A MANAGEMENT COMPETENCIES FRAMEWORK FOR HEADS OF ACADEMIC DEPARTMENTS AT SOUTH AFRICAN PUBLIC UNIVERSITIES

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DECLARATION

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ABSTRACT

Heads of academic departments (HoADs) occupy critical positions in the running of universities. Despite their significant contribution, universities appoint HoADs to middle management positions primarily based on good scholarship as opposed to the required competencies to manage a department. As such, a review of the literature found that no previous study has specifically explored the relationships between the intrinsic competencies of HoADs to self-manage, and the competencies required to manage, respectively, the external environment outside the control of the department and university, and internal operating environment within the department. For the former, the subconstructs were found to be resources mobilisation and management, diversity and uncertainty management, and development of networks and partnerships; for the latter, the subconstructs were found to be leadership, strategic planning, and staff management.

By using a positivist quantitative research design with stratified probability sampling, this study developed a management competencies framework by testing such relationships. The study collect data from 124 HoADs at public universities in South Africa via a self-administered questionnaire. A structural equation model using SmartPLS was employed for data analysis.

The results indicate that self-management is positively associated with both external and internal management competencies. Therefore, the study makes both a theoretical and practical contribution by developing a framework representing the link between self-management and the competencies associated with the external and internal dynamics that significantly affect an HoAD's ability to manage an academic department at a public university. The framework suggests that improving external and internal management competencies of HoADs and individual and organisational performance must focus on improving self-management. Thus, public universities need to reconsider the recruitment, training, and development of HoADs. Further research should examine the potential application of the framework in private universities, government entities, and other industries.

Keywords – Management, heads of academic departments, universities, self-management, management competence, and South Africa.

DEDICATION AND ACKNOWLEDGEMENTS

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Sincerely,

Marike van Rensburg

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LIST OF ACRONYMS AND ABBREVIATIONS

4IR	Fourth Industrial Revolution
ANC	African National Congress
AVE	Average Variance Extracted
CB-SEM	Covariance-based Structural Equation Model
COVID-19	Coronavirus Disease 2019
DHET	Department of Higher Education and Training
DNP	Developing Networks and Partnerships
DoE	Department of Education
DUM	Diversity and Uncertainty Management
EMC	External Management Competency
GHREC	General/Human Research Ethics Committee
HEI	Higher Education Institution
HoAD	Head of Academic Department
ICT	Information and Communications Technology
IMC	Internal Management Competency
L	Leadership
MEDUNSA	Medical University of Southern Africa
NCHE	National Commission on Higher Education
NCV	National Certificate Vocational
NQF	National Qualifications Framework
NSFAS	National Students Funding Aid Scheme
PLS-SEM	Partial Least Square Structural Equation Modelling
POPI	Protection of Personal Information Act
R^2	Coefficient of Determination
RMM	Resource Mobilisation and Management
SAQA	South African Qualifications Authority

SD	Standard Deviation
SLFMAN	Self-management Competency
SP	Strategic Planning
STFMAN	Staff Management
UCT	University of Cape Town
UFS	University of the Free State
UK	United Kingdom
UNISA	University of South Africa
UP	University of Pretoria
US	United States
USAf	Universities South Africa
WITS	University of the Witwatersrand

CHAPTER 1: INTRODUCTION AND BACKGROUND TO THE STUDY

"There are centuries when nothing happens, and there are years when centuries happen." (*Vladimir Ilyich Ulyanov, better known by his alias, Lenin, 1870–1924)*

1.1 INTRODUCTION

Even before the novel coronavirus disease 2019 (Covid-19) pandemic, the global higher education[1] environment has been changing both rapidly and radically (Czerniewicz, 2020). Driven largely by international trends such as globalisation and internationalisation (Dzvimbo & Moloi, 2013; Methula, 2017) as well as South African imperatives operating simultaneously, uncertainties and disruptions have escalated to levels unseen before (Badat, 2010; Chetty & Pather, 2015).

As such, public universities in higher education are important national institutions, which are vital to the development of national state sources. For instance, they drive the development of societies by pioneering new areas of research, contributing to cultural life, and producing the next generation of the trained workforce who go on to take their places in the modern knowledge economy (Dodgson & Gann, 2019).

The head of academic department (HoAD), also known as department chair in the United States (US), is the middle manager and central figure tasked with the management of such departments at a university (La Lopa, Woods & Liu, A., 2002). Universities are heavily dependent on HoADs to execute their plans at the academic department level on behalf of senior management, and HoADs are considered to be the building blocks of universities (Al-Turki & Duffuaa, 2003). It is estimated that 80% of university administration is executed at academic department level, thereby implementing the university's strategy (Ciprianio, 2017; Gonaim & Peters, 2017). Without academic departments, therefore, there is no university – the management thereof by HoADs is thus pivotal to its existence.

Despite the importance of the HoAD role, people often enter the position without going through any formal leadership and management preparation, resulting in little or poor

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[1] Higher education comprises "certificates and diplomas and undergraduate and postgraduate degrees up to the level of doctoral degrees" (Matsolo, Ningpuanyeh & Susuman, 2018: 1).

understanding of the role's expectations (Ciprianio, 2017). The ambiguity and inherent tensions of the role increase the complexity thereof (Weaver *et al.*, 2019). Additionally, HoADs assume important positions with little understanding of how to navigate both the roles of manager and scholar (Creaton & Heard-Laureote, 2019).

Given the important administrative tasks that HoADs perform in an academic department, it is crucial that HoADs are developed and demonstrate competency in their managerial tasks at academic department level (Kapur, 2018). HoADs require competencies to work with multiple stakeholders inside and outside their academic departments. In view of the scope of their management role, a management competencies framework will bring clarity and understanding to HoADs and ultimately assist them to perform their jobs successfully.

1.2 BACKGROUND TO THE STUDY

Universities have traditionally been seen as unique organisations characterised by a multiplicity of purposes, structures of autonomous and parallel administrative and academic management, and resistance to change via bureaucratic methods (Rodriguez, 2016). The rapidly changing and competitive global world, internationalisation, new and disruptive technologies associated with teaching and learning, new forms of governance and financing, commodification, massification, and geopolitics are all placing major pressure on the traditional way of managing universities (Beech, 2018; Burquel & Busch, 2018; Calderon, 2018b; Rensburg, Motala & David, 2015).

HoADs occupy mid-level managerial jobs at universities and serve as principal administrators in academic departments (Pham *et al.*, 2019). They perform a myriad of managerial tasks to execute the departmental strategy and improve the profile and standing of the academic department in the landscape of their universities (Ofori & Atiogbe, 2012). HoADs control the environment within the academic department: setting an example as scholars, providing direction to a community of scholars, and fostering teamwork in a collegial manner in the department are considered important managerial tasks of an HoAD (Chetty & Louw, 2012; Nickson, 2014). HoADs further play an active role in recruiting and managing diverse groups of staff. This means

creating a climate of working together that values diversity of cultures and views (Caron, 2019; Floyd & Dimmock, 2011; Thomas & Thomas, 2015).

An academic department is a subsystem of the broader macro-environment that affects universities directly (Lone *et al.*, 2017). In recognition of the limited measure of control over external factors, the HoAD seeks to position the academic department in the rapidly-evolving higher education sector (Calderon, 2018b). The HoAD interacts with multiple stakeholders in the university community and beyond. In the context of limited resources, the HoAD secures financial resources from both university central departments and sources external to the department (Nambiar, 2017). A crucial element of the job is to support initiatives to link researchers and students with partners who are external to the academic department in order to showcase their work (Croucamp, 2013; Spendlove, 2007).

Managing the academic department in compliance with national legislation and university diversity policies and programmes is arguably one of the most challenging tasks of an HoAD (Mickey, Kanelee & Misra, 2020). The ability to navigate pressures that originate from uncertainty and are largely outside the control of the academic department is a competency requirement of the job (Teece, Peteraf & Leih, 2016). The HoAD faces the pressure of implementing the university's diversity plans and policies and managing the implications of the policies in the academic department (Croucamp, 2013; Gwele, 2009). An HoAD promotes diversity by making recruitment decisions that are cognisant of the national demographis regarding age, sex, ethnicity, nationality, creed and disabilities (Godfrey *et al.*, 2017).

The complexities, ambiguity and paradoxical nature of the role require that HoADs possess the skills, abilities and behaviours to manage themselves and improve job performance outcomes. The ability to self-manage brings important social, emotional and attitudinal personal characteristics to the HoAD role (Cowley, 2019; Gigliotti, 2021). These inward personal characteristics empower an HoAD's actions, thoughts and feelings in flexible ways and, more effectively, in the work environment (Christian, 2017; Suess, 2015).

The ability to manage both the external and internal environments of an academic department requires an HoAD to adopt certain behaviours that enable successful job

performance (Alsemgeest, Booysen & Bosch, 2017). Personal conduct, ethics, self-driveness, integrity, honesty, ability to recover from setbacks, knoweldge of one's strengths and weaknesses, self- directed development, ability to balance the demands of work and life, time management, communication skills, transparency, and the ability to take initiative are important behaviours and skills for the job (Kumar, Adhish & Chauhan, 2014; Goleman, 2001; Hellriegel *et al.*, 2012). Self-management competencies (SLFMANs) thus reflect the ability to be adaptive and flexible in handling change, and resultantly empower the HoAD to smoothly handle multiple demands, shifting priorities and uncertainty in an ever-changing environment (Goleman, 2001).

The requirement for HoADs to possess management competencies is important in their context in South Africa. The changing higher education environment fuelled by policies of socio-economic-political redress has significance for HoADs (Swartz *et al.*, 2019). Not only are HoADs expected to stay abreast of change, but they are also required to embrace change in the management of academic departments. By showing stability, being in control of their emotions, such as anger and fear, having integrity, setting a positive example for others, and managing reactions during changing situations, HoADs at South African public universities will be effective managers in both the external and internal environment (Grackova, 2019). It can, therefore, be argued that self-management enables HoADs to perform their jobs – both externally and internally in the academic department.

Universities have been forced to adapt and transform accordingly to stay relevant while still remaining true to their core mandate of teaching, doing research and engaging with the community (Shawa, 2020). As such, they have embraced business practices that are commonly referred to as "managerialism" or "new public management in higher education" (Ajayan & Balasubramanian, 2020: 147). Managerialism is rooted in the "belief that organisations have more similarities than differences and thus the performance of all organisations can be optimised by the application of generic management skills and theory" (Klikauer, 2015: 1104). Accordingly, the autonomy in both academic and administrative systems and collegiate decision-making co-exist with layers of management and closer accountability of the deployment of resources and the outcomes of their plans resembling those of private companies (Clare & Sivil, 2014; Martin, 2017).

While seeking to maintain their traditional values of collegiality, academic freedom and community of scholars (Czerniewicz, 2020; Dodgson & Gann, 2019), universities have identified that effective leaders in the academy and managers at all levels, including academic departments, faculties, and the rectorate, are vital to achieve their goals and adapt to a changing external environment (Ngowi & De Jager, 2016). This constantly changing environment, however, suggests that universities require leaders with new skills and managerial competencies (Dodgson & Gann, 2019).

HoADs have most been affected by the appropriation of managerialist ideology from the corporate world (Davis, Jansen van Rensburg & Venter, 2016). As middle managers in the hierarchical structures of universities, they implement the strategic plans of the universities at department level (Pham *et al.*, 2019). HoADs lead and manage academic departments in a context where the socio-political challenges and university long-term plans of teaching and research meet the road of daily academic life, while simultaneously acting as the interface between the central administration and its academic departments (Gigliotti, 2021). According to Lane (2018) and Gmelch (2015), strong universities typically have healthy and vibrant academic departments and strong HoADs managing them.

As universities respond to external pressures and calls for accountability, there is an increasing expectation that HoADs must manifest competencies beyond typical academic credentials. (Gigliotti, 2021; Pham *et al.*, 2019). Yet, few universities have invested in the professional development of HoADs (Lane, 2018). This is a major concern because not only are HoADs expected to manage the department within a highly bureaucratic university structure, but they are also expected to do so in an external environment rife with change and uncertainty (Kruse, 2020). The latter arises from complexities emanating from factors driving higher education from both the South African and global perspective (Bruwer, 2018). The resultant expectation regarding the requisite skills and competencies that an HoAD needs in order to manage an academic department has thus escalated to levels arguably never seen before.

As of 2021, South Africa has 26 public universities spread across all nine provinces (Netshakhuma, 2021). Public universities are contending with local imperatives that seek to redress the ills of an unequal higher education system caused by a colonial

and apartheid political history that used race, language, culture and ethnic group as segregation criteria. The end of apartheid in 1994 brought significant political changes and policies aimed at reforming the higher education sector (Mzangwa & Dede, 2019; Otu & Mkhize, 2018). The post-1994 policy instruments aimed to overhaul a higher education system that was historically segregated, unequal and inefficient, and increase access for non-white students (Kola & Selesho, 2012; Mabokela & Mlambo, 2017). However, addressing these historical inequalities remains a challenging task. Student protests since October 2015 are a manifestation of this perceived slow rate of transformation (Mzangwa & Dede, 2019).

HoADs at South African public universities are at the coalface of these changes taking place in the higher education sector (Swartz *et al.*, 2019). With domestic problems improving too slowly and global events spilling over into the local higher education environment, public universities require all layers of management to respond accordingly (Wangenge-Ouma & Kupe, 2020). It was posited by Mouton and Wildschut (2015: 8) that the need for competencies by university managers is "acute".

HoADs require competencies to remain effective in their jobs and manage the external and internal relationships of those who directly contribute to the success of the academic department (Chu, 2020; Ghali, Habeeb & Hamzah, 2018; Hecht *et al.*, 1999; Nellis & Harrington, n.d.). Although studies carried out in South Africa, the contribution of self-management to the performance of the job of HoADs is still explored insufficiently. While studies by Croucamp (2013) and Potgieter and Coetzee (2010) have identified the management competencies of HoADs, they have not identified the structural relationship between the management competencies leading to external and internal job performance. The turbulent higher education environment in which South African HoADs execute their management role makes a study focusing on on developing a management competencies framework that describes expertise, know-how, capabilities, qualities, mindsets, attitudes, and character traits required to perform in the HoAD job effectively.

1.3 PROBLEM STATEMENT

Despite the importance of the HoADs in the functioning of universities, the middle management position is regarded as temporary and undervalued by universities.

HoADs often enter the position without formal leadership and management preparation, resulting in little or a poor understanding of the role's expectations (Ciprianio, 2017). They are appointed to the job primarily based on good scholarship. Even after the appointment, HoADs still operate from their academic identity – they see themselves as caretaker managers who have temporarily left their 'real job' for a temporary secondment of management. The ambiguity and inherent tensions of the role increases the complexity of such an important role (Weaver *et al.*, 2019). They are expected to demonstrate management competencies beyond typical academic credentials (Gigliotti, 2021; Pham *et al.*, 2019). Yet, few universities have invested in their professional development (Lane, 2018). Without the competencies to manage the primary academic unit of a university, an HoAD is unlikely to succeed, resulting in the university's inability to deliver in their mission. This is a major concern as not only are HoADs expected to manage their academic department within a highly bureaucratic university structure, but are expected to do so in an external environment rife with change and uncertainty (Kruse, 2020).

Externally, an HoAD manages relationships with those who directly contribute to the success of the academic department such as the dean, senior management, central administrative departments (for example, human resources, finance, marketing, and safety), donors, government agencies, student bodies, and societies. HoADs navigate these roles of manager and scholar without the required competencies (Creaton & Heard-Laureote, 2019). Internal to the department, HoADs manage and lead a community of scholars and peers without the formal or positional authority that is typically associated with managerial roles in, for example, the corporate environment (Gigliotti, 2021).

In South Africa, HoADs are ill-equipped to manage the local challenges posed by the changing higher education climate, influenced by a history of racial discrimination and a disproportionate allocation of resources among public universities. Previous research has shown that the need for competencies of managing academic departments is serious (Mouton & Wildschut, 2015). The need for developing a management competencies framework for HoADs in the context of public universities in South Africa continues to exist and imperatively justifies further academic and thorough investigation. Unless universities better understand the competencies of

HoADs from a manager perspective and their importance in the successful running of academic departments, they may be hindered from accomplishing the core academic success of public universities (Normore & Brooks 2014).

1.4   OBJECTIVES OF THE STUDY

Primary objective

The primary objective is to develop a management competencies framework for HoADs at South African public universities.

Secondary objectives

To fulfill the study's primary objective, secondary objectives are separated into literature- and empirical-based objectives, respectively.

The following secondary objectives refer specifically to literature-based objectives:

- Discuss the historical background of the South African higher education environment prior to 1994.
- Discuss higher education in post-1994 South Africa.
- Discuss the current challenges facing public universities in South Africa.
- Identify the management competencies of HoADs.
- Discuss the general perspectives on the managerial role of HoADs.

The following empirical objectives are posited:

- Discuss the characteristics of HoADs at South African public universities.
- Identify the relationship between SLFMAN and external management competencies (EMCs).
- Identify the relationship between SLFMAN and internal management competencies (IMCs).
- Identify the moderation effects of gender, race, university type, and number of terms as an HoAD on EMCs.
- Identify the moderation effects of gender, race, university type, and number of terms as an HoAD on IMCs.

1.5 RESEARCH METHODOLOGY

The study used a quantitative research design strategy. The target population was HoADs of public universities in South Africa. These were HoADs whose universities granted permission to conduct research and who had managerial responsibilities in their jobs. Data was collected via an online questionnaire from HoADs from these public universities to test a conceptual model incorporating the management competencies expected from HoADs. This model was tested using a partial least squares structural equation model on SmartPLS version 3.2.9. Several demographic variables (specifically gender, race, number of terms as an HoAD, and university type) were further used to test for moderation effects.

1.6 SIGNIFICANCE OF THE STUDY

This study is significant because it fills a knowledge gap by developing a management competencies framework for HoADs at South African public universities. The study provides an insight into the management competencies of HoADs through a framework built on literature and validated by empirical research conducted among HoADs.

The study found that SLFMAN has positive relationships with other management competencies required for job performance both in the academic department's external and internal environments. In addition, the study provides further insights into the characteristics of HoADs at South African public universities.

The study is useful for human resources departments and senior management of universities, as well as Universities South Africa (USAf). The results of the study will guide them in recruiting, preparing, and developing HoADs for management roles.

1.7 LAYOUT OF THE STUDY

The research study comprises seven chapters. Following this chapter, the remaining chapters are briefly discussed below.

Chapter 2 provides a discussion on the historical background of the higher education environment in South Africa prior to 1994, higher education in post-1994 South Africa, and the current challenges faced by public universities.

In Chapter 3, a literature review is conducted focusing on managing in a competency-based environment and the management competencies required in an academic setting.

Chapter 4 presents a conceptual model of management competencies. The model is formulated by using the existing literature on management competencies and is argued from a South African point of view.

Chapter 5 deals with the research methods used in the study. Specifically, the chapter describes the research design, sampling design, questionnaire design, data collection methods, and data analysis technique to be used.

In Chapter 6, the detailed presentation and the empirical results of this study are presented.

Chapter 7 concludes the study and provides the major findings, recommendations to human resources departments of universities, senior management of universities, and USAf.

1.8 CONCLUSION

This chapter presented a context for the research problem. The context was provided by explaining the changes taking place in the higher education environment that affect the management roles of HoADs and general functioning of universities. The chapter furthermore discussed that HoADs are primarily appointed to the position on the basis of good scholarship and not on the basis of management competencies needed for job performance.

The research problem, research objectives of the study, research methodology, significance of the study, and layout of the chapters were outlined.

The next chapter describes the South African higher education environment. The apartheid era and post-1994 period, and the challenges confronting South African public universities, are discussed.

CHAPTER 2: THE SOUTH AFRICAN HIGHER EDUCATION ENVIRONMENT

2.1 INTRODUCTION

This chapter introduces the study and discusses the historical background of South Africa's higher education sector before and after 1994. The political history of South Africa has deeply influenced the higher education environment and what is expected from HoADs to fulfil their management roles at public universities. Historical background of the South African higher education environment is provided to understand the HoAD role and the management competencies required. As such, the chapter has the following structure: Section 2.2 discusses the history of the South African public universities prior to 1994; Section 2.3 deals with higher education in the post-1994 phase; Section 2.4 presents the challenges facing public universities in South Africa; and Section 2.5 concludes the chapter.

2.2 HISTORY OF SOUTH AFRICAN PUBLIC UNIVERSITIES PRIOR TO 1994

The following section provides an overview of the history of public universities prior to 1994.

2.2.1 The Colonisation of South African Higher Education

The fifteenth century saw several European countries, such as Great Britain, France, Portugal, Germany, Spain, Italy and Belgium, colonising African countries (Oliver & Oliver, 2017: 1). In 1652, South Africa was colonised by the Dutch as they set up a refreshment station in the then called Cape on the southern tip of South Africa for passing ships sailing to India (Van Tonder, 1977). This settlement resulted in a new group of people called Afrikaners (Piotrowski, 2019). The Dutch domination came to an end in 1806 when the Cape colony came under British control (Oliver & Oliver, 2017). The Afrikaans farmers, called Boers, unhappy to live under British rule, first migrated eastward towards Natal on the east coast of South Africa, but then moved northwards when the British followed them (Fourie, 2020). Tensions, fuelled by territorial annexation and the discovery of mineral resources, grew between the Boers and British culminating in the Anglo-Boer Wars from 1880 to 1881 and from 1892 to 1902 (Oldiges, 2006).

The Union of South Africa was formalised in 1910 to advance white people's interests (Oliver & Oliver, 2017). According to Terreblanche (2010: 1), the Union of South Africa was first a racist construction (due to the exclusion of black people from political participation in favour of only white people); second, an imperialist construction (due to the British cooperating with Afrikaners in order to try and prevent the fall of their declining Empire); and third, a race-based capitalist construction (due to the *Black Land Act (1913)* creating a capitalistic system in South Africa using cheap and forced black labour.

In pursuit of the colonial project, universities were small state-funded institutions established to propagate European symbols and way of life so that the interests of those who came from Europe were served (Pietsch, 2013). The *Act of Union (1910)* defined higher education by placing public universities under the supervision of the national government and, by extension, they became state institutions under acts of Parliament (Beale, 2016; Moodie, 1994). Thus, public universities became subject to the influences and aspirations of the governing party. Giliomee and Mbenga (2007), Sehoole (2006) and Davies (1996) observed that participation in the higher education system had already been organised along racial and ethnic lines prior to 1910 and was designed to develop white people and exploit black people. According to Kgoale (1982), English and Afrikaans universities had already been reserved for white people only, whereas the University of Fort Hare, the first black university, catered for black people. However, two universities whose language of instruction was English, namely the University of Cape Town (UCT) and the University of the Witwatersrand (WITS), opened their doors to all students based on academic achievement (Murray, 1987). Furthermore, Beale (1992) added that at the end of the 1940s, the University of Fort Hare had about 400 black students whereas WITS and UCT had less than 100 black students. These statistics demonstrate how only a few African students attended South African universities and what the extent of segregation in higher education was (Beale, 1992).

Another element of higher education colonisation was the adoption of colonial languages of instruction, namely English and Afrikaans. After the arrival of the British in the nineteenth century, the British manner of life was imposed on black people, and English grew to become the dominant medium of instruction, dislodging Dutch as the

language of business (Kamwangamalu, 2001; Oliver & Oliver, 2017; Sehoole, 2006). South African universities became characterised by "Eurocentrism, racism, segregation and epistemic violence" (Heleta, 2016: 37). As a result, the imperialistic and colonial system downgraded African knowledge and imposed Eurocentric knowledge systems (Akena, 2012).

Table 2.1 provides the chronological establishment of South African public universities by colonial language. The South African College at Cape Town, established in 1829 for white people from Europe, was the first university to be set up in South Africa (Beale, 2016). According to Beale (2016), it was followed by the establishment of religious- and non-religious-based institutions to take care of the higher education needs of local white people of European ancestry. The founding of the Union of South Africa in 1920 was accompanied by an increase in investment in higher education for English and Afrikaans-speaking white people (Kgoale, 1982). Between 1916 and 1930, the public universities were given new names reflective of political changes taking place in the Union of South Africa.

Table 2.1: Chronology of universities in South Africa before 1948

Year established	Name of university	Language of instruction
1829	South African College	English
1873	University of Good Hope	English
1865	Victoria College	English
1895	School of Mines	English
1904	Rhodes University	English
1916	South African Native College (renamed the University of Fort Hare in 1951)	English
1918	South African College (renamed the University of Cape Town)	English
1918	University of Good Hope (renamed the University of South Africa)	English and Afrikaans
1918	Victoria College (renamed the University of Stellenbosch)	Afrikaans
1922	School of Mines (renamed the University of the Witwatersrand)	English
1930	UNISA's university college (renamed the University of Pretoria)	Afrikaans

Source: Adapted from Beale (2016)

The construction of the South African higher education system prior to 1948 was founded on colonialism and racial classification. Thaver and Thaver (2018) further argued that higher education was segregated at two levels: first, there was an ethnic divide between English- and Afrikaans-speaking white people and, second, there was racial classification between white and black population groups. Black people were, therefore, at the receiving end of a higher education system that subjugated African knowledge and imposed a colonial Eurocentric system of higher education (Kamwangamalu, 2001). This colonial system became the bedrock that shaped the South African higher education during the era of apartheid.

2.2.2 The Beginning of Formalised Policy for an Apartheid Education

The South African National Party, a political party of the Afrikaans white minority, won the general elections in 1948 and legalised a policy of apartheid that promoted segregation and discrimination on grounds of race (Greenstein, 2019). The resultant policy of apartheid divided South Africans into four racial classifications, namely white, black, Indian and coloured people (Naidu, 2011). 'White' referred to people of European descent and from other Western countries who came to South Africa in the mid-1600s; 'black' referred to natives or the indigenous people of South Africa; 'Indian' referred to those people who came to South Africa from India in the 1800s to work as slaves of the British colonial government (Ndimande, 2013); and 'coloured' referred "to any person of 'mixed-blood' and include children as well as descendants from black-white, black-Asian, white-Asian, and black-coloured unions, including Sunni Arab and European Muslims" (Brown, 2000: 198).

A series of laws to segregate education and sustain the policy of apartheid were passed by the National Party government. According to Phatlane (2007), the following five apartheid laws were the backbone of the racially classified policy that impacted the higher education sector in South Africa:

- The *Population Registration Act (Act No. 30 of 1950)* that mandated racial classification of South Africans from birth.
- The *Group Areas Act (Act No. 41 of 1950)* that designated human settlements on the basis of race.
- The *Separate Amenities Act (Act No. 49 of 1953)* that demarcated public services and amenities accoridng to race.

- The *Bantu Education Act (Act No. 47 of 1953)* that promulgated a separate and inferior system of education of black people.
- The *Extension of University Education Act (Act No. 45 of 1959)* that allowed discrimination of higher education according to race.

Kosciejew (2006: 3) described the *Population Registration Act (Act No. 30 of 1950)* as "the documentary backbone of the entire apartheid edifice: it influenced every law, every policy, and every lived reality in South Africa". Kosciejew (2006) added that the *Population Registration Act* laid down the systems for the race classifications of South Africans and thus advocated for race classification in the higher education sector.

With race as the organising principle, the *Group Areas Act of 1950* provided the National Party government with the framework to impose residential segregation in the cities and towns (Higgs, 1971). This Act facilitated land dispossession as South Africans were uprooted from their homes and land by force and resettled in townships and black homelands called 'Bantustans' (Kgatla, 2013). Under the Bantustan system, South Africa was fragmented into ten ethnic enclaves, and black people were artificially given political independence in their own territories while the white minority enjoyed full economic and political rights (Dugard, 1980). The Bantustan system reached its apex in 1976, 1977, 1979, and 1981, when the South African government granted 'self-determination' status to four homelands: Transkei, Bophuthatswana, Venda, and Ciskei (Khunou, 2009; Dugard, 1980).

Beale (2016) observed that between 1949 and 1959, the National Party government appointed four commissions (the Eiselen, Tomlinson, Holloway, and De Wet Nel Commissions) to formulate an apartheid educational system that aligned the racial and economic policies of the Nationalist Party government. In framing Bantu education, the National Party government used an African term, 'Bantu', which refers to a group of closely related African languages spoken south of the Sahara Desert (Jakobsson, Li & Schlebusch, 2014). Accordingly, Nkomo (2014; vii) posited that the primary objective of Bantu education was to offer the type of education to black people that would deliver a pool of labour to meet the needs of an economy dominated by white people and further to train black people to run the ethnically designated areas called 'homelands' and ethnic institutions in furtherance of the policy of apartheid.

In contrast, the government argued that the passage of the *Bantu Education Act of 1953* and the *Extension of University Education Act of 1959* was in the best interest of black people as it would allow them to progress and take charge of their own destiny (Kgoale, 1982). Furthermore, under the *Extension of University Education Act (Act No. 45 of 1959)* black students needed ministerial permission before they could be enrolled at white institutions (Beale, 2016). Up until 1959, white Afrikaans-medium universities restricted admission to only white people, while white English-medium universities – WITS, UCT and UNISA – admitted students irrespective of race (Kgoale, 1982). Although the University of Natal had an open admission policy, the classes were divided according to race (Beale, 2016).

Following the passage of the *Extension of University Education Act* and seeking to enforce other race and ethnic-based policies, the *Fort Hare Transfer Act (Act No. 64 of 1959)* was enacted. This Act transferred the University of Fort Hare to the Department of Bantu Education after previously being attached to UNISA (Kgoale, 1982). As a result, several staff members were dismissed and others resigned out of protest. While the University of Fort Hare became prominent for producing the first generation of black political leaders, it merged with Rhodes University in 1951 to form the University College of Fort Hare. This confined it to being a tribal university for students of Xhosa descent. Consequently, in 1960 South Africa had three ethnically segregated universities earmarked for black people: the University of Fort Hare, the University of Zululand, and the University of the North (Kgoale, 1982).

As a result of the enactment of the *Extension of the University Education Act* and the *University College of Fort Hare Transfer Act in 1959*, the fragmentation of higher education along racial and ethnic lines deepened and more ethnic-based black universities were built in the Bantustans (Nkomo, 2014). Table 2.2 provides the chronology of the universities built for black people until 1982. Except for Vista University that served black urban students, the universities were situated in the Bantustans along tribal lines, thereby breaking African unity by disenfranchising them in "white South Africa" (Davies, 1996). The direct impact was an increase in the black student population from 481 students in 1960 to approximately 10 000 students in 1982 (Nkomo, 2014).

Table 2.2: Chronology of universities established in the Bantustans until 1982

Year established	Name of university	Bantustan
1959	University of the North	Lebowa
1960	University of Zululand	KwaZulu
1976	University of Transkei	Transkei
1976	Medical University of South Africa	Medical university for black people
1979	University of Bophuthatswana	Bophuthatswana
1981	Vista University	For urban black townships
1982	University of Venda	Venda

Source: Adapted from Heffernan (2017)

Apartheid consolidated the segregation of the South African society through legislation and legalised race and ethnicity to be the determining factors for black and white students in terms of where they could study. Under apartheid, the South African higher education landscape was legally built to sustain the benefits and privileges of white people (Bunting, 2006) and consign black people to an inferior and underresourced system of higher education (Chetty & Knaus, 2016).

No new universities were built between 1983 and the end of apartheid in 1994. In the 1980s, apartheid reached a crisis point when black university students resisted the system by engaging in strikes, boycotts and unrest (Reddy, 2004). The disenfranchisement of black people, inferior university facilities, and low quality of education outcomes at black universities were some factors that fuelled student protests (Bot, 1985).

2.2.3   Public Universities in the Lead-up to 1994

By the time apartheid was dismantled in 1994, South Africa had 36 race and ethnically classified publicly-funded higher education institutions (HEIs) including the ones established in the Bantustans (Bunting, 2006) – see Table 2.3. The public HEIs were grouped into universities and technikons, and were managed under eight different education departments, thereby ensuring the separation of races and tribes (Bunting, 2006). Technikons collaborated closely with workplaces and employers and endeavoured to meet practical skills requirements (Garraway & Winberg, 2019). Technikons started out as colleges that provided training in technical skills, but were

later permitted to accompany technical training with the theories of apprentice-related education and training (Raju, 2006). Their aim was to provide education and training to students so that there was a constant supply of labour with middle- and high-level skills *vis-à-vis* technological and practical knowledge.

Table 2.3: Summary of the public HEIs until 1994

Responsible authority of higher education	Racial and tribal classification	No. of public universities	No. of technikons	Total HEIs
House of Assembly	White people	11	8	19
House of Representatives	Coloured people	1	1	2
House of Delegates	Indian people	1	1	2
Department of Education and Training	Black people living in 'non-independent' Bantustans	4	2	6
Republic of Transkei	Black people – Xhosa	1	1	2
Republic of Bophuthatswana	Black people – Tswana	1	1	2
Republic of Venda	Black people – Venda	1	0	1
Republic of Ciskei	Black people – Xhosa	1	1	
Totals		**21**	**15**	**36**

Source: Adapted from Bunting (2006)

According to Bunting (2006), the 19 historically white institutions were subdivided according to language – that is, the language of instruction was either English or Afrikaans. The larger and more established 'liberal' English HEIs such as WITS and UCT were advantaged by their location in urban metropolitan centres, historical ties to alumni, business community, other networks, and magnitude of their research. Bunting (2006) added that Afrikaans HEIs, on the other hand, were part of a plan to uplift the Afrikaner community as they were smaller and mainly traditional in outlook, but had growing capacity and potential. Jansen (2003) observed that both Afrikaans and English universities were advantaged by their closeness to businesses and alumni who exploited, to their benefit, higher levels in financial, research, infrastructure and academic staff investments. The historically white HEIs are listed in Table 2.4.

Table 2.4: Nineteen historically white HEIs in South Africa in 1994

Name of institution	Language of instruction	
	English	**Afrikaans**
Universities		
University of Cape Town	✓	
University of Natal	✓	
University of the Witwatersrand	✓	
Rhodes University	✓	
University of Port Elizabeth	✓	
Stellenbosch University		✓
University of South Africa		✓
University of Pretoria		✓
Rand Afrikaans University		✓
University of the Orange Free State		✓
Potchefstroom University for Christian Higher Education		✓
Technikons		
Technikon Witwatersrand	✓	✓
Vaal Triangle Technikon	✓	✓
Pretoria Technikon	✓	✓
Port Elizabeth Technikon	✓	✓
Natal Technikon	✓	✓
Free State Technikon	✓	✓
Cape Technikon	✓	✓
Technikon Southern Africa	✓	✓

Source: Adapted from Bunting (2006)

Alongside the 19 historically white institutions, the higher education sector comprised 17 historically black institutions designed along race or tribal lines (see Table 2.5). These institutions drew their students from underprivileged and rural backgrounds and were poorly funded, leading to underperformance in research and postgraduate student outputs (Ilorah, 2006; Leshoro, 2014).

Table 2.5: 17 Historically black HEIs in South Africa in 1994

Institution	Designated race and/or tribe
Universities	
University of Fort Hare	Black people – Xhosa
University of Zululand	Black people – Zulu
University of the North	Black people – Pedi
University of Bophuthatswana	Black people – Tswana
University of Transkei	Black people – Xhosa
Medical University of South Africa	Black people
University of Venda	Black people – Venda
Vista University	Black people – multi-city campus university
University of the Western Cape	Coloured people
University of Durban-Westville	Black and Indian people
Technikons	
Mangosuthu Technikon	Black people – Zulu
Technikon Northern Transvaal	Black people – Pedi, Venda and Tsonga
Border Technikon	Black people – Xhosa
Eastern Cape Technikon	Black people – Xhosa
North West Technikon	Black people – Tswana
ML Sultan Technikon	Black and Indian people
Peninsula Technikon	Black and coloured people

Source: Adapted from Bunting (2006)

South Africa's pre-1994 period was the era that disenfranchised Africans politically, intellectually and economically as colonialism and apartheid ideologies were the building blocks upon which the higher education sector, which focused on meeting the white minority's needs, was built (Hall & Symes, 2005). Public universities were classified racially and resourced unequally. Historically black institutions were designed to produce personnel for the Bantustan system, they had chronic financial challenges and poor infrastructure, and enrolled underprepared black students (Subotzky, 1997).

As such, leading into the abolishment of apartheid after 1994, the higher education sector had a racially divided dual structure consisting of 36 public universities, made up of 19 historically white institutions and 17 historically black institutions.

2.3 HIGHER EDUCATION IN POST-1994 SOUTH AFRICA

Section 2.2 provided a historical review of South Africa's higher education environment during the colonial and apartheid era. Public universities were segregated according to race and ethnicity, and most black South Africans were kept out of higher education. White universities enjoyed preferential resource allocation. The following section discusses the legislative environment that characterised the post-1994 period and the impact thereof on public universities.

2.3.1 A Changing Operating and Legislative Environment Post-isolation

The new era of the South African higher education sector was inaugurated in 1994 when apartheid was dismantled and the African National Congress (ANC) assumed political office and became the national government (Africa, 2019). South Africa became a united political state comprising nine provinces, which replaced the fragmented Bantustans and 'white areas' (Legodi, 2001; Netswera & Mathabe, 2006). The Department of Education (DoE) was formed to undertake the operations of the Ministry of Education (Netswera & Mathabe, 2006), and to give oversight to education matters in South Africa (Cloete, 2014).

According to Kulati (2000), late President Nelson Mandela established the National Commission on Higher Education (NCHE) in 1995, bring about a new era. The NCHE advised government about the scope of post-1994 higher education. It further provided guidance on the new system's policy objectives, institutional types on which to deliver, working relationships between universities and the government, and funding formula for institutions and students (Kulati, 2000). An important recommendation by the NCHE was the massification of higher education (Badsha & Cloete, 2011), which was described as the speedy growth in student enrolments resulting in big classes (Mohamedbhai, 2008). This proposed massification would be underpinned by the design and size of the higher education sector (Badsha & Cloete, 2011).

While the NCHE was being implemented, the South African Qualifications Authority (SAQA) was formed in 1989 by Act of Parliament No. 58 to provide an umbrella education and training qualifications framework and address pre-1994 divisions (SAQA, 2000: 3). This was done while also establishing uniform norms and standards for the post-1994 era.

The DoE assumed a critical role in South Africa of being the architect of facilitating a post-1994 higher education environment through policy and legislation (Cloete, 2014) and turned many recommendations of the NCHE into a framework provided in the White Paper on Higher Education Transformation of 1997 (Hall & Symes, 2005). This framework sought to reorganise the higher education sector and address the challenges associated with the exclusion of black students caused by apartheid (DoE, 1997a). According to Lefa (2014), the goal was to develop a unitary higher education system that would replace the apartheid-era system. As such, the White Paper culminated in the passage of the *Higher Education Act (Act No. 101 of 1997)*, which aimed "to regulate higher education; to provide for the establishment, composition and functions of a Council on Higher Education; to provide for the establishment, governance and funding of public higher education institutions; to provide for the appointment and functions of an independent assessor; to provide for the registration of private higher education institutions; to provide for quality assurance and quality promotion in higher education; to provide for transitional arrangements and the repeal of certain laws" (DoE, 1997b: 1).

The post-1994 legislative framework and the establishment of the NCHE sought to reform the racially and ethnically based higher education sector. The NCHE recommended that the sector be configured by establishing institutional university types, that new working relationships between universities and the government be defined, and that new funding pathways for institutions and students be established. The reforms set South African higher education on a new path.

2.3.2 The National Plan for Higher Education and Current South African Environment

To move the reform process forward, the Ministry of Education published the National Plan for Higher Education in 2001, which recommended concrete and attainable goals for the sector's size and shape (Hall, Symes & Luescher, 2004). The National Plan established a shared understanding for the following: (1) redressing past inequalities in alignment with national political changes; (2) providing increased access to particularly formerly marginalised population groups; (3) producing graduates with the needed expertise for the twenty-first century; and (4) investing in building advanced

research capacity that would unlock the strengths that would result in new research fields in South Africa (Cooper, 2001).

Subsequently, the DoE established three national working groups in 2001 to implement the National Plan for Higher Education (Shrivastava & Shrivastava, 2014). The first group investigated the merger of the HEIs in existence in 2001, while the two remaining groups were set up to examine the setting up of new HEIs in Mpumalanga and the Northern Cape provinces (Hall, Symes & Luescher, 2004). In 2005, the outcome of the former national working group resulted in the restructuring and reduction of HEIs from 33 to 23 (DoE, 2001a). Universities that offered theoretically orientated degree programmes were classified as traditional universities (Luvalo, 2017), and a new institution-type called a 'comprehensive university' was established (Gibbon, 2004). Comprehensive universities were born out of the merger of some previously standalone universities and technikons, while the third university type called a 'university of technology' was born out of the mergers of technikons to offer both theoretical and technikon-type programmes (Arnolds, Stofile & Lillah, 2013). Following the mergers, the South African public university landscape included 11 traditional universities, six comprehensive universities, and six technology universities (Arnolds, Stofile & Lillah, 2013).

The merger of two historically black institutions in 2005, namely the Medical University of South Africa (MEDUNSA) and the University of the North, resulted in the formation of the University of Limpopo. This university failed due to a lack of compatibility and the huge distance between campuses (Hall, 2015). As a result, they were both restored to their previous statuses in 2014, with MEDUNSA reverting back to an independent health sciences university and renamed to Sefako Makgatho Health Sciences University in January 2015 (Phakathi, 2013). Moreover, in 2014, two new comprehensive universities, namely the University of Mpumalanga and Sol Plaatje University, opened in Mpumalanga and the Northern Cape, respectively (Pule, 2014). Table 2.4 shows that in 2020, South Africa had 26 public universities, some with new names, following the merger and construction of the University of Mpumalanga and Sol Plaatje University.

At the end of 2005, the apartheid-era fragmented higher education system was replaced by a unitary system consisting of three institutional types: traditional universities, comprehensive universities, and universities of technology. The merger of HEIs and the creation of new university types shaped the post-1994 South African public university landscape.

Table 2.6: List of public universities in South Africa in 2020

	University name from 2005	Merged campuses and institutions	Merger date	University type	Location(s)
1	Nelson Mandela University – was called Nelson Mandela Metropolitan University until end of 2016	Port Elizabeth Technikon	01 Jan 2005	Comprehensive	Port Elizabeth, George
		University of Port Elizabeth			
		Port Elizabeth campus of Vista			
2	North-West University	Potchefstroom University for Christian Higher Education	01 Jan 2004	Traditional	Mafikeng, Potchefstroom, Vanderbijlpark
		University of the North-West, formerly University of Bophuthatswana			
		Vanderbijlpark campus of Vista			
3	Rhodes University (Rhodes)	Rhodes University's East London campus was absorbed by the University of Fort Hare	01 Jan 2004	Traditional	Grahamstown
4	University of Cape Town – unchanged	Did not merge		Traditional	Cape Town
5	University of the Free State	The former University of the North's QwaQwa Campus was absorbed into the University of the Free State	01 Jan 2003	Traditional	Bloemfontein
6	University of Johannesburg	Incorporation of campuses of Soweto and East campuses of Vista University	01 Jan 2004	Comprehensive	Johannesburg
		The merging of Rand Afrikaans University and Technikon Witwatersrand	01 Jan 2005		
7	University of Stellenbosch – unchanged	Did not merge		Traditional	Stellenbosch, Saldanha Bay, Bellville
8	University of Pretoria – retained its name	Incorporation of Vista University Mamelodi campus	01 Jan 2004	Traditional	Pretoria, Johannesburg

	University name from 2005	Merged campuses and institutions	Merger date	University type	Location(s)
9	University of the Witwatersrand – unchanged	Did not merge		Traditional	Johannesburg
10	University of Fort Hare – retained its name	Incorporated Rhodes University, East London Campus	01 Jan 2004	Traditional	Alice, East London and Bisho
11	University of KwaZulu-Natal	University of Durban, Westville	01 Jan 2004	Traditional	Durban, Pietermaritzburg, Pinetown, Westville
		University of Natal			
12	University of Limpopo	University of the North	01 Jan 2005	Traditional	Polokwane
		MEDUNSA			
13	University of Venda	Did not merge		Comprehensive	Thohoyandou
14	University of the Western Cape	Did not merge		Traditional	Bellville
15	Walter Sisulu University	Border Technikon	01 Jan 2005	Comprehensive	East London, Butterworth, Mthatha, Queenstown
		Eastern Cape Technikon			
		University of Transkei			
16	University of Zululand	Did not merge		Comprehensive	Empangeni, Richards Bay
17	University of South Africa – retained its name	Technikon Southern Africa	01 Jan 2004	Comprehensive	Distance education, with headquarters in Pretoria, campuses and regional offices nationwide
		Vista University Distance Education Campus			
18	Cape Peninsula University of Technology	Cape Technikon	01 Jan 2005	University of technology	Cape Town
		Peninsula Technikon			
19	Central University of Technology	Did not merge, changed name from Technikon Free State		University of technology	Bloemfontein, Welkom

	University name from 2005	Merged campuses and institutions	Merger date	University type	Location(s)
20	Durban University of Technology	ML Sultan Technikon	01 April 2004	University of technology	Durban, Pietermaritzburg
		Technikon Natal			
21	Mangosuthu University of Technology	Did not merge		University of technology	Umlazi
22	Tshwane University of Technology	Technikon Northern Gauteng	01 Jan 2004	University of technology	Pretoria, Nelspruit, Polokwane, Ga-Rankuwa, Soshanguve, eMalahleni
		Technikon North-West			
		Technikon Pretoria			
23	Vaal University of Technology	Did not merge; changed name from Vaal Triangle Technikon	01 Jan 2004	University of technology	Vanderbijlpark
24	University of Mpumalanga	Established in 2004 under post-apartheid South Africa		Comprehensive university (New)	Mbombela
25	Sol Plaatje University	Established in 2014 under post-apartheid South Africa		Comprehensive university (New)	Kimberley
26	Sefako Makgatho Health Sciences University	Established in 2005. Formerly MEDUNSA. On January 1, 2005, it merged with the University of the North to form the University of Limpopo. It was later separated from the University of Limpopo	01 Jan 2015	Health sciences university	Ga-Rankuwa

Source: Adapted from De Wet (2019)

2.3.3 Implementation Bodies of Higher Education in South Africa

This section discusses three bodies that contributed to the shaping of the post-1994 South African higher education sector: (1) the Council on Higher Education and the Higher Education Quality Committee; (2) SAQA; and (3) the National Student Financial Aid Scheme (NSFAS). These bodies were among the initiatives put in place to maximise the efficiency of the higher education sector (Badat, 2010).

2.3.3.1 Council on Higher Education and the Higher Education Quality Committee

The Council on Higher Education was created in 1997 by the *Higher Education Act (1997)* to carry out the function of quality assurance of the higher education sector of South Africa (DoE, 1997b). The Council's mission was to develop and implement policies, as well as to advise the Minister of Higher Education, Science, and Technology on issues involving higher education (DoE, 1997b).

The Higher Education Quality Committee, established as a subcommittee of the Council on Higher Education, had the overall responsibility for its mandate. It included quality promotion; institutional audit of broad areas that allow higher education institutions to achieve quality outcomes in institutional planning, courses accreditation, teaching, research and community engagement (CHE, 2004b). Since its inception, the Committee has been tasked with providing oversight on quality issues (Pillay, 2010). The Council on Higher Education required that higher education programs be approved and registered with SAQA.

Ramdass (2016) argued that the implementation of changes and accreditation of programmes and audits of institutions added a burden of time, financial and human resources pressures to university management. Another institutional body, SAQA, was established to ensure the accreditation of qualifications.

2.3.3.2 South African Qualifications Authority

The *SAQA Act (1995)* created SAQA to supervise the administration of the National Qualifications Framework (NQF), which provided a framework that standardised all education and training qualifications (SAQA, 2000). The qualifications levels, depicted

in Table 2.7, were grouped into two education bands, namely General Further Education and Training covering primary till high school grades, and Higher Education comprising post-high school qualifications. The NQF was criticised for the short implementation timelines it provided and the additional expenses and resource demands it placed on universities and management (Geber & Munro, 1999).

Table 2.7: NQF and education levels as at 2021

Education band	NQF level	Education level
General Further Education and Training	1	Grade 4–9
	2	Grade 10/N1
	3	Grade 11/N2
	4	Grade 12 National Senior Certificate/National Certificate Vocational (NCV4)
Higher Education	5	Higher Certificate
	6	Diploma/Advanced Certificate/National Diploma
	7	Undergraduate degree/Advanced Diploma/B Tech Degree
	8	Honours/Postgraduate Diploma/Professional Qualifications Degree
	9	Master's
	10	Doctorate

Source: Mohammed, Al-Sowaidi and Banda (2021)

Although both the Council on Higher Education and SAQA were important statutory bodies established to guide the Minister of Higher Education on higher education affairs and to ensure that the South African higher education sector is of high quality, respectively, they added more compliance and resource demands on the management of public universities.

2.3.3.3   The National Student Financial Aid Scheme

Another reform in the higher education sector was the incentivisation of HEIs through funding allocations (Wangenge-Ouma, 2010). In 2004, the New Funding Framework was birthed, it succeeded the pre-1994 formula called South African Post-secondary Education funding framework (Styger, Van Vuuren & Heymans, 2016). The new framework prioritised the funding of students through NSFAS (Bronkhorst & Matukane, 2017). The primary goal of NSFAS was to expand the proportion of black students enrolled in HEIs by providing bursaries and loans to those who qualified

(Bronkhorst & Matukane, 2017). NSFAS replaced the constrained Tertiary Fund of South Africa in 1999.

Even under NSFAS, the pressure of funding black students from poor backgrounds increased, culminating in student protests at public universities in 2015 and 2016 (Cini, 2019; Mavunga, 2019). In order to respond to the funding challenges facing students from poor background, NSFAS changed its student funding model from a loans to bursaries for students from poor families (Badenhorst, 2019). The definition of 'poor students' was expanded from the initial category of families with incomes of less than R122 000 per annum, they come from families with incomes of less than R350 000 per annum (Garrod & Wildschut, 2020). In 2020, NSFAS funded 52% of all students studying at South African public universities (Koornhof, 2020).

Higher education after 1994 was characterised by the consolidation of public universities and legislative changes initiated by the democratic government. Nolte (2004) argued that most changes directly challenged and affected different levels of management at public universities. Being at the coalface, universities and management at central and academic department levels must adapt and respond quickly to the changing environment and pressures imposed on them (Clark, 1999).

This section discussed the implementation of policy instruments aimed at dismantling the legacies of colonialism and apartheid in the South Africa higher education system. Higher education after 1994 promised a new era for previously disadvantaged black people, but was not without challenges. The following section discusses the most significant challenges confronting the higher education sector.

2.4   CHALLENGES FACING HEIs IN SOUTH AFRICA

As indicated in preceding sections, the South African government post-1994 created a legislative framework that restructured the higher education sector to eradicate racially and ethnically based imbalances. Even with these changes, South African public universities still face a number of challenges today due to not being insulated from an increasingly volatile, interconnected and disruptive global economy (Wangenge-Ouma & Kupe, 2020). These include: globalisation and internationalisation; advances in technology; increasing student enrolments; shifts in

student demographics; increasing competition from non-traditional competitors; rising student fees and costs; and inadequate funding (Calderon, 2018a; Conceição, 2016).

This section discusses several challenges considered critical in the current management environment of public universities in South Africa. By implication, university management will be required to deal with these challenges with a rejuvenated set of skills, knowledge, and competencies (Rumbley, Van't Land & Becke, 2018; Wangenge-Ouma & Kupe, 2020).

2.4.1 Student Protests and Increasing Disruptions

Although polices aimed at restructuring higher education sector have increased the access of previously marginalised students to South African public universities since 1994 (Hay & Monnapula-Mapesela, 2009), there is still a view that no substantial redress has occurred for the previously excluded black majority to become fully included into the system (Mzangwa & Dede, 2019). As a result, Albertus (2019) argued that, aside from increasing black students' access to historically white institutions, the higher education sector has failed to fulfill the expectations raised by the achievement of freedom in 1994.

Scholars have suggested that public universities in South Africa are in crisis, citing an increase in student protests since 2015 (Czerniewicz, Trotter & Haupt, 2019; Ebrahim, 2018; Fomunyam, 2017; Nicolson, Egwu & Payne, 2021). The 2015 and 2016 protests used various social media applications such as YouTube, WhatsApp and Twitter to call for removing apartheid-linked statutes and names at universities, putting an end to outsourcing of contract workers, implementing a freeze of tuition fee increases, providing formally disadvantaged students with free access to education, and decolonising both the curricula and institutional structures within HEIs (Le Grange 2016; Tjønneland, 2017). The 2020 protests were ignited by unpaid NSFAS student allowances (Coetzee *et al.*, 2021). Similarly, the 2021 protests were student fees related. NSFAS did not offer a pledge to cover the fees of qualifying students from poor backgrounds while university management did not want to reregister students with outstanding debt (Cloete & Van Schalkwyk, 2021).

Based on their numerous slogans and the coverage by local media, the 2015 and 2016 protests were collectively called the Fallist movement, signified by their Twitter handle references: #RhodesMustFall, #OutsourcingMustFall, #FeesMustFall and #SexualHarassmentMustFall (Makhanya, 2019). The protests degenerated into the vandalism of university infrastructure accompanied by violent showdowns with police and universities-contracted security guards, resulting in the imprisonment of many students (Albertus, 2019). The protests targeted state and university management as students viewed the latter as an extension of the state apparatus (Jansen, 2018). At the time of the protests in 2015, black students experienced the public universities spaces that were still characterised by colonialism and white privilege (Healy-Clancy, 2017; Heleta, 2016; Maringira & Gukurume, 2016). The slow pace of change is also evidenced by the dominance of white men in layers of management and underrepresentation of women in universities (Mangolothi, 2019). The student protests and disruptions at South African public universities coupled with the securitisation of campuses have undoubtedly resulted in an antagonistic relationship between students, university management and national government (Postma, 2016). University managers found themselves at the coalface of the student protests with calls for transparency in their management practices (Reinders, 2019). It might be argued that the management at South African public universities was not prepared to adapt the top-down approach and respond to internal changes at their universities (Reinders, 2019).

2.4.2 Globalisation and Internationalisation

Since the 1980s, the world has seen the acceleration of globalisation (Hogan, 2012). Defined as a world economy that is connected beyond national borders by information and communication technology (ICT), and knowledge linkages (Altbach, 2016), it has transformed the higher education sector across the world to make it look increasingly similar (Stensaker *et al.*, 2019). As a result, it has enabled an environment for the internationalisation of higher education to flourish (De Wit, 2020), forcing many HEIs around the world to embrace internalisation as a key strategy (Brandenburg & De Wit, 2015).

Internationalisation is a growing phenomenon that covers the academic mobility of students, staff in higher education, international study programmes, and international

partnerships and collaborative projects (Dagen *et al.*, 2019). Half of international mobilities favour students from Australia, Canada, New Zealand, the United Kingdom (UK) and the US (Priowirjanto, 2019), with South African universities seeing rising numbers of international students and staff from mainly the African continent (Bykanga, 2020). Furthermore, Obadire (2018) highlighted that the progress of South African public universities *vis-à-vis* internationalisation is threatened by hostile attitudes towards foreigners, and specifically those from fellow African countries. This so-called xenophobia is described as a hostile attitude and behavioural prejudice and is rooted in nationalism, while constructed on the premise that one nationality is superior over others (Licata & Klein, 2017).

Globalisation and internationalisation have driven the marketisation and corporatisation of South African universities (Dzvimbo & Moloi, 2013). Competition between universities for international students and the profit-seeking approach have permeated to different levels of managerial and influenced practices (Ntshoe, 2004).

2.4.3 Developments in Technology and the Fourth Industrial Revolution

Technology has traditionally been regarded as a disruptive force and an enabler of change in society (Boucher *et al.*, 2020). ICT is defined as ''shorthand for the computers, software, networks, satellite links, and related systems that allow people to access, analyse, create, exchange, and use data, information, and knowledge in ways that were almost imaginable'' (Barakabitze *et al.*, 2019: 1). ICT and its applications are regarded as being vital to life in the twenty-first century due to it being one of the key drivers of globalisation (Altbach, 2016). As a result, it is a dominant force driving transformation in higher education, specifically through access, learning strategies, equity and quality (Conceição, 2016). As such, ICT has become an enabler of teaching, learning and assessment in times where there is widespread upheaval and disruption. The advancement of ICT has led to what the founder of the World Economic Forum, Schwab, explained as the Fourth Industrial Revolution (4IR) (Schwab, 2016). He described it as a stage in human evolution in which technology is merging "the physical, digital, and biological spheres" (Schwab, 2016: 1).

Universities must adapt accordingly – they need to align their curricula to make their graduates employable in the advancing 4IR era (Coetzee *et al.*, 2021; Oliver, 2018).

In terms of learning and teaching, 4IR has enabled technology-assisted learning (Siergiejczyk, 2020) and universities are revamping their strategic plans to adopt new business models that compete more aggressively for students, staff, and funding (Ngcamu, 2020). E-learning platforms such as learning management systems are used to transmit course content and knowledge digitally, while ensuring that the practice promotes online lecturer–student interaction and the central storage of student information in the South African context (Maphalala & Adigun, 2021). As such, learning management system platforms allow universities to deliver high education through blended and online mode e-learning means (Bervell & Umar, 2017). These platforms are not time and space bound as they store user, course and content information on a server or cloud (Sharma & Vatta, 2013).

Maphalala and Adigun (2021) posited that for e-learning to advance educational borders and improve the learning capacity of students via different virtual and mediums, it is important to have access to fast internet connections. The findings of a 2018 survey on the status of ICT in South Africa indicated that a significant part of the South African population was technologically excluded, which has thus deepened the inequalities that are characteristic of society (Gillwald, Mothobi & Rademan, 2018). The challenges of the high cost of internet access, limited access, poor connection speeds and unstable electricity supply remain major obstacles for the widespread adoption of higher education through technology (Gillwald, Mothobi & Rademan, 2018).

Ngcamu (2020) noted that the 2015–2016 student protests under the banner of #FeesMustFall, #DecolonisedCurriculum and #RhodesMustFall and the resulting shutdown of public universities were some of the major push factors forcing universities to adopt technology more aggressively in the teaching and learning space.

2.4.4 The 2019 Novel Coronavirus

Covid-19 brought worldwide shock and disruption to the higher education sector (Marinoni, Van't Land & Jensen, 2020). The World Health Organization pronounced Covid-19 a global pandemic on 11 March 2020, resulting in the shutdown of universities across the world. Universities had difficulty organising teaching and learning online, student mobility and cross-institutional collaboration during the first

months of the pandemic (Marinoni, Van't Land & Jensen, 2020). Higher education in South Africa was not spared from the closure and disruption. When the government imposed a total country lockdown in March 2020, all HEIs were closed for all physical teaching and learning. In an effort to save the academic year, HEIs switched from contact to online teaching (Hedding *et al.*, 2020). Well-resourced historically white institutions adopted online, open-access and digital learning, and adapted and responded to the pandemic as quick as possible; historically black institutions, on the other hand, continued to lag behind (Lembani *et al.*, 2020).

The Covid-19 pandemic exposed the state of ICT inequalities in higher education (Ahmed, 2020). According to Hedding et al. (2020), campus closures impacted numerous students from poor and marginalised backgrounds who rely on government financial assistance. The digital divide was identified as a hindrance to students who did not, for example, have laptops and data facilities to switch to online learning (Mpungose, 2020). Numerous South African students without computer facilities at home depend on university-provided facilities such as computer labs, libraries and Wi-Fi hotspots tgo access the internet and online learning materials (Coetzee *et al.*, 2021).

Historically white institutions adapted quickly to online teaching and learning by providing academics and students with the appropriate learning platforms and systems, devices and mobile data (Osman & Walton, 2020). In describing the digital divide, Mpungose (2020) argued that the post-1994 policy amendments and restructuring of higher education in South Africa did not go far enough to address the plight of previously disadvantaged black students in as far as e-learning is concerned. Students from poverty-stricken families are challenged by insufficient study conditions at home.

According to Habib, Phakeng and Kupe (2020), the Covid-19 pandemic expedited the digital technologies that have been slowly disrupting the higher education sector and brought under question the extent to which HEIs could still depend on face-to-face or contact teaching. The blended teaching and learning mode is predicted to be an important long-term delivery mode of South African higher education (Habib, Phakeng & Kupe, 2020). In turn, Osman and Walton (2020) argued that the pandemic provides an opportunity to digitise the provision of higher education, and for government to provide overall national policy and direction. Wangenge-Ouma and Kupe (2020)

further proposed that all public universities adopt and expand hybrid or blended teaching and learning models due to these models expanding access, increasing the capacity to provide teaching and learning, and reducing cost.

2.4.5 Funding the Massification of Higher Education

Higher education access helps the wealthy to maintain privilege and an escape route out of poverty for the poor (Styger, Van Vuuren & Heymans, 2016). According to Motala (2017), the massification of higher education systems in Africa was necessitated by socio-economic, political, the exogenous forces of globalisation, and the rise in knowledge economy. According to Wangenge-Ouma (2021), policies that facilitated the growth of student numbers and broadening of access at HEIs to enroll poor students resulted in a funding shortfall.

The policy instruments that shaped the post-1994 higher education era advocated for the massification of South African higher education through policies of redress. This resulted in more students from disadvantaged and poor families enrolling in the higher education sector without having the means to pay university fees (Wangenge-Ouma, 2021). Student debt at public universities has grown to crisis levels, placing the financial sustainability of public universities at risk (Naidu, 2021).

While NSFAS assists students from very poor backgrounds, a category of students called the missing middle, defined as those coming from families with annual incomes of between R350 000 and R600 000, do not qualify for NSFAS (De Villiers, 2016). These students come from families who earn above NSFAS qualifying threshold, but are not well to do to afford university fees (Mlambo, 2020). Since 2015, this plight of the missing middle has received prominence in student protests and policy review (Garrod & Wildschut, 2020).

The decline of government funding public universities has seen the cost of university education become unaffordable for poor and middle-income students (Cloete, 2016). In 2019, South Africa's higher education and training budget on gross domestic product lagged behind other African and Organisation for Economic Co-operation and Development countries. These challenges are indicative of a South African higher education environment that is not stable, but rather in crisis (Tjønneland, 2017). Apart

from the local imperatives faced by the higher education sector, the forces of globalisation and internationalisation have affected university management in South Africa (Chetty & Pather, 2015).

2.5 CONCLUSION

This chapter discussed the study's three secondary objectives: the historical background of the South African higher education environment prior to 1994; higher education in post-1994 South Africa; and the current challenges confronting South African public universities. The South African higher education system was constructed on the political systems of colonialism and apartheid. Prior to 1994, HEIs were classified according to race and ethnicity, thus they benefited white people and excluded black people.

In 1994, South Africa achieved political independence, which brought in a new era in higher education. Legislative reforms, the establishment of quality assurance bodies, and the consolidation of the higher education sector characterised the post-1994 South African higher education environment. Three university types, namely traditional universities, comprehensive universities and universities of technology, were established. The consolidation and mergers of the HEIs reduced the number of HEIs. Two new public universities were built, and the enrolment numbers of black students increased. Although the post-1994 higher education was reformed, public universities face a number of challenges. Student protests at the campuses have increased, and public universities are concerned about increasing student debt and their financial sustainability.

In the next chapter, the focus is on managing in a competency organisation. The chapter specifically discusses the concept of management competencies, the role of a manager in a competency organisation, management models, and managing in an academic setting.

CHAPTER 3: MANAGING IN A COMPETENCY-BASED ENVIRONMENT

3.1 INTRODUCTION

The primary objective of this study is to develop a management competencies framework for HoADs at South African public universities. The South African higher education environment was examined in Chapter 2. The historical context of the higher education sector, the reforms that occurred following the installation of a democratic government in 1994, and the challenges that the higher education sector faced were specifically discussed.

This chapter is divided into five sections. The first section introduces the chapter; the second examines the origins, history, and broad application of the concept of management competencies; the third examines the role that management plays in a competency-based organisation; the fourth examines management competencies models; and the fifth discusses management competencies in an academic setting.

3.2 THE ORIGIN AND EVOLUTION OF MANAGEMENT COMPETENCIES

Management competencies are nowadays a topic of interest for scholars all over the world due to the vital role they play in running of organisations. This is shown by increasing scholarly works across different sectors and industries (see for example Bashir, 2017; Boyatzis, 1982; Lorber & Savič 2011; Manxhari, Veliu & Jashari, 2017; Nwokah, Ahiauzu & Harcourt, 2008; Potgieter, Basson & Coetzee, 2011; Potgieter and Coetzee, 2010; Tyrańska, 2016). The pressures of globalisation and international competition faced by private organisations in the US and the UK have elevated the imperative to have employees who possess the competencies that enable them to contribute to business success (Horton, Hondeghem & Farnham, 2002). As such, a competent workforce makes organisations effective and provides a competitive advantage in the marketplace (Kupczyk & Stor, 2017; Prahalad & Hamel, 1990).

This study confines itself to public universities in South Africa and considers the management competencies required by HoADs to execute their jobs. In order to conceptualise management competencies, this chapter begins with an examination of the definition and contextualisation in literature.

3.2.1 Defining and Contextualising Competencies

Scholars use the terms 'competence' and 'competency' reciprocally, suggesting that they have different meanings (Chan, Liu & Fellows, 2013; Cheng, Dainty & Moore, 2003; Kupczyk & Stor, 2017). They approach the concept from different scientific disciplines and their interests extend to different sectors, both private and public, largely from specifically US and UK orientations (Gonsalvez & Calvert, 2014; Page, Hood & Lodge, 2005). As a consequence, the discussions regarding competencies are influenced by national, sectoral and organisational viewpoints. The terms competence and competences are employed in this study to refer to individual managerial development by organisations.

For the first time, White (1959) discussed the concept of competence in a paper named *Motivation Reconsidered: The Concept of Competence.* As a psychologist, he claimed that the concept of competence could be explained as a phenomenon central to theories of personality and motivation. It is a human quality and disposition that leads to higher levels of performance and motivation. Subsequently, McClelland (1973) published an article that had a notable impact on the field of psychology and general views of competencies (Barrett & Depinet, 1991; Jamil, 2016; Le Deist & Winterton, 2005; Megahed, 2018). Furthermore, McClelland (1973) defined competence by arguing that intelligence and aptitude testing as a basis for determining good staff and learners has flaws. It introduces class and socioeconomic biases that do not forecast achievement as a learner, employee, or in life. He emphasised that, in contrast to traditional tools that measure IQ and aptitude, a measurement of behavioural qualities which assesses specific qualities or knowledge and skills, is capable of identifying exceptional employees and predicting success in a job-related environment. McClelland (1973) created two measurement instruments due to this: criterion sampling and behavioral event interviews. Criterion sampling sought to draw out the differences in behaviour between superior and average performers, while behavioural event interviewing collected data from the participants in a controlled manner. The goal was to identify successful unobserved behaviours, i.e., invisible characteristics, thought processes, and emotions associated with successful behaviours. McClelland is credited with pioneering the behavioural approach to competency as a result of this publication (Megahed, 2018).

Ever since, the subject of competence has been discussed and articulated in literature from various perspectives, resulting in the competency movement (Blömeke, Gustafsson & Shavelson, 2015; Horton, 2000; Schneider, 2019). In the United States and the United Kingdom, the pressures of globalisation and worldwide competitiveness increased the need for employees to have the skills, knowledge, attitudes, and behaviors that enable them to contribute to company success (Horton, Hondeghem & Farnham, 2002). The common perception was that the skill levels of employees did not keep pace with the changing competitive environment. By introducing the National Council for Vocational Qualifications in 1986, the UK government attempted to address this issue of skills shortage (Grugulis, 2003). National vocational qualifications developed into a tool that could increase competencies in a measurable way. As it advocated for predefining a necessary degree of competence in a given area of interest, this became known as the education approach (or the occupational/vocational approach) (Butova, 2015).

The Management Charter Initiative, in addition to national vocational qualifications, was founded in 1988 with the goal of increasing the quality of UK managers and the performance of organisations (Cheng, Dainty & Moore, 2003; Frank, 1991). It published a list of criteria two years later that sought to embody the competencies vital in a management role in all organisations and vocational sectors in the UK. According to Frank (1991: 4), the guidelines define competence as "the ability to perform effectively functions associated with management in a work-related situation". The performance of activities is measured against a national standard that is aligned with the management framework reflecting four major career stages of managers: (1) supervisory level, representing those with supervisory roles; (2) certificate level, for first-level managers; (3) diploma level, for middle managers with complex managerial duties; and (4) master level, for managers who have strategic responsibilities. As such, the UK's focus on competence emphasises the outputs or deliverables that an individual must accomplish or demonstrate (Mitchelmore & Rowley, 2010).

According to Cheng, Dainty and Moore (2003) and Burgoyne (1993), the drawback to the UK educational approach is its accreditation-driven and centralist approach to define competence outcomes as it does not evaluate an individual's ability to perform tasks. Burgoyne (1993) argued that the simplification of competence into qualification

levels under the single broad umbrella of the National Council for Vocational Qualifications is a misrepresentation of the progressive nature of learning and competence acquisition. As a result, an alternative approach, called the functional approach, was developed (Le Deist & Winterton, 2005). Functional analysis views competence as a set of tasks that an individual employee must complete in a specific occupational area (Megahed, 2018). According to Lester (2015: 2), functional competence comprises "four interrelated aspects of whole work roles rather than bundles of tasks; *viz.* the ability to complete tasks, manage tasks (e.g. decide which actions are appropriate for the situation), cope with unexpected situations and things that don't go to plan, and to manage the overall work role (e.g. to work effectively with other people, to plan work and use initiative)".

Several studies published in the US in the 1970s and 1980s by McBer Consultancy Group and American Management Association, respectively, grounded the concept of competencies to a behavioural approach (Pharaoh, 2018: 59). From a behavioural perspective, Klemp (1980), Boyatzis (1982), Dubois (1993), and Spencer and Spencer (1993) followed McClelland's (1973) approach by suggesting that individual competencies are those variables in a person that result in superior and effective job performance. These authors advocated that management competencies must identify the characteristics that separate the performance of superior managers from average managers. They further explained that the underlying characteristics of a manager include "motive, trait, skill, an aspect of one's self-image or social role, or a body of knowledge." These characteristics are measurable and contribute reliably to distinguish between exceptional and average performers (Spencer, McClelland & Spencer, 1994).

Parry's (1996) work built on previous contributions and provided a comprehensive definition of competencies that was widely accepted. Parry (1996: 50) defined competencies as "a cluster of related knowledge, skills and attitudes that affects a major part of one's job, that correlates with performance on the job, that can be measured against well-accepted standards, and that can be improved via training and development". This operational definition was followed, unsurprisingly, by studies done on management competencies conducted throughout other diverse industries (see for example Bashir, 2017; Lorber & Savič, 2011; Manxhari, Veliu & Jashari, 2017;

Nwokah, Ahiauzu & Harcourt, 2008; Potgieter, Basson & Coetzee, 2011; Tyrańska, 2016).

Furthermore, in the 1980s, Prahalad and Hamel (1990) launched a business approach to competency modeling grounded on the concept of *core competencies*. They defined core competency as the outcome of the organisation's skills, its manufacturing capabilities, and the integration of multiple technological advancements. As a result, it was acknowledged as an organisation's distinctive ability to produce and distribute products or services. Prahalad and Hamel (1990) further contended that is a collection of internal strengths and business processes rooted in the organisation underpinning how it conducts its business and is difficult to reproduce by competitors.

Although above literature suggests no uniform conceptual definition for competencies in general, the behavioural competencies approach has grown in recent times resulting in the emergence of several common themes (Blömeke, Gustafsson & Shavelson, 2015; Lorber & Savič, 2011; Fernandez *et al.*, 2012): *first*, several researchers define competencies as an individual's essential attributes and qualities that contribute in the ability to accomplish a job well (Boyatzis, 1982; Klemp, 1980; McClelland, 1973; Parry, 1996; Spencer & Spencer, 1993); s*econd*, the individual's essential attributes and qualities are recognised as the "skills, knowledge, abilities, attitudes, motives, traits, values, behaviours and personal characteristics" required to accomplish a job well (Dubois, 1993; Parry, 1996; Spencer, McClelland & Spencer, 1994); *third*, the individual's essential attributes and qualities function collectively in order to activate job accomplishment (Boyatzis, 1982; Parry, 1996; Spencer & Spencer, 1993); *fourth*, competence is deduced from the successful execution of tasks as opposed to being observed directly, whereas performance is directly observable (Parry, 1996); *fifth*, the individual's essential attributes and qualities are quantifiable and depend on the circumstances and conditions; *finally*, the individual's essential attributes and qualities must separate exceptional job accomplishmnent (Boyatzis, 1982; Parry, 1996). Measuring competencies entails evaluating the individual's essential attributes and qualities in the form of "skills, knowledge, abilities, attitudes, motives, traits, values, behaviours and personal characteristics" that lead to job accomplishment in a particular situation (Ufer & Neumann, 2018).

This section discussed the origin and evolution of management competencies. The educational, behavioural, functional, and business approaches were considered. The next section examines the role of management in a competency-based organisation.

3.3 THE ROLE OF MANAGEMENT IN A COMPETENCY-BASED ORGANISATION

This section reviews the literature related to management in competency-based organisations. There have been numerous studies that have sought to analyse the role of managers and the tasks that they do. As far back as 1964, Allen (1964: viii) wrote that "the manager is a new kind of professional, destined to take his place with the scientist and the educator in shaping the society of the future". Furthermore, Allen (1964) posited that more is expected of managers: they are important role players in different types of organisations and are expected to possess the competencies of managing.

Managers with competencies to lead and steer their organisations in complex and changing global and national environments are in demand across different types of organisations (Harper, 2018; Montt, 2015; Shaikh, Bisschoff & Botha, 2018). Greenwald (2008: 6), observed that an organisation is "a body of individuals working under a defined system of rules, assignments procedures, and relationships designed to achieve identifiable objectives and goals". It is a "social entity attached to an external environment" (Darft & Noe, 2001: 11). The structure of an organisation defines the operating procedures and governance structures within the organization, and it regulates the relationships between stakeholders to ensure that tasks are completed in an orderly and efficient manner (Ahmady, Mehrpour & Nikooravesh, 2016). Competency-based organisations develop competency frameworks as a basis for developing their employees (Gangani, McLean & Braden, 2008). They believe that the workforce's expertise and abilities define organisational success (Verle *et al.*, 2014). Competency-based organisations can, therefore, be explained conceptually as those that have a strategic human resources management philosophy that develops and leverages the individual competencies of its employees (Lišková & Tomšík, 2013) because they understand that employees are their most valuable asset and provides them with an advantage in the marketplace (Pasban & Nojedeh, 2016; Robotham & Jubb, 1996). Competency-based organisations are built around defining key

capabilities of their employees considered necessary for business effectiveness and the mechanisms needed to grow these skills in a way that gives them an edge (Harper, 2018; Lawler III, 1994).

Managers help their organisations achieve goals by performing responsibilities that will yield success (Mehri & Ramezan, 2016). Competency-based organisations recognise that the performance and effectiveness of their managers depend on the competencies that their managers possess. It is unsurprising that organisations have focused on the individual competencies required to achieve superior performance in in management jobs (Megahed, 2018). Since managers are needed in many types of organisations, there is therefore a large body of knowledge regarding their functions. The next section discusses the fundamental functions of management associated with any type of organisation.

3.3.1 FUNCTIONS OF MANAGEMENT

There has been widespread research on the subject of management and managerial work since Katz's 1955 publication *Skills of an Administrator*. Katz established that managers at all levels of organisations need three skills, namely technical, human and conceptual. According to Greenwood (1974), there has been no universally agreed theory of management prior to 1950. The works of Koontz and O'Donnell (1955), and Fayol (1949) converged and became known as the process theory of management, which established that managers, irrespective of organisation, industry or level, perform four functions, namely planning, organising, leading and controlling. The four functions are carried out interdependently and increase organisational performance (Gitman *et al.*, 2018).

Planning

Planning is regarded as a critical responsibility and the primary responsibility of managers (Belyh, 2019; Kareska, 2018; Steyn & Van Staden, 2018). Planning is the logical and orderly process of setting organisational goals (Bateman & Snell, 2013; Kareska, 2018), scanning the conditions in which the organisation finds itself and will accomplish its goals (Choo, 1999; Kareska, 2018), and choosing the best course of actions to achieve those goals (Kareska, 2018; Ogolo, 2011). Planning involves crafting the organisation or unit's vision, mission and objectives, and formulating strategies for achieving goals (Saah, 2017). The socio-political, economic, and international pressures are some of the underlying threads considered in the planning process (Bateman & Snell, 2013; Ogolo, 2011). By definition, planning is oriented toward the future; managers must monitor the landscape in which their organisations operate and identify possible conditions (Lahir, 2016).

The three levels of organisational planning are strategic, tactical, and operational planning (Misni & Lee, 2017; Ogolo, 2011). Strategic planning is an attempt to anticipate all possible scenarios so that an organisation can steer its environment's challenges and opportunities (Jeseviciute-Ufartiene, 2014; Kraus, Reiche & Reschke, 2005). Strategic planning is "a disciplined effort to produce fundamental decisions and actions that shape and guide what an organisation is, what it does, and why it does it" (Bryson, 1988: 6). Due to the long-term time horizon of strategic plans, senior management in organisations initiates developing strategic plans and seeks input from middle and lower management (Kareska, 2018; Misni & Lee, 2017).

When organisations develop short-term plans that extend to one to two years, they are engaged in tactical planning (Kareska, 2018; Misni & Lee, 2017). They devise methods, procedures and tools to implement long-term strategies. The operational planning process, on the other hand, is limited to a one-year time horizon and contains goals that are precise and measurable and come after the strategic and tactical plans have been developed (Misni & Lee, 2017). The focus is on day-to-day decisions (Kareska, 2018; Misni & Lee, 2017).

Organising

Organising is the second management function that creates structure and order in organisations (Gitman *et al.*, 2018). In executing the function of organising, managers carry out plan processes by utilizing all of the organisation's available resources to achieve the identified goals (Cohn, Gillan & Hartzell, 2016; Bateman & Snell, 2013).

The organising function ensures that there are efficiencies in management processes by dividing tasks, creating job groups and departments, and clarifying authority levels in an organisation (Gitman *et al.*, 2018). The organisational structure describes how jobs are to be done. Langton and Robbins (2007: 480) suggested six possible ways that an organisation can be structured, including bureaucratic, functional, divisional, matrix, centralisation and decentralisation structures.

Bureaucratic structures in organisations have a pyramid shape with a vertical line beginning at top management cascading down to middle management and to the lowest employee (Matte, 2017; Mphahlele & Schachtebeck, 2018). They are associated with hierarchical structures, rigid procedures with less flexibility, interpersonal relationships, and well-defined roles and responsibilities (Matte, 2017; Mphahlele & Schachtebeck, 2018; Weber, 1948).

A functional structure is the most popular structure and arranges the organisation into processes and functions, such as production, sales, distribution, and finance (Mphahlele & Schachtebeck, 2018; Pitts & Clawson, 2008). It is assumed that a functional structure enables organisations to consolidate organisational competencies (Pitts & Clawson, 2008).

In divisional structures, the organisation is split into semi-autonomous business units (Allen, 1964; Thompson, Strickland & Gamble, 2007). Head office decides how much power should be devolved to the divisions (Riyanto, 2000). Divisional unit heads are accountable for the performance and outcomes of the divisions.

Matrix structures combine the traditional bureaucratic and functional structures to form project teams (Kuprenas, 2003; Mphahlele & Schachtebeck, 2018). They are introduced when there is a need for technical skills across divisions in the organisation

(Kuprenas, 2003). Employees working in a matrix structure may report to more than one manager.

According to Hage & Aiken (1967), centralisation go hand in hand with bureaucratisation; decision-making and formally resides with top management. Authority is vested in top management of the organisation (Gitman *et al.*, 2018). Hage and Aiken also observed that a centralised structure is rule based while decentralised organisations count on on the competencies of their emplyees. In a decentralised structure, power and decision-making are devolved downwards to lower levels of the organisation (Tam, 2017). The benefits of decentralisation are quick turnaround times, flexibility and responsiveness to external environments (Ahmed & Iqbal, 2009).

Organising can either enhance or inhibit an organisation's attempt to implement its plan and thus significantly impact organisational success. It could be opined that it is an important management function.

Leading

Leading and leadership as a management function has been researched extensively from multiple perspectives in literature. The components of leading are described as managing subordinates, pursuing efforts that unite the unit (Mintzberg, 1990), making decisions, solving problems (Saah, 2017), obtaining employees' support for the plan (Lloyd & Aho, 2020), communicating and motivating (Allen, 1964).

In the mid-nineteenth century, the great man theory of leadership assumed that leaders are born and not made, and that destiny has set them apart for leadership (Spector, 2016). Scholarly criticism of the great man theory ushered in the trait approach theory to leadership and laid the foundation for many other leadership theories (Fleenor, 2006). The trait approach theory proposed "that certain people were born with special traits that made them great leaders" (Wilson, 2004: 22). Traits are represented by thoughts, feelings, and the behaviours and skills employed to adjust and interact with the environment and other people (McCrae & Costa, 2003). The trait leadership approach suggests that there are leadership traits such as personality characteristics, personal attributes, individual competencies and personal values that leaders should possess because they are applicable in all situations (Kirkpatrick &

Locke, 1991). The list of key traits developed for the trait leadership approach includes characteristics such as drive, initiative, confident in one's abilities, acumen, determination, persistence, decisiveness, control of emotions, inventiveness, motivation and knowledge of the business (Aubry, Blomquist & Müller, 2007; Kirkpatrick & Locke, 1991).

Although the trait approach contributed to leadership theory, Kirkpatrick and Locke (1991) posited that traits by themselves do not do enough to ensure that leaders of organisations succeed, they need to be complemented by skills, visions and implementation of the vision.

Controlling

Controlling is a useful function during the execution stage; it ensures that the organization pursues the approved plan in place (Ingraham & Rose, 1975). It works in combination with planning to provide guidance to an organisation's entire management operating system (Lloyd & Aho, 2020). It reports deviations from approved plans and procedures, and is a useful function that assit managers to make corrections (Saah, 2017). According to Lloyd and Aho (2020), for the control function to be practical, management should outline the benchmark or target to be met at the beginning of the planning process phase.

According to Ingraham and Rose (1975), controlling has four main purposes: (1) informing management what has occured in the past and what is occurring now; (2) forecasting likely situations if current trends continue; (3) diagnosing deviations from plans and reasons why they happened; and (4) recording and reporting historical decisions that may be valuable for future planning.

Managers conduct a range of activities and tasks in order to carry out the four functions of management: planning, organising, leading, and controlling. (Gitman *et al.*, 2018). The managerial activities are categorised as interpersonal, informational and decisional roles (Mintzberg, 1990). The next section discusses managerial roles that have been reported in literature.

3.3.2 MANAGERIAL ROLES

According to Mintzberg (1990), interpersonal roles are discharged when a manager acts as a figurehead, leader and liaison for the organisation. As a figurehead, the manager engages in ceremonial and official tasks and manager the organisation both locally and internationally (Saah, 2017). The leadership role involves setting direction, recruiting and motivating employees, and guiding subordinates to achieve organisational goals (Gitman *et al.*, 2018; Mintzberg 1990; Saah, 2017). In the role of a liaison, the manager develops relationships with external and internal stakeholders (Robbins & Judge, 2013).

Since the job of management involves relating with diverse people, the manager is likely to possesses more information than his or her subordinates. Informational roles involve gathering information relevant to the organisational unit and passing it on to subordinates by being a monitor, disseminator and spokesperson for the organisation (Mintzberg, 1990). In the monitoring role, the importance of good and relevant information is acknowledged and thus the manager searches for information in the environment in which his or her organisation operates (Gitman *et al.*, 2018; Saah, 2017). The manager plays a disseminator role to pass information to where it is needed the most so that employees are up to date with what is happening in the organisation (Robbins & Judge, 2013). In the role as a spokesperson, the manager communicates with stakeholders outside of the organisation and also represents the organisation at external forums (Gitman *et al.*, 2018).

Managers use information to make decisions of importance on behalf of the organisation. The decisional roles of managers is demonstrated through the entrepreneurial, disturbance handler and resource allocation roles (Mintzberg, 1990). According to Mintzberg (1990), the entrepreneurial role is about managers improving and initiating new things, looking for new opportunities, and adapting to changes in the environment. As a disturbance handler, the manager acts to correct situations and to bring calm and order in the organisation, while the resource allocation role entails the prudent management of financial, physical and human resources through correct allocation and controlling (Robbins & Judge, 2013). The basic functions of management and the managerial roles are indicative of the competencies managers

require to discharge their duties. The next section discusses management competencies models.

3.4 MANAGEMENT COMPETENCIES MODELS

Management competency models have attracted the interest of executives and human resources practitioners in recent years across a wide range of sectors and industries (Lara, Mogorrón-Guerrero & Ribeiro-Navarrete, 2020; Müller-Frommeyer *et al.*, 2017). The models are used to develop employees – especially when they are developed for certain jobs (Müller-Frommeyer *et al.*, 2017). Managers have been challenged by the changes in an increasingly globalised world marked by new technologies and competitive pressures (Manxhari, Veliu & Jashari, 2017). These forces of change have been accompanied by increased investments in individual managerial competencies within organisations since the mid-1980s (Robotham & Jubb, 1996).

A management competencies model is a directory of expertise, know-how, capabilities, qualities, mindsets, attitudes, and character traits needed to effectively perform management tasks in a company (Asumeng, 2014; Manxhari, Veliu & Jashari, 2017). It represents those indicators that ensure that there is success in a given job in the organisation (Stevens, 2012). The type of a job, the intricacies associated with performing it, the industry, and the contextual factors facing the organisation influence the development of a management competency model (Bozkurt, 2011). According to Mirabile (1997), management competencies models separate between exceptional, average and low employees. Parry (1996) asserted that the usefulness of competencies models is in the grouping of similar competencies related to a particular job.

The literature reveals a number of models, frameworks and lists of management competencies that describe specific knowledge, skills, abilities, attitudes, behaviours, and personal characteristics that differentiate between high, average and low performers (Asumeng, 2014; Manxhari, Veliu & Jashari, 2017; Wisniewski, 2019). Management competency models are determined by the difficulties associated with the job, as well as the sector and environment wherein the job is performed within the organisation (Bozkurt, 2011). These management competencies models are recognised for the foundational role they play in the development of the management

competencies framework in this study. Although most management competencies models are organised differently, they converge to the same management competencies clusters and similar competencies. The clustering of the competencies has the advantage of identifying a relatively few groups from an array of competencies while being as detailed as possible (Boyatzis, Goleman & Rhee, 2000; Gonsalvez *et al.*, 2015; Kakemam *et al.*, 2020). Management competencies models are viewed as vital tools that describe the needed expertise, know-how, capabilities, qualities, mindsets, attitudes, and character traits for the accomplishment of jobs. They are used increasingly to benefit organisations by developing a framework that they can use for the recruitment and development of their managers (Lara, Mogorrón-Guerrero & Ribeiro-Navarrete, 2020). For individual managers, it is a measurement and development tool.

Most prior research in business management literature has adopted previously established competency models or has modified existing generic models for testing in a specific context. For the purposes of this study, five competency models were chosen because they are generic in nature and do not describe specific industry competencies. They provide the foundational theory for the development of the management competencies framework for HoADs. The next section presents Katz's three skills of management model.

3.4.1 The Katz's Three Skills of Management Model

Research in management has evolved since 1955 when Katz identified the challenges that managers in organisations face regarding skills to perform their jobs successfully (Petersen, 2006). In this regard, Katz (1955) opined that the core skills of managers are not innate personality traits, but skills that can be developed if managers acquire a set of managerial knowledge. Based on this assumption, it is important to establish the skills of the administrators.

According to Katz (1955) there are three essential skills needed by managers in varying degrees at different levels of an organisation, namely, technical (which comprises specific expertise of a certain job and the skill to think in a logical manner), human (which relates to interacting and collaborating with others), and conceptual

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(which is the ability to understand the big picture, the interconnectedness of diverse sections, and recognising how the surrounding environment affects the organisation).

For one to be considered to have technical skills, one needs to be proficient in using specialised instruments and equipment, methods, techniques, processes, and procedures. For example, computer operators, accountants, doctors, and engineers require specific technical skills to carry out their jobs and to train, direct, and evaluate subordinates performing specialised tasks. It was argued that managers who possess the needed technical skills in a specific task are able to train their subordinates as managers (Katz, 1955).

Human skills are defined in the model as the ability to collaborate with others, to be a team player, to communicate and engage with one another, and to seek conflict resolution in the interactions with others (Katz, 1955). Conceptual skills are considered as the capability to see the different components of an organisation as a complete whole. The three skills work interdependently in managerial jobs and in varying degrees at each level of management in organisations. Katz (1995) argued that human skills are important and that all managers at every level of the organisation require human skills. The need for technical skills is high at the levels below top management, while conceptual skills are essential in middle and senior management positions.

Katz's model assumed that all three skills are learned and applied sequentially and seamlessly in organisations. Managers lead and steer their organisations in complex and changing global and national environments (Harper, 2018; Montt, 2015; Shaikh, Bisschoff & Botha, 2018). They are expected to adapt their skills to the circumstances. Matsuo (2019) argued that management skills are dynamic, that their development is discontinuous rather than continuous, and that previous skills may need to be unlearned.

In the following years, Katz's theory of hierarchy of three fundamental skills became influential in the field of management. Scholars built on it and added a comprehensive assortment of functions needed in management jobs than those earlier conceived (Batao Ibay & Anthony Cenas Pa-alisbo, 2020; Hayton, 2015; Pavett & Lau, 1983; Peterson & Van Fleet, 2004; Razaghi, 2014). The three skills needed at the middle management level, namely technical, human and conceptual skills, are considered

relevant as this study is aimed at HoADs who occupy middle management positions at universities. The next section presents the generic management competencies model of Boyatzis.

3.4.2 The Generic Management Competencies Model of Boyatzis

In 1982, Boyatzis's studied a group of 2 000 managers occupying 41 diverse management positions in 12 distinct firms.   Boyatzis (1982) investigated the characteristics linked to the effective performance of managers. Accoridng to Boyatzis (1982), 19 behavioural competencies characterised managers whose performance was considered above average. These were consequently placed into five management competencies groups: (1) goal and action management; (2) leadership; (3) human resource management; (4) focus on others; and (5) directing subordinates. Boyatzis argued that these competencies distinguish superior from average management performance.

Goal and action management group

The competencies in the goal and management group empower the manager to perform one of the functions of management, namely to plan by establishing goals and implementing those goals. Boyatzis (1982) found that exceptional managers have four underlying characteristics, namely: thinking patterns that reduce wastage, self-intiated behaviours, problem-solving, and influence. He further clarified that these competencies are more present in private sector managers than those in public organisations.

Leadership group

Under the leadership group, Boyatzis (1982) identified that managers at middle and executive levels must possess underlying characteristics such as self-confidence, skill in delivering presentations orally, and conceptualisation. Boyatzis (1982) considered these competencies as important for managers to provide strategic direction to the organisation.

Human resource management group

The human resources management group concerns itself with managing and working with people at different levels in the organisation, such as subordinates, peers, boss, board of directors and external stakeholders. Boyatzis (1982) established that the underlying characteristics in this cluster are use of relational capital, encouragement and empathy, supervision of others, and truthful feedback. These competencies empower managers to relate with various groups of people and stakeholders.

Focus on others group

Boyatzis (1982) found that four underlying characteristics – the ability to control one's behaviour, ability to treat others with fairness, resilience and adaptableness, and being considerate and empathetic – were critical in this cluster. These competencies enable managers to put others ahead of themselves by restraining their needs and desires in favour of others and their organisations.

Directing subordinates group

According to Boyatzis (1982), the effectiveness of managers increases if they possess the competency to direct their subordinates. He identified the use of authority, ability to adapt to changes and empowering others as key competencies under directing subordinates.

Megahed (2018) noted that Boyatzis' model is rooted in American culture and may be difficult to replicate in other cultures. He also questioned its applicability to specific occupations such as lawyers, diplomats, and vocational school teachers.

The general model of Boyatzis led to an interest in the behavioural management competencies for many types of organisation (Gold, Thorpe & Mumford, 2010; Mitra, Bangia & Mitra, 2008). The model is important for this study as it has empirically identified the management competencies that differentiate managers with superior performance from underperformers. According to Boyatzis (1982), positive regard and managing a group process are applicable to managers in middle management positions. These management competencies provide relevant theory that contributes towards the primary objective of developing a management competencies framework of HoADs. The next section discusses Sandwith's competency domain model.

3.4.3 Sandwith's Competency Domain Model

Sandwith's (1993) competency domain model was developed for managerial jobs at all levels in large organisations. The model is not prescriptive but offers guidance to those in roles tasked with management training and development in an organisation. Rooted in Katz's (1955) three-skills cluster model (technical, human and conceptual), Sandwith's (1993) competency domain model assumes that managers' foremost job is to make decisions and carry out managerial tasks in multiple situations. In addition to Katz's three skills, Sandwith's (1993) model advocates for including the leadership and administrative domains.

Sandwith (1993: 50) defined the technical domain as "the actual work that the organization does" and refers to the manager's knowledge of the business or organisation in terms of the processes involved in producing the products or services offered. This domain includes skills that apply to a variety of job types. Sandwith's (1993) model classified human skills as the interpersonal domain. The interpersonal domain is concerned with how well a person interacts with co-workers and customers. This domain includes oral, written, and telephone communication skills and conflict resolution and negotiation abilities, listening to others' points of view, and maintaining silence (Sandwith, 1993).

The conceptual domain was expanded to include the creative domain, which explains that managers need cognitive skills to understand how their role relates to other stakeholders inside and outside the organisation (Sandwith, 1993). To meet the position's creative qualities, the creative portion of this domain was added. These skills are related to idea generation, synthesising, adaptation to changing circumstances, and scenario planning required of managers. The leadership domain connects the conceptual/creative domain to other competency domains (Sandwith, 1993). Leaders turn plans into reality, influence and recruit others to support the strategic direction of the organisation, build and develop teams, and network and build contacts inside and outside the organisation. Leadership thus makes an important competency domain of the model.

In his model, Sandwith (1993) refers to the administrative domain as the skills needed to conduct personnel and financial management functions in an organisation. The

administrative domain also covers knowing, communicating, and ensuring compliance with the policies and procedures. Managers are expected to develop administrative domain competencies that are commensurate with the level of management in the organisation.

Sandwith's (1993) domain model comprising five clusters of management competencies: (1) Technical domain, (2) Interpersonal domain, (3) Conceptual/creative domain, (4) Leadership domain, and (5) Administrative domain, provide an important theory that underpins this study and the achievement of the primary objective, namely, to develop a management competencies framework. It should be noted that the changing management landscape, as well as the broadening of managers' tasks, responsibilities, and priorities, necessitate the modification of Sandwith's model to suit various industries and jobs, confirming its inapplicability to specific occupations and industries (Megahed (2018).The next section presents the Hogan and Warrenfeltz competency model.

3.4.4 The Hogan and Warrenfeltz Competency Model

Having studied all the competency models from McClelland (1973) to 2003, Hogan and Warrenfeltz (2003) posited that all competency models can be arranged into four competency domains, namely: intrapersonal skills, interpersonal skills, leadership skills, and business skills:

Intrapersonal skills

The model suggests three components of intrapersonal skills, namely: (1) self-esteem, emotional security or resiliency; (2) relating with those in positions of power; and (3) ability to control oneself. Hogan and Warrenfeltz (2003) argued that when people have self-esteem, emotional security or resilience, they are self-confident, tend to recover quickly from setbacks, and are positive. Attitude towards authority is demonstrated by complying with rules and procedures. The third aspect of intrapersonal skill – self-control – concerns itself with the ability to master oneself by restraining one's desires, developing self-discipline habits, being personally organised, and doing tasks that need to be done.

According to Hogan and Kaiser (2005), intrapersonal skills describe the management of emotions and behaviours by an individual. It involves the processing of information, self-awareness and self-management competencies (Shek & Lin, 2015). Self-awareness competencies indicators are considered to be the ability to recognise one's own emotions, self-examination and self-esteem, while the underlying characteristics of self-management are the ability ot control oneself, honesty, thoroughness, flexibility, desire to succeed and resourcefulness (Goleman, Boyatzis & Mckee, 2002). Emotional intelligence is accepted as an umbrella concept that expands the understanding of intrapersonal skills. It is described as the "ability to monitor one's own and others' feelings and emotions, to discriminate among them, and to use this information to guide one's thinking and actions" (Salovey & Mayer, 1990: 189). The model argues that integrity is central in intrapersonal skills. It further attributes the success of a manager to interpersonal skills.

Interpersonal skills

Hogan and Warrenfeltz (2003) proposed that the interpersonal skills component of the model comprises four elements: (1) imagining oneself in the shoes of another; (2) anticipating and accommodating other people's expectations; and (3) integrating other's expectations into subsequent dealings and behaviour, and (4) self-control. Hogan and Warrenfeltz (2003) contended that interpersonal skills enable one to relate with people from diverse backgrounds.

Leadership skills

The leadership skills domain rests upon intrapersonal and interpersonal skills and is made up of five areas: (1) recruiting and bringing talented people into the team; (2) ensuring that talented people who are brought in stay; (3) motivating the team; (4) crafting a vison that binds the team together; and (5) persisting and overcoming setbacks.

Business skills

The competency domain of business skills is cognitive based and comprises planning, controlling, monitoring and evaluating, and organising. The model proposes that the competencies associated with the business skills domain are exhibition of an

understanding of how businessese run, decisiveness, mental alertness, specialised expertise, organising ability, prioritisisation, and strategy making skills.

Hogan and Kaiser (2005) stated that Hogan and Warrenfeltz's competency model is extensive, and the four domains incorporate many competency models. However, Asument (2014) criticized it for ignoring two critical skills: career and mentoring, critical for managerial performance and effectiveness. Asumeng's (2014) 'holistic-domain model of managerial competencies' is deemed inapplicable to this study. The competencies that make up Hogan and Warrenfeltz's model are thus considered essential theory in the development of the management competency model for HoADs. Slocum, Jackson and Hellriegel's management competency model is presented in the next section.

3.4.5 Slocum, Jackson and Hellriegel's Managerial Competency Model

A model developed by Slocum, Jackson and Hellriegel (2008) proposed six management competencies required for managerial jobs, namely: (1) communication competency, (2) planning and administration competency, (3) teamwork competency, (4) strategic action competency, (5) self-management competency, and (6) multicultural competency.

An expansion of the six management competencies is presented in Table 3.1.

Table 3.1: Management competencies and their descriptors

Management competency	Management competency descriptions
Communication competency	• Communicating informally • Communicating formally • Negotiating
Planning and administration competency	• Researching details, analysing and thinking • Developing strategies and organising plans • Managing resources • Allocating and managing finances
Teamwork competency	• Encouraging partnerships • Forming nurturing environments • Maximisng teamwork

Management competency	Management competency descriptions
Strategic action competency	• Familiarising oneself with the business • Possessing knowledge of the organisation • Acting in the best interest of the orgnaisation
Multicultural competency	• Embracing differences and diversity • Cultivating cultural sensistivity
Self-management competency	• Pursuing honesty in dealings and behaving ethically • Having self-generated energy and being resilient • Harmonising the professional and private life demands • Being aware of oneself and developing personally

Source: Slocum et al. (2008: 6)

The model further proposes that the six management competencies are interdependent in driving managerial performance (Slocum, Jackson & Hellriegel, 2008). Communication competency is a requirement for all managers and involves interacting with people inside and outside the organisation – it can include formal and informal communication as well as negotiations. Planning and administration is a necessary competency in management jobs as it ensures that managers at all levels are skilled to gather information, solve problems, manage time, delegate responsibilities, execute plans, achieve goals, and manage the finances allocated to them.

In order for managers to work with others and accomplish tasks through their team, they require teamwork competency (Slocum, Jackson & Hellriegel, 2008). Managers must know how to create teams, establish a supportive environment for the teams to flourish, and manage team dynamics.

Senior managers are expected to possess the strategic action competency and envision the future of the organisation (Slocum, Jackson & Hellriegel, 2008). Scanning the environment in which the organisation operates and responding with a relevant business strategy are important. Despite strategic planning being associated with senior management, middle and lower management are required to have strategic awareness skills.

A manager who possesses multicultural competency demonstrates an understanding when responding to diverse socio-political, cultural, and economic issues in the

operating environment (Slocum, Jackson & Hellriegel, 2008). This is considered important at all levels of management in an organisation.

According to Slocum, Jackson and Hellriegel (2008), self-management involves taking charge and being accountable for one's life in both the work and private environments. Managers who possess self-management demonstrate honesty in their dealings, uprightness and decision-making that is rooted in moral convictions, drivenness and ability to recover from setbacks, stability, sober judgement, ability to handle life issues, awareness of one's strengths and weaknesses, and self-directed development.

The Slocum, Jackson and Hellriegel (2008) competency model is useful and important in this study as it identifies additional middle management competencies. Thus, the model provides a theoretical base for the development of a management competencies framework for HoADs.

3.4.6 Discussion of the Models

The five models discussed thus far identified the wide range of competencies needed for superior performance in managerial jobs at different levels of an organisation. Conceptually, the management competencies contained in the models reflect the combination individual qualities, skills, knowledge, abilities, attitudes, motives, traits, values, behaviours and personal characteristics that cause job accomplishment in a particular situation. However, caution should be exercised when applying generic competency models without considering the context of the organisation's environment.

Public universities are faced with changes emanating from within and outside their campuses. The qualities and competencies of managers at the universities who are responsive to these changes have never been as important. Adapting existing generic models has been found to be a cost-effective way of developing organisation- and sector-specific competencies (Asumeng, 2014). Similarly, the models provide a theoretical base for the development of a management competencies framework for HoADs at public universities in South Africa.

The next section discusses management competencies in an academic environment. Specific reference is made to the role and functions of HoADs and the general perspectives related to the position.

3.5 MANAGEMENT COMPETENCIES IN AN ACADEMIC SETTING

Universities are organisations enclaved in a scholarly culture of professional autonomy and academic freedom (Broström, Feldmann & Kaulio, 2019), where the primary functions of teaching and research (Archer, 2017) are distributed to faculties and their respective academic departments. Subject expertise is seen as the most legitimate basis for many decisions and is fragmented across the various disciplines and scientific areas represented in the organisation (Broström, Feldmann & Kaulio, 2019). This is particularly important as public universities provide a higher, special and noble cause for societal good (Walker & McClean, 2013).

According to Preymann *et al.* (2016), universities have internal tensions of working systems of teaching, research and administration: both teaching and research have the overall aim of knowledge creation, while the university administration concentrates on complying with rules, ensuring corporate governance, and establishing order. The main activities of teaching and research are exercised within an institutional environment of high levels of employee autonomy, self-government, academic freedom, and decentralised collegial decision-making (Ruben, Lisi & Gigliotti, 2017). Employees gain and develop competencies in the key responsibilities of teaching and research through doing tasks by themselves, observing others, submitting results to senior colleagues, having them discuss it in seminars, for example (Musselin, 2006).

Weick (1976), an organisational social psychologist, introduced the concept of loosely coupled systems to describe universities. He asserted that universities have specific characteristics that differentiate them from other types of organisations, arguing that universities by nature lack cohesion and integration. Weick (1976) further pointed out that universities are characterised by blurred, diverse or vague organisational processes; low levels of coordination of employees' productive activities; low levels of organisational control dispensed through policies that give employee autonomy; and less managerial control. The characterisation of universities as loosely coupled systems has since received support from several authors (Elken & Vukasovic, 2019; Lutz, 1982), with Barrett *et al.* (2019) arguing its manifestation in devolved decision-making powers to academic departments.

Traditionally, universities have been seen as communities of scholars with common interests in teaching and research (Deem, 1998; Jongbloed, Enders & Salerno, 2008), focusing exclusively on scholarship in the broader sense. Since the 1980s, however, there has been a distinct shift from focusing exclusively on being nonprofit organisations to being institutions that embrace business-like philosophies concerned with their financial viability (Kok *et al.*, 2010; Soh, 2005). This has subsequently established a *managerialist* ideology associated with embracing business sector practices by the public sector (Davis, Jansen van Rensburg & Venter, 2016; Deem, 1998). This so-called managerialism is characterised by the adoption of scientifically based management methods (Kok *et al.*, 2010), the corporatisation of universities through business performance metrics (Chetty & Louw, 2012), the embrace of enterprise ethos that seeks to generate income (Whitchurch & Gordon, 2010), and the centralisation of governance structures resulting in increased control of academic staff (Ryan, 2012; Whitchurch & Gordon, 2010).

As such, managerialism has brought with it a new way of managing universities. Power and decision-making have shifted from a community of scholars and academics to professional managers in a bureaucratic organisational structure (Deem, 1998; Shepherd, 2018). As a result, universities have recognised that to succeed and stay relevant, they require competent academic leaders and managers who can function in the jobs of heads of departments, deans of faculty, deputy/pro-vice chancellors, and even vice chancellors (Ngowi & De Jager, 2016).

3.5.1   Role and Functions of Academic Departments

HoADs are middle managers tasked with overseeing the operations of their respective academic departments (Pham *et al.*, 2019; Buller, 2018; Potgieter, Basson & Coetzee, 2011; Lyons, 2008; Vacik, 1997). Academic departments date back to the 1880s and 1890s and have evolved to be the structure most used at universities and colleges (Rosowsky & Keegan, 2020; Seagren, Creswell & Wheeler, 1993) as they deliver on a triple mandate, namely, to provide teaching and produce qualified graduates, conduct research, and offer community services (Al-Turki & Duffuaa, 2003). The growing offering of courses led to a growth in specialisation and number of academic departments (Gonaim & Peters, 2017).

Academic departments are considered important building blocks of universities (Lane, 2018) and the immediate organisational context and physical location in which academic staff engage in academic work (Pifer, Baker & Lunsford, 2020). They are the disciplinary homes of academic staff and the organisational structure through which academic staff are assigned courses and enact their scholarly inquiry, and further provide a place where different cultures and contestation of ideas takes pace (Pifer, Baker & Lunsford, 2020). Much of the work of colleges and universities is executed at department level (Wolverton, Ackerman & Holt, 2005), this is crucial in establishing the ethos of these institutions (Jones, 2011a). According to Gmelch (2015: 3), "80% of university decisions are made at department level" as they translate a university's vision and strategic goals into reality (Gonaim & Peters, 2017). Departments are the primary location for academic staff appointments, promotions, and socialisation into the norms and practices of the university.

Academic departments are governed by a combination of academic and administrative structures, characterised by collegial and managerialism cultures, respectively (Du Toit, 2007). They are accountable to stakeholders, operate within environments of constraints and opportunities, and have bureaucratic layers and processes (Jongbloed, Enders & Salerno, 2008).

As the position of HoAD became institutionalised in the US context in the late 1880s, it has since spread to HEIs the world over (Kruse, 2020). The development of this position was influenced by the drive to see intellectual specialisation at universities on the back of changes in both higher education and industry politics (Dyer & Miller, 1999). As academic departments grew in numbers over the years (Knight & Trowler, 2001; Morris, 2008), the demand for HoADs who will head the departments also grew (Neary *et al.*, 2009). Coupled with this, as the work of universities has become more complex, HoADs have fulfilled an increasingly important leadership role to support faculty deans (Kruse, 2020). The position has thus evolved to include a myriad of day-to-day tasks and responsibilities required for academic departments to function properly and to carry out the primary mandate of the university, similar to the rise of middle managers in businesses (Gmelch, 2015). HoADs thus fulfil a crucial role in the functioning of a university.

The next section discusses the general perspectives on the managerial role of HoADs. The South African perspective is also presented.

3.5.2 General Perspectives on the Managerial Role of HoADs

HoADs worldwide have numerous titles, including departmental heads, chairs, academic leaders, departmental chairs, school directors, head of schools, and division heads (Hendrickson *et al.*, 2013; Kruse, 2020). Regardless of the title used, the individuals assuming these roles are the principal administrative officers of academic departments, and the job varies widely from department to department, and university to university (Cipriano, 2017; Kruse, 2020).

There is increasing research on the position and function of HoADs and, as discussed above, especially the paradigm shift towards managerialism in the 1990s. Although the changing higher education sector around the world fuelled by external forces (such as accelerating globalisation, technological advances and public demands for accountability) is contributing to a change of the HoAD position (Pham *et al.*, 2019), it is the appropriation of managerialist ideology from the private sector that has affected the HoAD position the most (Davis, Jansen van Rensburg & Venter, 2016). Managerialism is a philosophy that subscribes to a business way of running organisations, it believes that management practices give best results (Bleiklie, 2018). It values and elevates the status of managers by creating hierarchical structures in organisations (Kolsaker, 2008). Managerialism is, therefore, rooted in a new public management school of thought, which was introduced by English and Australian public administrators (Hood, 1991). It is described as a public service agenda that adopted the management philosophy of the private sector believing that it translates into quality and efficiency of the civil service (Bleiklie, 2018).

From a South African perspective, the title of HoAD varies across public universities and includes titles such as heads of school, division directors and departmental chairs (Lyons, 2008). These managers are typically appointed for a term ranging from three to five years (Croucamp, 2013). As discussed in Chapter 2, since 1994, the South African higher education sector has experienced fundamental changes driven by local priorities (Sing, 2016; Swartz *et al.*, 2019) and, as indicated here, the global trends of managerialism and corporatisation have exacerbated the pressure placed on

managing academic departments (Davis, Jansen van Rensburg & Venter, 2016; Metz, 2017). As such, Dlamini (2018) argued that South African public universities have embraced the acceptance of neoliberal reforms in the name of pursuing world class status that have subsequently deepened the inequalities in the higher education sector. The corporatisation of universities has further undermined the post-1994 framework built upon the South African Constitution, which seeks to implement redress policies and access to higher education (Dlamini, 2018). This resultant corporatisation at South African public universities is one of the factors fuelling the student protests discussed in Chapter 2 (Gray, 2017). Therefore, the environment facing HoADs is constantly changing and requires individuals who are able to manage the environment effectively.

The literature review shows that four studies focused on the competencies and managerial environment facing HoADs in South Africa (see Table 3.2). The study by Visser (2009) developed a training framework for one university in South Africa. Potgieter and Coetzee (2010) researched the management competencies of HoADs at one correspondence university in South Africa and found that HoADs come into their positions with very little and inadequate training. Croucamp (2013) studied HoADs and proposed a competency model for HoADs. The model, however, failed to describe the structural relationships of competencies and their contribution to the performance of the HoADs. Another limitation of Croucamp's study was a very small number of participants, thus making generalisation of the findings difficult.

Table 3.2: Studies since 2000 on management competencies of HoADs in South Africa

	Author/s	**Research focus**
1	Visser (2009)	Development of a management competency training framework for one university in South Africa
2	Potgieter and Coetzee (2010)	Management competencies for one university in South Africa
3	Potgieter, Basson and Coetzee (2011)	Literature overview of management competencies for the development of heads of department in the higher education context
4	Croucamp (2013)	Developing a competency model for heads of departments at ten tertiary education institutions in South Africa

Source: Own

3.5.3 Managerial Tasks and Duties of HoADs

HoADs are deemed as middle managers in the structure of universities (Kruse, 2020), and the position is often considered to be the gateway up the ladder of management at universities (McDade, 1987). The position has traditionally been occupied by respected scholars within the discipline and considered a ceremonial appointment (Hecht *et al.*, 1999). The position has, however, become increasingly more managerial and administrative in recent times (Pham *et al.*, 2019). It is described by Gmelch (2015) as the most unique management position as incumbents carry out their management functions while simultaneously engaging in teaching and scholarship.

The higher education landscape has been changing rapidly since the beginning of the twenty-first century, which has directly impacted the position and responsibilities of HoADs (Potgieter, Basson & Coetzee, 2011; Weaver *et al.*, 2019). While many universities still insist that they have a record of scholarship through specifically publications, the expectation extends to being more than a mere role model or figurehead (Weaver *et al.*, 2019). More specifically, HoADs have become central in ensuring that universities as organisations are managed efficiently and effectively (Buller, 2018; Gmelch *et al.*, 2017). The position has thus evolved and universities are looking for HoADs who are skilled in advocacy, consensus-building, financial management, communication, and the implementation of university policies and directives (Machovcová, Zábrodská & Mudrák, 2019). The managerial role of HoADs has therefore broadened in its functionality beyond being mere manager in the simplest sense.

To identify the managerial competencies needed in the role, it is important to explore the tasks and duties of the HoAD managerial role. These are shaped by the type of university in which HoADs function, the organisational structure and leadership approach of the university, and the academic discipline in which HoADs specialise (Gmelch, 2015; Moses & Roe, 1990).

A comprehensive study conducted by Pham *et al.* (2019) at Asian, Australian, British, and US universities identified six broad HoAD categories of tasks and duties. They are presented in Table 3.4 as: (1) departmental and university governance; (2) programme

management; (3) human resources management; (4) budget and resources management; (5) external communication; and (6) office management.

Table 3.3: The tasks and duties of HoADs

Category of tasks and duties	Tasks and duties	Sources
Departmental and university governance	Reviewing/replying to office correspondence	Chu (2006); Young (2008)
	Chairing departmental meetings	Chu (2006); Tucker (1992); Young (2008)
	Reading administrative materials	Chu (2006); Young (2008)
	Writing reports	Chu (2006); Tucker (1992); Young (2008)
	Developing and initiating long-term departmental goals	Chu (2006); Jones (2011a); Tucker (1992); Young (2008)
	Evaluating departmental performance	Young (2008)
	Informing department of faculty and university concerns	Tucker (1992); Young (2008)
	Soliciting ideas to improve the department	Young (2008)
	Providing informal and collegial leadership	Young (2008)
	Preparing the department for accreditation and evaluation	Tucker (1992)
	Doing strategic planning	Scott; Coates and Anderson (2008)
	Championing the department within the university	Boyko (2009); Jones (2011a); Weaver *et al.* (2019)
	Developing policies for the department	Scott; Coates and Anderson (2008)
	Identifying new opportunities	Scott; Coates and Anderson (2008)
	Implementing departmental plans	Boyoko (2009); Jones (2011a)
	Using committees effectively	Tucker (1992)
	Providing institutional support and advancement	Boyko (2009); Jones (2011a)

Category of tasks and duties	Tasks and duties	Sources
Programme management	Scheduling classes	Chu (2006); Tucker (1992); Young (2008)
	Staffing classes	Chu (2006); Tucker (1992); Young (2008)
	Conducting programme and teaching assessment	Chu (2006); Tucker (1992); Young (2008)
	Encouraging good teaching	Boyko (2009)
	Remaining current within the discipline	Boyko (2009); Jones (2011a)
	Fostering good teaching in the department	Chu (2006); Jones (2011a); Tucker (1992); Young (2008)
Human resources management	Managing staff	Jones (2011a); Scott, Coates and Anderson (2008); Tucker (1992)
	Handling performance reviews	Chu (2006); Jones (2011a); Tucker (1992); Young (2008)
	Recruiting staff	Chu (2006); Jones (2011a); Tucker (1992); Young (2008)
	Managing tenure and promotions	Chu (2006); Tucker (1992); Young (2008)
	Maintaining conducive work climate, including conflict resolution	Tucker (1992); Young (2008)
	Supervising and evaluating technical and administrative staff in the department	Tucker (1992)
	Stimulating faculty research and publications	Tucker (1992)
	Maintaining staff morale	Boyko (2009); Jones (2011a)
	Developing staff	Scott, Coates and Anderson (2008)
	Promoting affirmative action	Tucker (1992)
	Managing relationships with senior staff	Scott, Coates and Anderson (2008)

Category of tasks and duties	Tasks and duties	Sources
Budget and resources management	Managing the departmental budget	Chu (2006); Jones (2011a); Tucker (1992); Weaver *et al*. (2019); Young (2008)
	Seeking outside funding	Tucker (1992)
	Managing finances and facilities	Chu (2006); Jones (2011a); Tucker (1992); Weaver *et al*. (2019); Young (2008)
External communication	Serving as an advocate and representing the departmental at university-level meetings	Tucker (1992); Chu (2006); Young (2008)
	Encouraging participation in regional and national professional meetings	Tucker (1992)
	Building and maintaining relationships with external stakeholders	Weaver *et al*. (2019)
Office management	Maintaining essential department records, including student records, and managing data	Jones (2011a); Tucker (1992)
	Monitoring building security and maintenance	Tucker (1992)

Source: adapted from Pham et al. (2019: 3)

This section discussed the myriad managerial tasks and duties of HoADs. The next section discusses the management competencies expected of HoADs.

3.5.4 Management Competencies Expected of HoADs

HoADs face the challenge of not merely understanding the requirements of their own positions at their own universities, but also the demands placed on them to exhibit competence in order to succeed in their role (Crosthwaite & Erwee, 2014). Although the functions and roles of managers are similar across different sectors and industries, it is acknowledged that some specific management competencies only apply in the university context (Crosthwaite & Erwee, 2014; Potgieter, Basson & Coetzee, 2010).

Drawn from the management competencies models presented in Section 3.4 and supported by additional literature reviewed, the management competencies regarded to be specific to HoADs in an academic setting are grouped into seven categories (see Table 3.4). The following seven management competencies are identified as being the most pertinent *vis-à-vis* HoAD:

- **Self-management:** the skills, behaviours and personal characteristics that empower actions, thoughts, and feelings flexibly and effectively in the work environment, their outlook on life, and how that the things that are happening in their lives are handled (Aslan & Pamukçu, 2017; Slocum, Jackson & Hellriegel, 2008).

- **Resource mobilisation and management:** the ability and skills to obtain and manage the financial, human and other resources required to advance the plans of the academic department (Hogan & Warrenfeltz, 2003; Nambiar, 2017).

- **Diversity and uncertainty management:** the ability and skills to manage a diverse and changing academic department, navigate the pressures caused by legislative and policy uncertainty that is largely outside the control of the HoAD (Slocum, Jackson & Hellriegel, 2008; Teece, Peteraf & Leih, 2016).

- **Developing networks and partnerships:** the ability, skills and behaviours to connect the academic department to the outside world by developing networks and partnership that result in the progress of the department (Greven, Strese & Brettel, 2020; Hogan & Warrenfeltz, 2003; Sandwith, 1993).

- **Leadership:** the ability, skills and exemplary behaviours to provide direction, lead peers, motivate staff and advance the vision of the academic department (Boyatzis, 1982; Gmelch, 2019; Hogan & Warrenfeltz, 2003).

- **Strategic planning:** the ability and skill to develop a plan for the academic department through a consultative process and to put internal processes and systems in place to achieve departmental and university goals and objectives (Bashir, 2017; Boyatzis, 1982; Meymand, Pour & Jafari, 2013; Slocum, Jackson & Hellriegel, 2008).

- **Staff management:** the ability and skills to build a cohesive team, rally staff around an agreed upon strategic vision, motivate staff to enhance teaching and research, evaluate staff performance, manage conflict, and foster a climate inside the department that values diversity of cultures and views (Boyatzis, 1982; Caron, 2019; Hogan & Warrenfeltz, 2003; Katz, 1955; Slocum, Jackson & Hellriegel, 2008).

Table 3.4: Management competencies required by HoADs

Competencies	Description	Source
Leading	Providing clear direction, motivating staff, setting appropriate standards of behaviour, being decisive, being pro-active, being a problem solver, making decisions, setting an example, and recruiting staff of high calibre.	Banerjee *et al.*, (2020); Frantz, Lawack & Rhoda (2020); Kruse (2020); Lyod & Aho (2020); Caron (2019); Pham *et al.*, (2019); Wisniewski (2019); Jooste, Frantz & Waggie (2018); Armstrong & Woloshyn (2017); Saah (2017); Crosthwaite & Erwee (2015); Gmelch (2015); Stretton (2015); Cilliers & Pienaar (2014); Nickson (2014); Gmelch (2013); Chetty & Louw (2012); Jones (2011a), Lyons (2008); Spendhove (2007); Seagren, Creswell & Wheeler (1983).
Strategic planning	Being a strategic thinker, planning and formulation strategies, implementing strategies, doing environmental scanning and analysis, being knowleagebale about orgnaisation and the industry, intentionally driving strategic plans, having conceptual skills, having analytical ability, dealing with complexity, and creating a compelling vision.	Cunningham & Smith (2020); Haney (2020); Wangenge-Ouma & Kupe (2020); Eckel & Tower (2019); Nataraja & Bright (2018); Bashir (2017); Guerra *et al.*, (2017); Hatherill (2017); Letizia (2017); Albon, Iqbak & Pearson (2016); Goldman & Salem (2015); Simyar & Osuhi (2015); Meymand, Pour & Jafari (2013); Hinton (2012); Kahveci *et al.*, (2012); Ofori & Atiogobe (2012); Fathi & Wilson (2009); Lyons (2008); Slocum, Jackson & Hellriegel, 2008); O'Brien (2006); Haywaard, Ncayiyana & Johnson (2003). Boyatzis, 1982).
Self-management	Having courage, honour, integrity, energy, drive, and learning agility. Communicating informally and formally, having negotiation skills, being honest, being able of ethical conduct, having a professional manner, being widely trusted, balancing work/life issues, having personal drive, being resilient, and managing stress.	Swartz *et al.,* (2019); Grackova (2019); Ghali, Habeeb & Hamzah (2018); Alferaih (2017); Aslan & Pamukçu (2017); Alsemgeest, Booysen & Bosch (2017); Christian (2017); Godfrey *et al.*, (2017); Kälkäjä (2015); Suess (2015); Kumar, Adhish & Chauhan (2014); Ross (2014); Hellriegel *et a*l., (2012); Symington (2012); Slocum, Jackson & Hellriegel (2008); McPheat (2010); Jain & Sinha (2006); Goleman (2001); Mills (1983); Mains & Sims (1980); Luthans & Davis (1979).

Competencies	Description	Source
Staff management	Recruiting talent, training, coaching, mentoring, working effectively as part of a team, managing conflict, designing teams properly, creating a supporting team environment, managing team dynamics appropriately, coaching others, developing others, delegating tasks, managing performance, and listening.	Gigliotti (2021); Musakuro & De Klerk (2021); Gumbi & Mckenna (2020); Kruse (2020); Ulz (2020); Caron (2019); Armstrong & Woloshyn (2017); Naidoo (2015); Thomand & Thomas (2015); McCormack, Propper & Smith (2014); Floyd & Dimmock (2011); Slocum, Jackson & Hellriegel (2008); Slocum, Jackson & Hellriegel (2008); Hogan & Warrenfeltz (2003); Leaning (2003); Boyatzis (1982); Katz (1955).
Diversity and uncertainty management	Managing diversity, managing cross-cultural issues, managing change, having respect for differences, creating an environment conducive for transformation, and being resilient.	Du Plessis (2021); Mickey, Kanelee & Misra (2020); Wangenge-Ouma & Kupe (2020); Makoni (2019); Steenkamp (2019); Calderon (2018b); Urbancová, Čermáková & Vostrovská (2016); Hogg & Belavadi (2017); Godfrey *et al.,* (2017); Dike *et al.* (2015); Hellriegel *et al.* (2004); Hogan and Warrenfeltz (2003); Al Abduwani (2017); Lone *et al.,* (2017); Luvalo (2017); Achor & Gielan (2016); Mehri and Ramezan (2016); Teece, Peteraf & Leih (2016); Ovan (2015); Kola & Pretorius (2014); Chun & Evans (2015); Rudhumbu & Chawana (2014); Croucamp (2013); Potgieter, Basson and Coetzee (2011); Carter (2010); McGuire & Bagher (2010); Gwele (2009); Chartered Institute of Personnel & Development (2005); Greco & Roger (2001); Cameron, Kim & Whetten (1987).
Resource mobilisation and management	Using resources optimally, using management information systems effectively, gathering information timeously, managing time, managing financials, managing human resources, understanding governance processes, having a commercial understanding, managing customer care, managing policies compliance, evaluating performance, and negotiating for resources.	Wangenge-Ouma (2021); Douglas Lees, Malik & Williams (2019); Swartz *et al.,* (2019); Musselin (2018); Nambiar (2017); Mateus, Allen-ile & Iwu (2014); Wangenge-Ouma (2010); Hogan & Warrenfeltz (2003).

Competencies	Description	Source
Developing strong networks and partnerships	Managing external relationships with key stakeholders, establishing and maintaining relationships with peers from internal departments, using humour to bring warmth to relationships, and using political processes to influence others.	Chu (2020); Greven, Strese & Brettel (2020); Gmelch (2019); Cano & Whitfield (2019); Kozma & Calerno-Medina (2019); Mehri and Ramezan (2016); Gmelch (2015); Bergman (2014); Croucamp (2013); Edmonson *et al.*, (2012); St. Marthe (2012); Potgieter, Basson and Coetzee (2011); Potgieter and Coetzee (2010); Spendlove (2007); Hogan & Warrenfeltz (2003); Sandwith (1993).

Source: own

3.6 CONCLUSION

This chapter addressed the two secondary objectives of the study, namely identifying the management competencies of HoAD and discussing the general perspectives on the managerial role of HoADs. The review of literature showed that there is growing literature in management competencies, which is due to the recognition that human resource development gives organisations a competitive advantage in the marketplace. Individual competencies of employees and managers lead to job performance. As a response, organisations have been developing management competency models to capture the skills, abilities, behaviours, and personal characteristics required in each position.

Although HoADs occupy important middle management positions in universities, they are appointed into the jobs without previous management experience. HoADs are challenged by a myriad of tasks and responsibilities and changes taking place in their operating environment. The management tasks specific to academic institutions emphasise the need for developing a management competencies framework for HoADs in public universities.

The next chapter presents the conceptual model for the study that will inform the development of a management competencies framework for HoADs at South African public universities. The background, diagram of the model, the constructs underpinning the model and the hypotheses are discussed.

CHAPTER 4: CONCEPTUAL MODEL AND HYPOTHESIS DEVELOPMENT

4.1 INTRODUCTION

This chapter presents the conceptual model for the study that will inform the development of a management competencies framework for HoADs at South African public universities. The conceptual model is based on the review of the literature discussed in Chapters 2 and 3. Section 4.2.1 introduces the model by providing the background and diagram of the model. The constructs underpinning the model and the hypotheses are discussed in Section 4.2.2. The moderating variables are discussed in Section 4.2.3 followed by the conclusion.

4.2 DEVELOPMENT OF THE CONCEPTUAL MODEL FOR THE STUDY

4.2.1 Background to the Conceptual Model

The job of managing an academic department is regarded as one of the most complex and challenging at a university (Gappa & Trice, 2010; Gigliotti, 2021). Faced with pressures and disruptions emanating from the external and internal environments of their work (Gallos, 2002), HoADs navigate the complexities that come with occupying a middle management position, which is typically squeezed between senior management and departmental staff (Armstrong & Woloshyn, 2017; Pham *et al.*, 2019).

The HoAD interfaces with multiple stakeholders who are external and internal to the academic department. Externally, the HoAD manages relationships with those who directly contribute to the successful performnace of the academic department, such as the dean, senior management, central administrative departments (for example, human resources, finance, marketing, and safety), donors, government agencies, student bodies and societies, professional bodies, and parents of students (Chu, 2020; Hecht *et al.*, 1999; Nellis & Harrington, n.d). Internally, the HoAD is the line manager of academic and administrative staff and interacts with a changing student population on departmental academic matters (Armstrong & Woloshyn, 2017).

Capturing this external and internal dynamic *vis-à-vis* the management competencies of HoADs is central to the model proposed in this study. Externally, HoADs focus on

growing the profile of the discipline and facilitating its relevance by developing networks and partnerships that are beneficial to the department. In an ever-changing external environment filled with uncertainty, this requires mobilising resources for the department and establishing a culture in which academic staff are involved and appreciated for their contributions (Al-Karni, 1995; De Freitas *et al.*, 2020; Gallos, 2002; Moraru, 2012).

Internally, managing a department requires developing a vision that has the buy-in of all stakeholders in the department, while championing the needs of staff in the department and addressing many student-related matters (Al-Karni, 1995; Armstrong & Woloshyn, 2017; Kruse, 2020; Potgieter, Basson & Coetzee, 2011; Seagren, Creswell & Wheeler, 1993). These are not easy tasks for even the most experienced and developed HoADs. In carrying out all these responsibilities outside and inside of the department, HoADs are expected to develop a collegial culture and bring synergy between the department and the university's reputation (Lane, 2018).

Linked to the delivery of these functions is an administrative system made of policies and procedures required to enable the academic department to operate, highlighting the essential requirement for HoADs to have the requisite management competencies in order to succeed. As such, management competencies are described as a collection of qualities, values, knowledge, skills, abilities, attitudes, behaviours, and personal characteristics, which lead to effective managerial performance in a given context, situation or role (Boyatzis, 1982; Parry, 1996; Spencer & Spencer, 1993; Woodall & Winstanley, 1998). Therefore, it is not surprising that a number of scholars consider this one of the toughest jobs at a university (Davis, 2018; Harvey, 2021; Thomas & Thomas, 2015).

Despite the significance of the role of representing the department to senior management, evidence suggests the reluctance to take up the position of HoAD (Gigliotti, 2021), citing a major reason, namely that inadequate training and development opportunities are provided (Brinkley-Etzkorn & Lane, 2019; Gmelch *et al.* 2017). For HoADs taking up the role voluntarily, the willingness to serve and assist their fellow scholars in the department and to position the academic department have been found to be a major driver (Gmelch & Miskin, 1993). Irrespective of whether

HoADs come into the position willingly or unwillingly, they move from a strictly scholarly role into a management and leadership role, and more often than not, with a deficit of competencies to manage at that level (Buller, 2018; Flaherty, 2016; Gmelch, 2015; Lucas, 1986; Pate, 2012).

Based on the literature review conducted in Chapters 2 and 3, scholars have added to the body of knowledge by defining and developing management competencies models across many disciplines and sectors. This study argues that HoADs require two broad categories of management competencies: those that require them to manage factors emanating outside (or external) to the department, and those required to be more hands-on due to factors emanating internally from the department.

Despite the fact that research has been conducted in South Africa, the structural relationships of the management competencies in job performance outside and inside the academic department at South African public universities are still explored insufficiently. To fill this gap in the literature, a conceptual model of the HoAD's SLFMAN as it relates to the EMCs and IMCs is proposed.

4.2.2 The Conceptual Model

A conceptual model illustrates the relationships between variables considered in the study (Hair *et al.* 2016). It serves as the foundation on which the study is developed (Premkumar, David & Ravindran, 2017) and links proposed causal linkages among a set of concepts. Soni and Kodali (2013: 5) and Earp and Ennett (1991) argued that a framework (or model) must meet the following conditions: (1) describe the structural relationships elements of the system being studied and not just propose elements contained in the system; (2) describe the different phases or sequences of events; and (3) describe the different connectors of the framework by explaining the dependent, independent, and mediating variables. As such, the development and schematic presentation of the framework considered all the identified main theoretical elements, their subelements, and their relationships (Sinclair, 2007).

The conceptual model for this study is presented in Figure 4.1. As suggested earlier, HoADs are expected to have competencies to manage factors emanating externally to the department, on the one hand, and those inherent to the internal management

environment of the department, on the other. The model posits that the inherent SLFMAN of HoADs reflect what the individual brings to the job and acts as a predictor of EMCs and IMCs, respectively (Christian, 2017; Cowley, 2018; Kalargyrou & Woods, 2009). In turn, both EMCs and IMCs are respectively regarded as second-order formative constructs made up of subconstructs extracted from literature. For EMCs, the subconstructs are:

- Resource mobilisation and management (RMM) (Donachie, 2017; Jarvis & Mishra, 2020; Nambiar, 2017; Potgieter, Basson & Coetzee, 2011).
- Diversity and uncertainty management (DUM) Croucamp, 2013; Gwele, 2009; Potgieter, Basson & Coetzee, 2011; Whitchurch & Gordon, 2010).
- Development of networks and partnerships (DNP) (Gmelch, 2019; Greven, Strese & Brettel, 2020; Kruse, 2020; Stawnychko, 2021).

All three of these subconstructs emanate externally to the department where the outcomes of the duties are generally not under the control of the HoAD. Similarly, for IMCs, the three subconstructs refer to competencies that are part of the day-to-day management of the department itself where job performance is generally under the control of the HoAD. These include:

- Leading: (Caron, 2019; Croucamp, 2013; Gmelch, 2019; Lane, 2018; Potgieter, Basson & Coetzee, 2011).
- Strategic planning: (Haney, 2020; Kelly, 2009; O'Brien, 2006; Ofori & Atiogbe, 2012; Schafer, Tomasik & Gilmore, 2005).
- Staff management (STFMAN): (Cipriano, 2017; Hecht *et al.*, 1999; Jones, 2011a; Kruse, 2020; Pham *et al.*, 2019; Potgieter, Basson & Coetzee).

In summary, SLFMAN acts to empower an HoAD by influencing the EMCs and IMCs and, subsequently, the execution of duties requiring competencies to manage activities from both outside and inside the academic department. The model further assesses whether the relationship between SLFMAN and EMCs and IMCs are respectively moderated by the type of university, race of the HoAD, gender of the HoAD, and experience of the HoAD regarding the number of terms served. Due to the model identifying and testing structural relationships of management competencies needed by HoADs driven by external and internal forces, it can be applied across different departments, disciplines and university types.
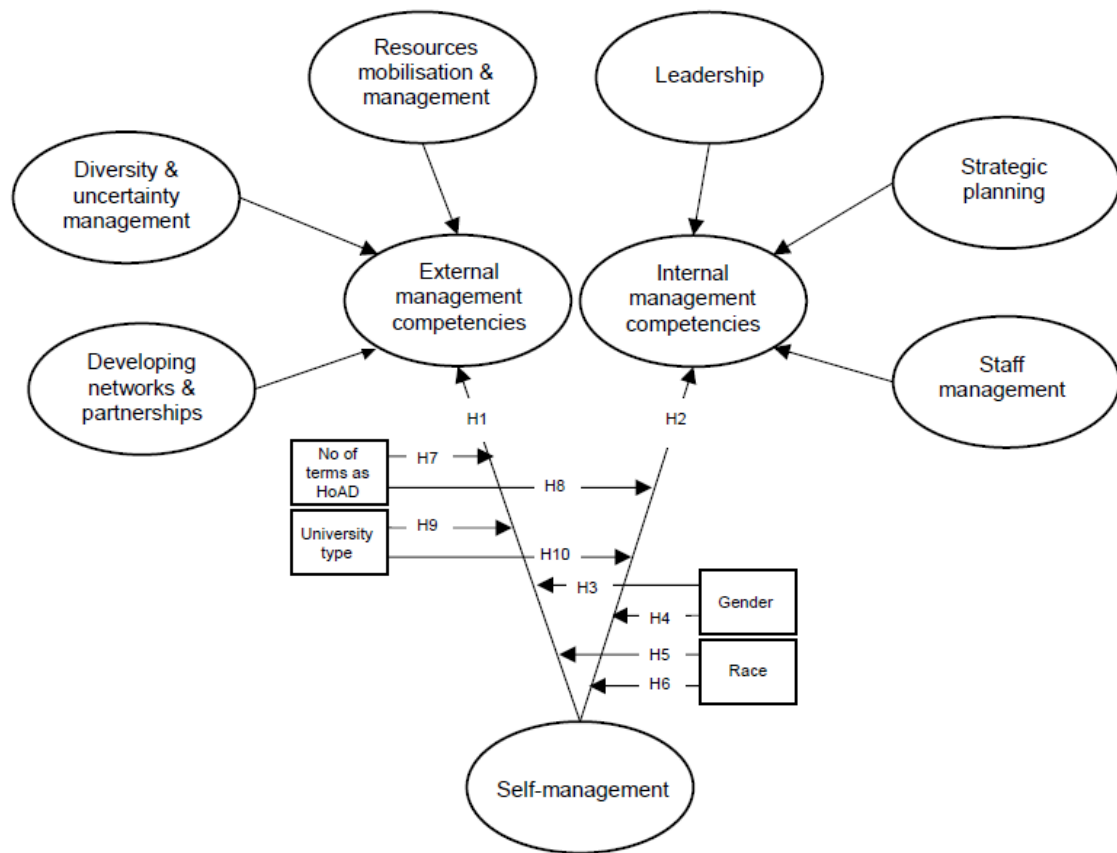
Figure 4.1: Conceptual model of the study

Source: Own

4.2.3 Construct and Hypotheses Development

4.2.3.1 Self-management

Navigating the world of work as an HoAD requires self-management, which refers to the ability of HoADs to oversee their own conduct (Ghali, Habeeb & Hamzah, 2018) and adopt behaviours that would result in changes they desire in their positions (Alsemgeest, Booysen & Bosch 2017; Symington 2012), leading to job performance (Alferaih, 2017). HoADs with self-management have innate behaviours that strengthen desirable habits and lessen bad habits in the working environment (Kälkäjä, 2015).

Self-management has attracted the interest of researchers in the disciplines of organisational behaviour and management (Jain & Sinha, 2006; Luthans & Davis, 1979; Manz & Sims, 1980; Mills, 1983). As far back as 1979, Luthans and Davis (1979)

noted the inattention to the value of self-management by referring to it as the missing link in managerial effectiveness. Scholars have found that self-management provides benefits to managers and organisations resulting in job performance (Alferaih, 2017; Gerhardt, 2007; Jain & Sinha, 2006; Renn *et al.*, 2011; Tombari, Vito & Ndukwu, 2018). There is a recognition that "the person that the manager is; the responsibility of being his or her best self in terms of attitude, contribution to work, learning and growing personally and professionally, it is a win-win situation for the individual and the organisation, and is therefore more value that their skills" (Gomez, 2017: 40).

The complexities, ambiguity and paradoxical nature of the HoAD role require HoADs to possess the skills, abilities and behaviours to manage themselves and improve job performance outcomes. HoADs assume the middle management position without prior preparation, "in-service training, competency assessment or feedback about the person–job fit" (Cilliers & Pienaar, 2014; 26). Their ability to self-manage brings important social, emotional and attitudinal personal characteristics to the HoAD role (Cowley, 2019; Gigliotti, 2021). These inward personal characteristics empower the HoAD's actions, thoughts and feelings in flexible ways to be more effective in the work environment (Christian, 2017; Suess, 2015; Ross, 2014; Symington 2012). An HoAD who possesses SLFMANs will intentionally undertake behaviours that are characterised by "personal attributes such as honesty, trustworthiness and reliability" (Botha & Musengi, 2012: 73).

Self-management equips HoADs to take responsibility for their own actions, behaviours, mistakes and emotions (McPheat, 2010). It suggests a strong consciousness of their personal strengths and weaknesses and the resultant capacity to manage in a way that results in job performance (Manz & Sims, 1980). Self-management is demonstrated by a life that is characterised by values of personal behaviours that exhibit ethics, integrity, honesty, personal drive and resilience, self-awareness, self-directed development, work–life balance, time management, communication skills, transparency, and ability to take initiative (Goleman, 2001; Hellriegel *et al.*, 2013; Kumar, Adhish & Chauhan, 2014). HoADs with SLFMANs communicate with colleagues in the academic department and other stakeholders external to the academic department (Godfrey *et al.*, 2017). Self-management thus reflects the ability to be adaptive and flexible in handling change, and resultantly

empowers the smooth handling of multiple demands, shifting of priorities, and uncertainty in an ever-changing environment (Goleman, 2001). An HoAD requires SLFMANs to manage the external and internal environments of the job.

The need for HoADs to possess SLFMANs is relevant in the South African context. The changing higher education environment fuelled by policies of socio-economic-political redress in South Africa has implications for HoADs (Swartz *et al.*, 2019). Not only are HoADs expected to stay abreast of the changes, but they are also required to demonstrate self-management by integrating the changes in the management of academic departments. By showing stability and control of their emotions – such as anger and fear, integrity, setting a positive example for others and managing reactions during changing situations – HoADs in the South African context will be effective managers in both the external and internal environments (Grackova, 2019). It can, therefore, be argued that SLFMANs enable HoADs to perform their jobs by managing both the external and internal environment affecting the academic department.

4.2.3.2 External management competencies

For purposes of this study, EMCs refer to those required by an HoAD to perform their duties due to factors emanating in the external environment – outside of the department. By implication, these management competencies deal with factors outside the control of the HoAD, but have a material impact on the successful management of the department. As the next section will argue, EMCs include three subconstructs, namely, RMM, DUM, and DNP.

4.2.3.2.1   Resource mobilisation and management

To be able to fulfil the mission and strategic plan of the academic department, HoADs need resources such as financial, human and logistical resources. These resources are invariably secured from central administration departments, research agencies, donors and other sources external to the academic department. RMM is thus described as a combination of knowing the resources necessary to manage the academic department and connecting with persons and/or institutions outside the locus of the department who provide these resources (Nambiar, 2017).

HoADs in South Africa discharge their duties in a context of limited resources caused by tight funding, rising costs, and skills shortages in some disciplines (Douglas Lees, Malik & Williams, 2019; Mateus, Allen-Ile & Iwu, 2014; Wangenge-Ouma, 2021). Inadequate financial resources attributed to declining government subsidy and inability of students from poor backgrounds to pay fees are the foremost challenges confronting South African universities, which thus affect HoADs (Wangenge-Ouma, 2010). HoADs compete for limited budgets in centralised budgetary and planning systems that do not devolve the funding decision-making power to the academic departments that produce university revenues (Musselin, 2018). Without mobilising external funding for departmental projects and activities, HoADs find it difficult to deliver on the annual plan of their academic departments (Swartz *et al.*, 2019). They need the skills to mobilise resources outside their academic departments and help to increase the department's profile.

4.2.3.2.2 *Diversity and uncertainty management*

Managing diversity and uncertainty emanating from forces outside of an academic department is arguably one of the most challenging tasks for an HoAD (Mickey, Kanelee & Misra, 2020; Zhuwao et al.,2019). This is mainly due to a department operating as a subsystem of the broader macro-environment that affects universities directly (Lone *et al.*, 2017). As with RMM, an HoAD has a limited measure of control over these external factors. HoADs are expected to uphold forces of globalisation-fuelled DUM and organisational imperatives (McGuire & Bagher, 2010; Steenkamp, 2019).

Modern universities have staff and students from diverse backgrounds with different expectations of their HoAD (Godfrey *et al.*, 2017). According to Urbancová, Čermáková and Vostrovská (2016: 1083), diversity in the workplace manifests in the "age, sex, ethnicity and nationality, creed or disabilities" of the workforce. It recognises the differences of the workforce and leverages them for organisational effectiveness (Rudhumbu & Chawawa, 2014). Uncertainty management seeks to manage uncertainty during change and in cases of ambiguity about likely future scenarios (Hogg & Belavadi, 2017). Therefore, at the core of DUM is the ability of the HoAD to navigate pressures that are largely outside the control of the academic department (Teece, Peteraf & Leih, 2016). For example, the changing social, legal and economic

environment, as well as individual expectations and values, have a direct effect on institutions and potentially on the organisational culture (Chartered Institute of Personnel & Development, 2005: 1-7).

The determination of the democratic South African government to address the pre-1994 history of racial discrimination that classified public universities by racial and ethnic differences has resulted in legislation that compel public universities to come up with transformation policies and plans that reflect the diversity of society in terms of race and gender (Luvalo, 2017). HoADs are implementers of diversity plans and policies, and they manage the implications associated with the policies in their reports to senior management (Croucamp, 2013; Gwele, 2009; Kola & Pretorius, 2014).

Although the rapid pace of change resulting in uncertainties has become a feature of university environments worldwide (Al Abduwani, 2017), external disruptive forces are increasing at an alarming pace in the South African university sector (Wangenge-Ouma & Kupe, 2020). Student protests have become a regular occurrence at universities, disrupting the academic calendar and creating uncertainty among academic staff (Makoni, 2019). All organisations, including universities, do not like uncertainty (Carter, 2010). Uncertainty leads to feelings of crisis, anxiety and stress and negatively affects performance (Cameron, Kim & Whetten, 1987; Greco & Roger, 2001). HoADs need skills to respond and manage uncertainties emanating from sources external to the academic department. At an individual level, HoADs require resilience to rebuild after suffering adversity and setbacks, stay relevant in changing conditions, persevere in the face of adversity, and manage the academic department in the midst of unending chaotic and stressful work environments (Achor & Gielan, 2016; Ovan, 2015). HoADs further require support at institutional level to ensure there is institutional stability, sustainability and vitality (Wangenge-Ouma & Kupe, 2020).

Therefore, an HoAD seeks to position the academic department in the fast-changing landscape of the higher education sector (Calderon, 2018b). As an important part of the broader university-wide strategies and policies, an HoAD is expected to implement the diversity strategies and policies of their universities in the areas of workforce and culture inclusiveness, student diversity, curriculum changes, decolonising of education, and internationalisation programmes (Chun & Evans, 2015; Du Plessis,

2021; Mickey, Kanelee & Misra, 2020). The source of these programmes and policies all emanates outside the academic department, but have a considerate impact on the department itself – both from an operational and sustainability point of view.

4.2.3.2.3   Developing networks and partnerships

Developing professional networks, cultivating supporters and partners, and nurturing community relationships outside the academic department are important to HoADs (Gmelch, 2015) as they can be regarded as valuable assets that link the academic department to the world outside the department (Greven, Strese & Brettel, 2020). In prioritising external networks and partnerships, an HoAD enhances external resources, makes departmental course offerings relevant, identifies potential collaborations, and gains influential seats at key campus, civic, and professional tables (Gmelch, 2019; Greven, Strese & Brettel, 2020; St. Marthe, 2012). To develop and manage networks external to the academic department, an HoAD needs to possess the requisite competencies (Cano & Whitfield, 2019; Gmelch, 2015; Greven, Strese & Brettel, 2020).

HoADs deal with a large number of issues daily and they are not experts in all fields: developing networks both external and internal to the academic department empowers them and their competencies for job performance. Universities are bureaucratic organisations comprising administrative units such as human resources, finance, communication, and information technology (Chu, 2020).

HoADs recognise that partnerships and collaborations between their academic department and bodies external to the academic department, such as other universities, private and public organisations and research institutes, are a means to achieving their departmental goals (Edmondson *et al.*, 2012). In the pursuit of partnerhips and collaborations, research staff and students attract partners and funding, and provide important solutions to industry problems (Broström, Feldmann & Kaulio, 2019).

Public universities in South Africa and elsewhere are increasingly engaged in activities that extend beyond their traditional mandates of teaching and research. They are now expected to develop networks and partner with other stakeholders with a view of

contributing in local and national contexts (Bergman, 2014). From an HoAD perspective, DNP is an opportunity to showcase researchers and students in the department to external stakeholders (Kozma & Calero-Medina, 2019). HoADs are called upon to demonstrate support by developing, nurturing and supporting these networks and partners who are external to the academic department (Croucamp, 2013; Spendlove, 2007).

In summary, based on the above discussion, the subconstructs and features of EMCs are provided below in Table 4.1.

Table 4.1: The subconstructs and features of EMCs

Construct	Subconstructs	Features
External management competencies	Resource mobilisation and management	• Budgetary constraints • Staff shortages
	Diversity and uncertainty management	• Legislated transformation imperatives • Diverse workforce • Changing environment
	Developing networks and partnerships	• Stakeholder relationships • Networking

Source: Own

4.2.3.2.4   The impact of SLFMANs on EMCs

Without SLFMANs, HoADs find it difficult to execute their job outside their academic departments (Christian, 2017; Gomez, 2017). HoADs who possess SLFMANs can be trusted by constituencies outside the academic departments to behave in an ethical manner and to take responsibility for their own actions and behaviour (Steyn & Van Staden, 2018). Their ability to set goals, identify opportunities, and look new resources outside the department make them adaptable to changing work environments (Cowley, 2018; Steyn & Van Staden, 2018 Davis, Zweig, Franko & Weidner (2015). Such managers are typically emotionally flexible and able to manage transitions in their work environment and adapt to new situations driven by uncertainty emanating outside of the department and the university at large (Botelho, 2021).

Therefore, self-management enables HoADs to adapt to an uncertain and ever-changing higher education environment and make the necessary changes –

sometimes with limited resources at their disposal. By exhibiting the traits of inherent to high levels of self-management, these HoADs deal effectively with difficult emotions while staying optimistic and providing a strong support system to colleagues in the department (Bartz & Bartz, 2017). These attributes suggest increased resilience due to the ability to recover from setbacks out of their control (Bartz & Bartz, 2017; Kruse, 2020). By exhibiting SLFMANs that demonstrate confidence in their abilities, skills in interpersonal relationships and management of stress levels in the department (Osibanjo *et al.*, 2016), it is hypothesised that self-management will have a positive relationship with the competencies required to manage the external environment out of the immediate control of the academic department. For this reason, it is proposed that:

> **H1:** *Self-management has a positive and significant relationship with external management competencies.*

4.2.3.3 Internal management competencies

EMCs refer to those competencies that are required to manage the environment emanating outside of the department that are largely outside the control of an HoAD, whereas IMCs refer to those competencies required to manage the internal environment within a department. The HoAD has more control over this environment due to it requiring a more hands-on management focus to lead staff and drive the strategy of the department, typically within the broader context of the faculty it resides in. As such, the following section argues that this study defines IMCs as having three subconstructs, namely, leading, strategic planning and staff management.

4.2.3.3.1   Leading

Leadership is the basic function of management that is accompanied by influencing and bringing harmony between individual and organisational objectives (Stretton, 2015). The leadership provided by an HoAD is vital to drive the role of academic departments and related units to establish the ethos of a university (Jones, 2011a). For instance, if a university aspires to be research-intensive or improve its academic ranking, HoADs are expected to articulate and implement this vision in their respective spheres of responsibility (Jones, 2011a). HoADs provide leadership in a mid-level position of a university (Pham *et al.*, 2019) to a community of scholars in their

academic department by employing a collegial, consensus-driven and cooperative style of leadership (Chetty & Louw, 2012; Nickson, 2014; Spendlove, 2007). HoADs employ a shared leadership approach that does not rely on positional authority and power, but on consulting and giving advice to colleagues in the department before making final decisions on matters that affect them (Seagren, Creswell & Wheeler, 1993).

Aligned with the types and needs of their universities (Frantz, Lawack & Rhoda, 2020), HoADs are required to possess leadership competencies to serve and coordinate the academic departments internally by setting an example of good behaviour and scholarly productivity (Armstrong & Woloshyn, 2017; Caron, 2019; Gmelch, 2013), setting direction for their academic departments (Crosthwaite & Erwee, 2015; Kruse, 2020; Lyons, 2008; Wisniewski, 2019), recruiting, influencing and guiding staff (Lloyd & Aho, 2020), solving problems and making decisions (Saah, 2017), and executing the day-to-day running of academic departments (Banerjee *et al.*, 2020). As leaders of their departments, HoADs solicit ideas for department improvement, plan and evaluate curriculum development, and organise and conduct departmental meetings (Gmelch, 2015).

HoADs move from an academic position into a management role without prior preparation and are expected to provide leadership to an academic department (Cilliers & Pienaar, 2014). Lack of experience in both academic and leadership roles increases the complexity of the role (Jooste, Frantz & Waggie, 2018). The ability to lead is thus an important management competency that HoADs need to develop.

4.2.3.3.2 *Strategic planning*

For several decades, universities have used strategic planning as a planning tool (Fathi & Wilson, 2009; Guerra *et al.*, 2017). Strategic planning is a management function that HoADs employ to put internal processes and systems in place to achieve departmental and university goals and objectives (Bashir, 2017; Meymand, Pour & Jafari, 2013). Strategic planning in a university tends to follow a top-down approach as it is a diligently drawn-out process used to map future scenarios (Nataraja & Bright 2018; Ofori & Atiogbe, 2012). An overall strategic plan is developed at senior management level whereafter academic and support departments develop the

strategic plans that guide their contribution to the overall university strategic plan (Goldman & Salem, 2015). This is considered important because resistance typically occurs if strategic planning does not rely on input from the entire internal community (Hatherill, 2017).

The development of a departmental strategic plan involves striking a balance between the goals of the university and the personal goals and values of individual academic staff inside the department (Haney, 2020; O'Brien, 2006). The departmental strategic plan typically focuses on creating a shared vision that strengthens the quality of teaching, research, and community engagement (Cunningham & Smith, 2020).

The ability of HoADs to consult and listen to all divergent interests and stakeholders inside the department is therefore crucial (Lyons, 2008; Simyar & Osuhi, 2015) as the department aims to align itself with the external environment (Kahveci *et al.*, 2012). This is done by scanning the environment, analysing present realities, and forecasting the future that will position the academic department ahead of other universities (Fathi & Wilson, 2009).

The strategic plans of academic departments in South African public universities are challenged by the volatile external environment (Wangenge-Ouma & Kupe, 2020; Letizia, 2017). Strategic planning thus assists HoADs with clarifying their vision and future scenarios, anchoring decision-making on rationality and plans, setting priorities, and improving performance of the department (Albon, Iqbal & Pearson, 2016). The result of representatives of all constituencies in the department participating in the planning process is buy-in and commitment to the process and, ultimately, efficient implementation (Eckel & Trower, 2019; Hinton, 2012). Regular communication with all stakeholders is thus necesaary. The changing external environment that HoADs function within makes strategic planning competencies necessary for academic department management (Hayward, Ncayiyana & Johnson, 2003).

4.2.3.3.3   Staff management

HoADs play a critical role in linking senior management of the university and department staff. They articulate the needs of the department and also mediate concerns between the department staff and senior management (Caron, 2019;

Gigliotti, 2021). Staff within the academic department comprise a range of individuals and groups including full- and part-time academic staff and administrative staff.

HoADs consider managing academic staff as one of the most challenging responsibilities in their positions, which they liken to herding cats (Leaming, 2003; McCormack, Propper & Smith, 2014). They are expected to create a cohesive team of departmental staff and rally them around an agreed upon strategic vision so that the academic department can achieve its goals. Furthermore, HoADs must motivate staff to enhance teaching and research, evaluate staff performance, manage conflict, and foster a departmental climate that values diversity of cultures and views (Caron, 2019; Floyd & Dimmock, 2011; Thomas & Thomas, 2015). HoADs demonstrate their support of staff development by advocating for them during the promotion process (Ulz, 2020).

HoADs do not relinquish their identity as scholars while serving in a management role. Most HoADs intend returning to their discipline after serving their management role (Armstrong & Woloshyn, 2017). HoADs often come into the position with a mandate to advocate for their departmental peers (Gumbi & Mckenna, 2020). They are typically seconded by their peers and have temporarily accepted management roles so that their peers can carry on with the department's main functions of teaching and research (Kruse, 2020). Navigating these often competing responsibilities of being a scholar and manager can prove difficult – especially when tough decisions need to be made (Caron, 2019). The effectiveness of HoADs increase when they possess staff management responsibilities.

Recruiting and retaining academic staff to meet the demands of increased student enrolments and mitigating attrition caused by emigration, resignations and retirements have become important to South African HoADs (Musakuro & De Klerk, 2021). HoADs make staffing management decisions against a background of pressure to meet transformation targets and diversify their academic departments so that they can reflect South African society in terms of the racial, gender, ethnic and language representation (Naidoo, 2015). In order to navigate the demands of the South African environment, HoADs require staff management competencies.

As with EMCs, the subconstructs and features of IMCs are summarised in Table 4.2.

Table 4.2: The subconstructs and features of IMCs

Construct	Subconstruct	Features
Internal management competencies	Leading	• Setting direction • Solving problems • Being exemplary
	Strategic planning	• Developing vision for the department • Considering external issues • Identifying new opportunities • Developing and implementing departmental plans
	Staff management	• Consulting staff • Evaluating performance • Providing developmental opportunities • Supporting promotion processes • Developing teamwork • Delegating work

Source: Own

4.2.3.3.4   The impact of SLFMANs on IMCs

SLFMANs enable HoADs to manage the internal environment within an academic department and are vital to achieving the goals of not only the department itself, but also the faculty it resides in and the broader university as a whole (Kälkäjä, 2015). The ability to self-manage is considered a fundamental requirement for empowering HoADs to take responsibility for decisions they make to ensure both individual and organisational success (Steyn & Van Staden, 2018; Suess, 2015). SLFMANs enable HoADs to use interpersonal and collaborative skills and self-directed capacity to manage the academic department through consensus-building (Jonkma *et al.*, 2016). On these grounds, the following hypothesis is therefore proposed:

> **H2:** *Self-management has a positive and significant relationship with internal management competencies.*

4.2.3.4 Moderation effects

Although the relationship between variables is not always simple, it may best be explained through a moderator variable (Fairchild & MacKinnon, 2009). The introduction of a moderator variable in the model changes the direction of the relationship between two other variables (MacKinnon, Coxe & Baraldi, 2012).

Moderation analysis is useful for testing whether the effect of an intervention takes place across groups (Fairchild & MacKinnon, 2009). Although post-apartheid South African public universities have been deracialised and are on a path of transformation, the biographical profile of academic staff and HoADs continue to dominate literature (Breetzke & Hedding, 2018). Accordingly, four biographical moderation variables, namely gender, race, number of terms and university types, were assessed based on theoretical considerations and the need to add potency to the model (Namazi & Namazi, 2016).

4.2.3.4.1   *Gender*

Literature on management competencies has established strong and positive associations between SLFMANs and the ability to bring changes to their work environment resulting in job performance (Ghali, Habeeb & Hamzah, 2018; Jain & Sinha, 2006; Seate, Pooe & Chinomona, 2016; Tombari, Vito & Ndukwu, 2018). SLFMANs equip HoADs to execute managerial duties in the academic department, to communicate with other stakeholders external to the academic department, and to have adaptive and flexible skills in a fluid environment (Godfrey *et al.*, 2017; Goleman, 2001).

However, the strength of the relationship between SLFMANs and EMCs and IMCs is more complex given an HoAD's gender. The issue of gender is a topical issue in South Africa where public universities are considered patriarchal environments as evidenced by the underrepresentation of women in managerial positions (Mangolothi, 2019). Gender diversity leads to positive individual and organisational outcomes in the workplace (Zhuwao et al.,2019).

Empirical studies conducted on differences regarding self-management between women and men in the workplace have produced conflicting findings. For example, a study of employees of small and medium size enterprises by Khalili (2011) found that men showed higher levels of self-management than women. In other studies, the work–life balance was found to be a more important self-management dimension to women than to men (Stead & Elliott, 2009; Verniers *et al.*, 2016). In accordance with popular beliefs, there is evidence that women express their emotions more readily than men (Brody, 1997; Brody & Hall, 2000). Since self-management features include

keeping emotions under control during difficult situations, balancing the demands of work and life, possessing communication skills, demonstrating integrity, and working productively under a pressurised environment, it is hypothesised that gender has a moderating effect on the relationship between SLFMAN and EMCs and IMCs, respectively.

> **H3**: *Gender moderates the relationship between self-management and external management competencies.*

> **H4**: *Gender moderates the relationship between self-management and internal management competencies.*

4.2.3.4.2   Race

As discussed in Chapter 2 (Section 2.1), South African public universities have a history rooted in colonialism and exclusion based on race, which is still reflected in the structures and management of public universities (Beale, 1992; Beale, 2016; Brown, 2000; Erasmus, 2020). The debate about race and redress in the academy is far from over (Geldenhuys, 2020; Jawitz, 2016). Even with the implementation of employment equity interventions that seek to increase the representation of previously disadvantaged groups, the professoriate, which is often the group where most HoADs come from, is still racially skewed in favour of white people in South Africa (Grove, 2017). The lived experiences of black academics are characterised by racism, lack of belonging, lack of opportunities and suspiciously being looked at as not being competent to perform their jobs (Hlatshwayo, 2020; Kola & Pretorius, 2014; Nordling, 2019).

Although racial classifications employ inherited biological traits for grouings purposes, race is a social rather than biological construct (Nittle, 2021; Onwuachi-Willig, 2021) Although racial classifications employ inherited biological traits for grouings purposes, race is a social rather than biological construct (Nittle, 2021; Onwuachi-Willig, 2021). According to Eswaran (2019), racial diversity provides numerous benefits to an organisation, including increased profitability and creativity, more robust managerial environment, and improvement in solving problems. People from diverse cultures bring various perspectives, ideas, and experiences, assisting in developing resilient and effective organisations that outperform organisations that do not invest in

diversity. A study conducted at one of the South African public universities found that gender and ethnic diversity are positively related to employee performance (Setati *et al.*, 2019). Given that HoADs require self-management dimensions such as being resilient, keeping emotions under control during difficult situations, balancing the demands of work and life, possessing communication skills, demonstrating integrity, and working productively in a pressurised environment, it is proposed that racial diversity affects the performance outcomes of HoADs. Therefore, it is hypothesised that race has a moderating effect on the relationship between SLFMANs and EMCs and IMCs, respectively.

> ***H5****: Race moderates the relationship between self-management and external management competencies.*

> ***H6****: Race moderates the relationship between self-management and internal management competencies.*

4.2.3.4.3   Number of terms

The length of time an individual spends in a certain job is crucial for acquiring on-the-job experience (Shukla & Srivastava, 2016). Studies conducted in the South African and global context have found that HoADs regard the job as a temporary task: they come into their roles without prior training, understanding of the challenges and ambiguity of the job, and experience in management (Kruse, 2020; Gmelch, 2015; Lee *et al.*, 2020; Potgieter & Coetzee, 2010). Therefore, it follows that the longer HoADs stay in a position, the more job experience they will acquire (Flaherty, 2016; Harvey, 2021). With more job experience, they are more likely to display better self-management dimensions such as adaptability, time management and emotional maturity (Balyer, 2017; Harvey, 2021; Jorfi *et al.* 2011; Kumar & Muniandy, 2012; Mayer, Caruso & Salovey, 1999). This leads to improved job performance.

Therefore, it is hypothesised that number of terms as HoAD has a moderating effect on the relationship between SLFMANs and EMCs and IMCs, respectively.

> ***H7****: Number of terms moderates the relationship between self-management and external management competencies.*

H8: *Number of terms moderates the relationship between self-management and internal management competencies.*

4.2.3.4.4 University type

It was discussed in Section 2.3.2 of Chapter 2 that post-1994 South African public universities were restructured and categorised as traditional, comprehensive, or university of technology (DET, 2004; Mense *et al.*, 2018). These university types were founded on a historically race-based system that favoured a certain race over another. This resulted in certain types of universities being better resourced than others (Subbaye, 2018). For example, traditional universities are historically advantaged and resourced and are likely to invest in their management structures and systems, thereby creating an empowering environment for HoADs (Mzangwa & Dede, 2019; Tjønneland, 2017).

As pointed out in Section 2.4.5 of Chapter 2, the policies of social equity and redress as well as academic development initiatives to upskill academic staff and support underprepared students are challenged by low public funding and internal university resources (Badat, 2010; Wangenge-Ouma, 2021). While traditional type universities have resources to respond to environmental changes, comprehensive and university of technology types are generally characterised by instability and uncertainty (Ilorah, 2006; Leshoro, 2008; Subotzky, 1997; Tjønneland, 2017). For example, the Covid-19 pandemic exposed the inequalities of university types in terms of students' access to ICT (Ahmed, 2020). Traditional and resourced universities adapted quickly to online teaching and learning by providing academics and students with appropriate learning platforms, systems and devices (Czerniewicz *et al.*, 2020; Saeed, 2020). It can thus be concluded that university type influences the working conditions of HoADs.

Based on these arguments, the type of university is hypothesised to influence the ability of HoADs to manage their respective departments and apply their requisite competencies. The following hypotheses are therefore proposed:

H9: *University type moderates the relationship between self-management and external management competencies.*

H10: *University type will moderate the relationship between self-management and internal management competencies.*

In summary, the hypotheses to be tested are provided in Table 4.3.

Table 4.3: Summary of the hypotheses to be tested

Hypothesis		Expectation
H1	SLFMANs -> EMCs	Positive and significant
H2	SLFMANs -> IMCs	Positive and significant
H3	SLFMANs -> Gender -> EMCs	Moderates the relationship
H4	SLFMANs -> Gender -> IMCs	Moderates the relationship
H5	SLFMANs -> Race -> EMCs	Moderates the relationship
H6	SLFMANs -> Race -> IMCs	Moderates the relationship
H7	SLFMANs -> Number of terms as HoAD -> EMCs	Moderates the relationship
H8	SLFMANs -> Number of years as HoAD -> IMCs	Moderates the relationship
H9	SLFMANs -> University type -> EMCs	Moderates the relationship
H10	SLFMANs -> University type -> IMCs	Moderates the relationship

Source: Own

4.3 CONCLUSION

Chapter 4 presented the conceptual model for the study and achieved the primary objective of developing a management competencies framework for HoADs at South African public universities. Seven management competencies were identified: SLFMAN was considered to be an independent variable while the other six competencies were grouped into EMCs and IMCs. The model advanced the argument that possessing SLFMAN adds value to HoADs because it has positive and significant relationships with EMCs and IMCs. The model further argued that gender, race, university terms and university types moderate the relationship between SLFMAN and EMCs and IMCs, respectively. The next chapter presents the research methodology of the study.

CHAPTER 5: RESEARCH METHODOLOGY

5.1 INTRODUCTION

Chapters 2 and 3 discussed the higher education environment in South Africa as well as managing in a competency-based environment. The theoretical underpinnings helped develop a conceptual model for the study in Chapter 4.

This chapter discusses the research paradigm, research design, research strategy, research method, population under study, method used to collect data, and method of data analysis. The choice of research paradigms, research design and methods chosen for this study are stated. The research instrument design, the validity and reliability of the research instrument are addressed. Ethical considerations pertaining to the research are also discussed.

5.2 RESEARCH PARADIGM

Scientific research has been described as the production of knowledge in a systematic and organised way (Khaldi, 2017), resulting in the collection, analysis and interpretataion of data so as to "understand, describe, predict or control an educational or psychological phenomenon or to empower individuals in such contexts" (Mertens, 2005: 2). According to Khaldi (2017), the research study must adhere to the principles of scientific methods, which involve the following steps:

1) Define the research problem and research constructs.
2) Review concepts, theories and previous findings.
3) Define the statement of the hypothesis or the research question(s).
4) Describe the research framework in terms of research tools, sampling procedure, etc.
5) Collect relevant data.
6) Analyse data.
7) Discuss the results and test the hypothesis (or answer the research question(s)).

Scientific research is influenced by the research paradigms/philosophies the researcher subscribes to (Khaldi, 2017) and assumptions about how the world operates (Park, Konge & Artino, 2020). During the research planning process, it is

essential that researchers examine their philosophical worldview assumptions and the relationship with the design and methods of the research (Cresswell & Cresswell, 2017).

In scientific research, the paradigm or philosophy is the organisation of the researcher's thought, resulting in the production of new, reliable knowledge about the research object (Žukauskas, Vveinhardt & Andriukaitienė, 2018). This research paradigm is a shared set of principles and theoretical underpinnings that guides the scientific community in the formulation and solving of problems (Kuhn, 1970). Furthermore, Park, Konge and Artino (2020: 690) stated that "research paradigms are the philosophies of science that guide the way science is conducted by shaping the following core elements: ontology (how reality is viewed), epistemology (how the nature of knowledge is conceived), axiology (the role and values of the research process), methodology (how the paradigm defines processes associated with conducting science), and rigour (the criteria used to justify the quality of research in the paradigm)." As such, there are different types of research assumption that underpin research. According to Saunders, Lewis and Thornhill (2009: 136-137), five philosophies underpin research in business and management research, namely: positivism, critical realism, interpretivism, post-modernism, and pragmatism (Saunders, Lewis & Thornhill, 2009). Table 5.1 compares the research philosophies.

Choosing the appropriate research approach in social sciences is one of the most challenging decisions for any researcher as it depends on the problem that the researcher is trying to solve and the primary research objective of the study (Cresswell & Cresswell, 2017). The primary research objective of this study is to develop a management competencies framework for HoADs at South African public universities. The study investigated a set of management competencies that HoADs in public universities in South Africa perceive to be important. As illustrated in Chapters 3 and 4, management competencies are unobserved variables that are measured by latent variables. The conceptual model demonstrates the relationships between them. In this respect, a robust in-depth literature review of the phenomenon became the starting point to develop appropriate hypotheses and formulation of the research problem (Cresswell & Cresswell, 2017). Accordingly, a quantitative method was used in this study.

Table 5.1: Comparison of five research philosophies in business and management research

Philosophical assumptions	Philosophies				
	Positivist	**Critical realism**	**Interpretivism**	**Post-modernism**	**Pragmatism**
Ontology (nature of reality or being)	• Real, external and independent. • One true reality (universalism). • Granular things. • Ordered.	• Stratified/layered (the empirical, the actual and the real). • External, independent, intransient. • Objective structures. • Causal mechanisms.	• Complex, rich. • Socially constructed through culture and language. • Multiple meanings, interpretations, realities. • Flux of processes, experiences, practices.	• Nominal. • Complex, rich, socially constructed through power relations. • Some meanings, interpretations, realities are dominated and silenced by others. • Flux of processes, experiences, practices.	• Complex, rich, external. • 'Reality' is the practical consequences of ideas. • Flux of processes, experiences and practices.
Epistemology (what constitutes acceptable knowledge)	• Scientific method. • Observable and measurable facts. • Law-like generalisations. • Numbers. • Causal explanation and prediction as contribution.	• Epistemological relativism. • Knowledge historically situated and transient. • Facts are social constructions. • Historical causal explanation as contribution.	• Theories and concepts too simplistic. • Focus on narratives, stories, perceptions and interpretations. • New understandings and worldviews as contribution.	• What counts as 'truth' and 'knowledge' is decided by dominant ideologies. • Focus on absences, silences and oppressed/ repressed meanings, interpretations and voices. • Exposure of power relations and challenge of dominant views as contribution.	• Practical meaning of knowledge in specific contexts. • 'True' theories and knowledge are those that enable successful action. • Focus on problems, practices and relevance. • Problem-solving and informed future practice as contribution.

Philosophical assumptions	Philosophies				
	Positivist	**Critical realism**	**Interpretivism**	**Post-modernism**	**Pragmatism**
Axiology (role of values)	• Value-free research. • Researcher is detached, neutral and independent of what is being researched. • Researcher maintains objective stance.	• Value-laden research. • Researcher acknowledges bias by worldviews, cultural experience and upbringing. • Researcher tries to minimise bias and errors and is as objective as possible.	• Value-bound research. • Researcher is part of what is researched, subjective. • Researcher interpretations key to contribution and researcher reflexive.	• Value-constituted research. • Researcher and research embedded in power relations. • Some research narratives are repressed and silenced at the expense of others and researcher radically reflexive.	• Value-driven research. • Research initiated and sustained by researcher's doubts and beliefs. • Researcher reflexive.
Typical methods	• Deductive, highly structured, large samples, measurement, typically quantitative methods of analysis, but a range of data can be analysed.	• Retrodictive, in-depth historically situated analysis of pre-existing structures and emerging agency. • Range of methods and data types to fit subject matter.	• Inductive. • Small samples, in-depth investigations, qualitative methods of analysis, but a range of data can be interpreted.	• Deconstructive – reading texts and realities against. • In-depth investigations of anomalies, silences and absences. • Range of data types, typically qualitative methods of analysis.	• Range of methods: mixed, multiple, qualitative, quantitative, action research. • Emphasis on practical solutions and outcomes.

Source: Saunders, Lewis and Thornhill (2019: 144-145)

The positivist research approach was chosen for this study because the development of a management competencies framework is based on existing theories and a single and objectivism view of reality with specific methods to discover and measure independent facts (Saunders, Lewis & Thornhill, 2009). The ontological position of a single and objectivism view of reality is grounded on the belief that HoADs are appointed into managerial positions within a defined hierarchical structure of public universities. HoADs are thus expected to conform to the requirements of the organisation's academic department at the respective public universities.

This study adopted the epistemological position that a management competencies framework for HoADs at South African public universities can be developed by using qunatitataive tools that discover relationships among variables (Soiferman, 2010). Reliance was placed on pure data as well as facts without being influenced by interpretation of bias by humans (Cresswell & Cresswell, 2017; Saunders, Lewis & Thornhill, 2009). Therefore, the investigation was done through inquiry using value-free, statistical generalisations to confirm theory.

5.3 RESEARCH STRATEGY

As this research study is rooted in a positivistic philosophy and involves collecting and analysing data to test hypotheses, a quantitative research strategy was chosen to address the research questions. Quantitative research is a research strategy that involves the delineation of phenomena by collecting numerical data and applying statistical analysis approaches to explain them (Bryman, 2012; Williams, 2007). The typical strategies of inquiry are experiments and surveys (Cresswell & Cresswell, 2017), which involve "a deductive approach to the relationship between theory and research, in which the accent is placed on the testing of theories; has incorporated the practices and norms of the natural scientific model and of positivism in particular; and embodies a view of social reality as an external, objective reality" (Bryman, 2012: 36).

In positivism research, there is no provision for human interests and so the researcher is independent and isolated from the study design and in data collection to minimise bias (Park, Konge & Artino, 2020; Žukauskas, Vveinhardt & Andriukaitienė, 2018). As a result, data is used to measure reality objectively. Quantitative research thus creates meaning through objectivity uncovered in the collected data and attempts to ascertain

causal relationships between constructs by using independent and dependent variables (Williams, 2007). The goal is to build, affirm or validate relationships and to create generalisations that lead to theory.

There are several criticisms against the quantitative research design. The researcher is disconnected from the research subjects and observes from a distance without a relationship with the subject and does not typically get immersed in the setting in which the study happens (Daniel, 2016). The researcher is not flexible in the inquiry of subjects and, therefore, does not study the phenomenon in depth (Atieno, 2009). Furthermore, the structured nature of quantitative research lends itself to the view that it does not encourage creativity and imaginative research (De Vaus, 2002) as the data collected is used to support or reject a predetermined hypothesis.

Quantitative research is contrasted with the qualitative approach. Kalra, Patha and Jena (2013:1) explained that it is employed to explore the beliefs, experiences, attitudes, behaviours, and interactions of research subjects. It does not generate numeric data, but rather provides rich data about the research subjects and attempts to understand their behaviours in the research context (De Vaus, 2002).

In this study, a quantitative approach was applied using numeric data collected from HoADs of South African public universities. Data was collected via an online questionnaire with a seven-point Likert scale.

5.4 RESEARCH DESIGN

Research design is the overall structure that holds a study together. It communicates the plans and decisions that the researcher has made to answer the research questions in detail. Mouton (2001: 55) described research design as "an architectural design or blueprint of a research project and the execution of the design." Creswell and Plano Clark (2007: 58) explained research design as the procedures for collecting, analysing, interpreting and reporting data in research studies. It is a roadmap that the researcher follows to test a hypothesis or answer research questions (Webb & Auriacombe, 2006).

Research design is generally grouped into one of four approaches, namely: exploratory, descriptive, explanatory or experimental (Akhtar, 2016). Exploratory

research is applicable when there are new insights into a phenomenon; therefore, little knowledge is available (Saunders, Lewis & Thornhill, 2009). The researcher is driven by curiosity and assumes the work of a detective (Pratap, 2018). The purpose is thus to collect new data, identify new facts, and gain new insights.

Exploratory research design typically uses unstructured and flexible approaches of data collection (Pratap, 2018): it describes individuals, events, or conditions by studying them as they are in nature without any manipulation by the researcher (Siedlecki, 2020). The exploratory research design approach seeks to understand the phenomenon being studied by following ethical methods that will enrich the study (Stebbins, 2001).

Descriptive research design is used to describe phenomena or ideas as they exist (Saunders *et al.*, 2009). Therefore, it is recognised as the only research design that can be used for both single and multi-variable studies (Siedlecki, 2020) due to it having rigid data collection methods (Pratap, 2018). It is sometimes referred to as statistical research and is extensively used by the physical and natural science research community (Akhtar, 2016).

McNabb (2008) noted that most conventional qualitative studies uses explanatory research as the research design method. According to White (1999), explanatory research is a theory-building research approach that attempts to offer an explanation and account of descriptive information (Akhtar, 2016). Thus, although descriptive studies may ask 'what' kinds of questions, explanatory studies seek to ask 'why' and 'how' questions (Yin, 1989). Using exploratory and descriptive studies as the foundation, explanatory research continues to find real explanations for the emergence of a phenomenon by looking for causal factors and relationships between various facets of the phenomena under study (Akhtar, 2016).

In turn, experimental research design is used in experiment-like conditions to test causal relationships under a controlled situation (Akhtar, 2016). The researcher manipulates the independent variable and observes any impact of those changes on the dependent variable (Scollon, 2021). According to Levy and Ellis (2011), there are four types of experimental research designs, namely: laboratory experimental, quasi-experiment, factorial design and *ex post facto* design. King *et al.* (2012) described a

laboratory experiment as a method that allows the researcher to assign adult participants randomly to achieve manipulated outcomes. In quasi-experiments, on the other hand, the researcher has restricted control over the participants, but can manipulate the independent variable (Cook & Campbell, 1979).

Factorial designs are widely used for studying multiple treatments in one experiment (Muralidharan *et al.*, 2019). Unlike in experiential design, in *ex post facto* studies the researcher's control over the independent variable is restricted as it is usually a life event or life experience of the participant that cannot be manipulated (Black, 1999).

The decision about which research design to adopt broadly depends on the nature of the research as determined by the objectives of the research. For this research, the primary objective of the study was to develop a management competencies framework of HoADs at South African public universities. The management competencies framework is based on already developed management theories which are used widely in the field of management. To achieve this, a non-experimental, explanatory, descriptive survey research design was chosen. As stated in Section 5.3, achieving the primary objective required a quantitative approach utilising statistical tools, examining the relationships of HoAD management competencies, and gaining additional insights into how to develop the framework (Saunders, Lewis & Thornhill, 2009). As a result, the appropriate research design is explanatory, testing a theory and responding to both the how and why aspects of the primary objective.

The descriptive research design approach was appropriately chosen for this study because the development of the management competencies framework of HoADs at South African public universities required the researcher to explore the phenomenon under study (Williams, 2007). By adopting this design, the researcher was able to obtain the HoADs' perceptions and answer the question: 'What are the management competencies perceived important by the HoADs at South African public universities?' The descriptive research design was deemed to be the most appropriate for obtaining the respondents' perceptions (Polit & Beck, 2004: 50). The choice of a non-experiential study design meant that the variables could not be manipulated, but rather measured as they naturally presented themselves.

5.5 SAMPLING DESIGN

5.5.1 Population Description

For this study, the respondents were HoADs. In selecting the respondents, the first step was to consider the population under study. A population is the full set of cases from which a sample is taken (Saunders *et al.*, 2009). It is also defined as the entire interest group that meets the criteria set by the researcher for the study about which some information is required to be ascertained (Banerjee & Chaudhury, 2010; McMillan & Schumacher, 2010). The group shares the same characteristics, specification or features. The population for this study (see Figure 5.2) comprised HoADs of one of three types of South African public universities, namely traditional, comprehensive and universities of technologies (as discussed in Section 2.3.2 in Chapter 2).

The target population is "the entire aggregation of respondents that meet the designated set of criteria" (Burns & Grove, 1997: 236). It is that portion of the total population on which the study focuses (Banerjee & Chaudhury, 2010; McMillan & Schumacher, 2010). With respect to this study, the target population was 529 HoADs of public universities in South Africa that granted institutional or gatekeeper permission to conduct the study (see Table 5.2). The target population of 529 HoADs was determined based on their titles as HoADs. Individuals who occupied positions as directors of units and heads of units with no management responsibilities were excluded from the target population.

Table 5.2: Target population of HoADs

University type	Total population	Target population	Sample	Sample/target population (%)
Traditional university	624	362	320	88%
Comprehensive university	305	101	85	84%
University of technology	149	66	61	92%
Total number of HoADs	**1 078**	**529**	**466**	**88%**

Source: Own

In a research project, gatekeepers are people, institutions, and public or private organisations from which the researcher must obtain permission before accessing the participants in a study (De Laine, 2000; Singh & Wassenaar, 2016). Universities were gatekeepers of HoADs. Gatekeeper permission was received from 54% of public universities as depicted in Table 5.3.

Table 5.3: University types that granted gatekeeper permission

University type	Total no. of universities	Gatekeeper permission received	Percentage of universities
Traditional university	12	7	58%
Comprehensive university	6	5	83%
University of technology	8	2	25%
Total number of universities	**26**	**14**	**54%**

Source: Own

The names and email addresses of the 529 HoADs were obtained from the universities' websites. The researcher used the websites to obtain electronic academic prospectuses and magazines, faculty databases or university or departmental websites to identify HoADs. The offices of the deans provided the HoAD names where the websites were not up to date.

5.5.2 Sampling

Turner (2020) acknowledged that the vast majority of research projects do not collect data from the entire population, but from a smaller sample. Turner (2020) added that sampling from the population is the most efficient way of doing research as it decreases research time and research costs. The aim of survey research is to "make inferences about a population by examining a sample from that population" (Young, 2016: 2).

The sample is the set of elements selected from the population for investigation (Bryman & Bell, 2003; Schofield, 1996; Sekaran, 2000). Studying samples helps the researcher to critically generalise the findings of the analysis to the population under study. Table 5.4 summarises the two broad categories of sampling, namely probability and nonprobability sampling. The objectives of probability and nonprobability sample surveys are centred on observations of a small subset of the population to estimate

the characteristics of a large population effectively (Cornesse *et al.*, 2020). Unlike probability sampling, which gives every member of the population a known and non-zero chance of being included in the sample, nonprobability sampling does not give every unit of the population an equal chance of participating in the investigation (Alvi, 2016; Turner, 2020). Table 5.4 explains several methods of probability and nonprobability sampling.

Table 5.4: The two broad categories of sampling design

Sample type	Description
Probability sampling	
Random	Cases are selected at random – as in a lottery, a roulette wheel or using a table of random numbers.
Stratified	Population is divided into groups by characteristics appropriate for the research questions (e.g. age, income, profit, location), whereafter a sample is selected from each group.
Cluster	Population is divided into segments (e.g. geographical, by street), whereafter several segments (e.g. streets) are chosen at random.
Nonprobability sampling	
Systematic	Cases are selected by choosing every nth case, e.g. 5th, 10th 20th. Systematic sampling is often regarded as close to probability sampling depending on the order of the list.
Quota	Cases are selected on the basis of set criteria (e.g. gender, age, income group) to ensure that the sample has a spread of cases in different categories, even though some of those categories might be small.
Purposive	The sample is hand-picked for the research. Used when the researcher already knows something about the specific cases and selects specific cases deliberately because they are likely to produce the most valuable data.
Convenience	The sample is built from cases that are accessible, such as organisations in a certain region or members of a social networking site.
Snowball	A few key individuals are selected and asked to contact or recommend other relevant individuals. Could be viewed as a mix between purposive and convenience sampling.

Source: Rowley (2014: 12)

For the purpose of this study, probability stratified sampling was used for the target population. The strata were the three university types, namely traditional, comprehensive and universities of technologies. As indicated in Table 5.2, a target population of 529 HoADs from South African public universities was identified on the basis of their titles as HoADs. The target population was reduced to 466 HoADs for four reasons: (1) email auto-office reply indicating that the participants were on

sabbatical; (2) emails that were retuned due to incorrect email address; (3) HoADs who wrote back and excused themselves from the survey; and (4) individuals who occupied positions of directors of units and heads of units with no management responsibilities.

To meet the objective of this study, primary data was collected directly from the respondents who completed the questionnaire using an online survey.

5.5.3 Research Instrument

Surveys use questionnaires to gather information from respondents to achieve the research objectives. As such, the research instrument for this study was a questionnaire. A questionnaire is a useful tool for measuring the attitudes, opinions, biographical information, beliefs, and views of groups that are too large to observe directly (Babbie, 2005; McMillan & Schumacher, 2010). The researcher systematically asks many people the same questions and then records their answers (Neuman & Robson, 2014). The benefits that questionnaires provide are: (1) they are an inexpensive method to collect data from large numbers of the population (Marshall, 2005); and (2) they broaden participation by obtaining responses from a reasonably large number of people, often also dispersed in remote places.

5.5.4 Design of the Research Instrument

The design of the questionnaire is a crucial step when any survey study is conducted as it enables quantitative data to be collected in a standardised manner (Jenn, 2006). Internal consistency and coherence of data collected are considered important for inference of results to the wider population (Bloomer, 2020; Jenn, 2006; Malhotra, 2006).

A researcher-developed self-administered, online survey (see Appendix A) was used to gather responses from HoADs at South Africa public universities (Bryman *et al.*, 2014; McMillan & Schumacher, 2010). The focus was on gathering information about the HoADs, their position, and their opinions of the management competencies deemed important in the position. Since the instrument for the study was self-developed, a number of stages were followed, which included selecting and creating items, doing an exploratory survey, checking content validity, and doing a pilot test.

The planning of the instrument followed outmost care and was grounded on the research objectives and literature review, and involved "experts in the field, colleagues, and members of the target population in question design in order to ensure the validity of the coverage of questions included in the tool (content validity)" (Kelley *et al.*, 2003: 263).

5.5.4.1 Validity and reliability

In quantitative research, validity refers to the exactness of the questionnaire in measuring the concept or phenomenon (Heale & Twycross, 2015). Validity indicators communicate the extent of accuracy contained in the research conclusions (Polit & Beck, 2004). Table 5.5 describes the four different types of validity that the measuring instrument must have, namely: face validity, content validity, criterion validity, and construct validity (Sekaran, 2003). Criterion validity is divided into two types, namely concurrent validity and predictive validity, while construct validity is divided into two types, namely convergent validity and discriminant validity.

Table 5.5: Types of validity

Type of validity	Description
Content validity	Does the measure adequately measure the concept?
Face validity	Do experts validate that the instrument measures what its name suggests it measures?
Criterion-related validity	Does the measure differentiate in a manner that helps to predict a criterion variable?
Concurrent validity	Does the measure differentiate in a manner that helps to predict a criterion variable currently?
Predictive validity	Does the measure differentiate individuals in a manner as to help predict a future criterion?
Construct validity	Does the instrument tap the concept as theorised?
Convergent validity	Do two instruments measuring the concept correlate highly?
Discriminant validity	Does the measure have a low correlation with a variable that is supposed to be unrelated to this variable?

Source: Sekaran (2003: 208)

5.5.4.2 Content and face validity

This study followed the judgemental approach, also referred as face validity, which involves extracting questionnaire statements (Taherdoost, 2018). The content of the

constructs were validated by adhering to the following steps: In Step 1, relevant statements from existing literature on management competencies and academic departmental management were identified. This resulted in the building of the questions and the content validity questionnaire. In Step 2, two groups of experts comprising five faculty deans and five experienced HoADs were chosen. In Step 3, the two groups met separately and were provided with the questionnaire designed in Step 1. The two groups of experts were requested to respond independently to each statement in relation to a particular construct. The following three-point scale was used to assess the statements: '1 = not necessary', '2 = useful, but not essential' and '3 = essential'. In Step 4, the responses of the two groups of experts were combined. This step included counting the responses that indicated 'essential' for each item. Lastly in Step 5, the content of the constructs considered '3 = essential' by the experts were retained and thus formed the questionnaire.

5.5.4.3 Reliability

It is important that the research instrument is seen to be reliable and that it consistently produces the same results by several different researchers under stable conditions (Khawaja, Haim & Dileep, 2012). Reliability is defined as the consistency, dependability and stability with which the research instrument measures the concept or variable across time and across the various items in the instrument (Neuman & Robson, 2014; Sekaran, 2003). Table 5.8 describes the three attributes and explains the measures that estimate the reliability of an instrument.

Table 5.6: The three attributes of reliability

Attributes	Description
Homogeneity (or internal consistency)	The extent to which all the statements on a scale measure one construct
Stability	The consistency of results using an instrument with repeated testing
Equivalence	Consistency among responses of multiple users of an instrument, or among alternate forms of an instrument

Source: Heale and Twycross (2015: 66)

According to Heale and Twycross (2015), Cronbach's alpha test is used to determine the internal consistency of an instrument. It is the most suitable measure of reliability when using Likert scales (Robinson, 2009). The Cronbach's alpha coefficient was thus

used to measure the reliability of the measurement instrument in this case of the questionnaire. The results of the Cronbach's alpha tests are provided and discussed in Chapter 6 when the results for the structural equation model are presented.

In the design of the questionnaire, the questions were made to be "as clear, simple, specific and relevant for the study's research objectives as possible" (Lietz, 2010: 257). In this regard, Rowley (2014) stated the usefulness of knowing the type of questions that are appropriate for particular contexts when developing and preparing the questionnaire. According to McMillan and Schumacher (2010), the types of questions (or statements) on a questionnaire are typically open- or closed-ended questions, scale statements, ranked statements or checked statements. Open-ended questions are used to elicit an answer or short comments from respondents enabling them to use their own language and share their own viewpoints (McMillan & Schumacher, 2010; Rowley, 2014; Saunders *et al.*, 2012). Closed-ended questions are often followed by a set of choices to choose from (McMillan & Schumacher, 2010; Rowley, 2014; Saunders *et al.*, 2012).

In order to assess the respondents' beliefs or opinions accurately, a questionnaire may also include questions with itemised rating scales and a number or brief description associated with each response category (Malhotra, 2006; McMillan & Schumacher, 2010). Likert-type scales are extensively employed to measure behaviours, attitudes, personality traits and other psychological factors (Nadler, Weston & Voyles, 2015). In 1932, Likert originated the scales when he developed a measurement scale to assess the agreement of a respondent with a given statement (Bryman, 2012). The numerical answer choices are horizontally and uniformly spaced next to the item, and the value labels are column headings. Likert's measurement scale includes the neutral midpoint and bipolar endpoints.

There is substantial debate about the optimal number of response options that should be on the Likert scale while still preserving validity and reliability as interval data (Carifio & Perla, 2008). It was reported that an increase in the scale from five to seven improved the reliability and validity, but stabilised when the response options increased (Oaster, 1989; Revilla, Saris & Krosnick, 2014; 2014; Vickers, 1999). Accordingly, the seven-point Likert scale depicted in Table 5.7 was used for each of

the 43 management competencies statements identified in this study. The survey was expected to take a maximum of 30 minutes to complete.

The respondents were guided with the following instruction:

> *This survey contains competency descriptions associated with the role of head of academic department (HoAD). What level of importance would you place on each statement indicated as it relates to your role as HoAD? On a scale of 1 to 7 (1= Not at all important, 7 = Extremely Important), please indicate the degree of importance appropriate to your situation.*

Table 5.7 below provides a visual representation of the scale for the questionnaire, with the level of importance increasing from left to right.

Table 5.7: Scale for questionnaire

Not at all important	Very unimportant	Somewhat unimportant	Neutral	Somewhat important	Very important	Extremely important
1	2	3	4	5	6	7

Source: Own

According to Smyth (2006), questions may also include ranked and checked statements. Ranked statements allow the individual to rate the list of choices from the highest to the lowest available. Checked statements allow participants to select from a variety of choices with the option to choose more than one. The questionnaire for this study is included in Appendix A. The questionnaire was divided into ten sections, as shown in Table 5.8. The questionnaire's sections 6.1, 6.2, and 6.13 included checked statements with the option to select more than one response. The HoADs' management competencies derived from the literature in Chapter 3 of this study were included in Section 8 of the questionnaire. Table 5.9 depicts the management competency statements. Participants were to measure the importance the management competencies statements as HoADs by indicating on a Likert scale. In total, the questionnaire had 43 statements based on the conceptual model proposed in Section 4.2.2 of Chapter 4.

Table 5.8: Questionnaire layout

Section	Title	Description
1	Research Study Information	Cover letter provided background information of the survey.
2	Research Study Information - continued	Continuation of background information
3	Consent to Participate in This Study	Participant consent.
4	Personal Details	Thirteen questions about university type, name of academic department, gender, age, race, academic credentials, number of terms, experience in the academy and other sectors and reporting relationships.
5	Academic Department Profile	Questions about home faculty, academic staff complement, administrative staff and student population.
6	Incumbency	Questions about HoAD position description focused on appointment process, evaluation processes, compensation, future plans of the HoADs.
7	Instructions	Explanation of how to complete Section 8
8	Management Competencies Required by HoADs	43 Likert scale statements to assess knowledge, skills, attitudes, personal traits and attributes.
9	Academic Department Performance	Four questions to assess academic department performance.
10	Optional	Contact details if the participant is interested in receiving a summary of the findings of the study.

Source: Own

Table 5.9 lists of the management competencies and subscales of the dimensions measured.

Table 5.9: Statements measuring management competencies

Management competency cluster	Competency statement
Self-management	Keep emotions under control during difficult situations
	Demonstrate integrity
	Behave in line with the professional, ethical and legal framework of the university
	Good time management
	Handle criticism well
	Balance the demands of a work life and a personal life

Management competency cluster	Competency statement
	Possess communication skills
	Demonstrate clear information-processing skills
	Working productively in a pressurised environment
	Take responsibility for decisions made
Resources mobilisation and management	Identify resource needs for the department
	Negotiate for departmental resources from administrators and other entities
	Ensure the optimal utilisation of resources to meet the department's academic goals
Diversity and uncertainty management	Create an environment supportive of transformation within the department, in line with the university-wide changes
	Demonstrate the capacity to recover quickly from a difficult environment
	Able to adapt to changing circumstances
	Provide developmental opportunities to foster a diverse workforce
	Accept new ideas
	Establish relationships with peers from within the department
Developing netwrorks and partnerships	Manage relationships with key external stakeholders
	Build wide networks of contacts
	Use humour appropriately to bring warmth to relationships with others
	Make effective use of political processes to influence others
Leadership	Provide department staff with clear direction within the distinctive organisation of higher education
	Solve the problems faced by the department
	Motivate staff members to achieve goals
	Set an example as a scholar in the department
	Set appropriate standards of behaviour
	Demonstrate ability to make good decisions
	Recruit staff of high calibre
Strategic planning	Develop a compelling vision for the department's future
	Take account of a wide range of issues across, and related to the department
	Identify new opportunities
	Develop departmental plans in line with the university's strategic objectives
	Implement departmental goals
Staff management	Solicit ideas of staff to improve the department
	Establish good working relationships with staff
	Provide staff with developmental opportunities

Management competency cluster	Competency statement
	Evaluate staff performance against predetermined objectives
	Manage staff promotion process
	Delegate work appropriately to staff
	Promote team work
	Manage staff conflict

Source: Own

The questionnaire was converted into an electronic format. EvaSys Survey System version 8.0, a web-based survey tool, was used to collect the data. The benefits of online surveys are low administration costs, low risk of confidentiality requirements, ease and convenience of administering surveys and following up with participants, global reach, format flexibility, ease of data entry, quick analysis of data, and generalisations of study findings to target population (Evans & Mathur, 2005; Sekaran, 2003; Spencer & Spencer, 1993). In contrast to the benefits of online surveys, several potential weaknesses associated with online surveys include that emails could be ignored because they are thought to be junk emails, computer illiteracy and technological limitations, unclear answering instructions, impersonal nature of online surveys, confidentiality and security concerns, and low response rate (Evans & Mathur, 2005; Sekaran, 2003).

According to Jones *et al.* (2008), despite the advantages of using web-based questionnaires to collect data, there are two main drawbacks: First, the design and creation of a web-based questionnaire require effort and skill. Second, the response rates for web-based and online surveys have been reported to be lower than hard copy surveys. Rowley (2014) further added that in using a web-based questionnaire, the researcher is not able to tell if the questions were understood by the respondents or if the respondents have provided accurate data. The drawbacks were mitigated by conducting pilot testing.

5.5.4.3 *Pilot testing*

Piloting of the research instrument in quantitative studies is an important step in the questionnaire design. According to Rowley (2014), piloting affords the researcher an opportunity to find out whether the questions are understandable and whether the

questionnaire is easy to complete. The objective of carrying out a pilot study is to find out problems and issues that the researcher can correct and increase the probability of success prior to sending the questionnaire to a big number of participants (Bourke *et al.*, 2016; Salkind, 2012). Piloting a questionnaire before it is sent out is further an important step in checking the validity and reliability of the questionnaire (Marshall, 2005) and making adjustments to increase validity and reliability (Heale & Twycross, 2015).

A pilot test of the survey instrument was carried out in the period from 25 June 2018 to 18 July 2018 with the objective of receiving feedback on the length, readability, user friendliness of the instrument. Eight experienced HoADs from a cross-section of disciplines, covering economic and management sciences, natural sciences, law, and humanities, and serving second terms at one public university in South Africa took part in the pilot study. These eight HoADs were excluded from the final study.

The pilot study gave an indication of the time it would take to complete the survey. The feedback and suggestions received from the respondents were processed and incorporated in the final survey instrument. Grounded on the pilot study, the study progressed to the data collection phase.

5.6 DATA COLLECTION AND ANALYSIS

Data was collected by means of a web-based questionnaire after both institutional and gatekeeper permission were granted by the public universities. The HoADs received an email entitled 'Invitation to participate in the doctoral project survey' with a link that granted them access to the online EvaSys Survey System platform, where they could voluntarily complete the questionnaire. The University of the Free State ethical clearance certificate (see Appendix B) and application letter for institutional and gatekeeper permission that the respective HoAD works for (see Appendix C) were attached to the email. The email provided a brief background about the researcher, the aim of the research project, and how long the survey would take to complete. The mail requested participants to click on the link and complete the questionnaire. The deadline to complete the survey was given. Considering that this was an anonymous survey, initially two reminder notices would be sent to all respondents. However, the inadequate responses attributed to Covid-19 and the total shutdown of the public

universities in March 2021 made it necessary to send a third reminder notice. For this research, the total data collection period varied from university to university as it depended on the institutional and gatekeeper permission. The survey closed for participation on 30 June 2020.

Participation was voluntary and no personal information was collected to assure subject confidentiality. Participants were informed of the nature and purpose of the study and its use for the researcher's PhD degree requirements.

The screen of the web-based questionnaire provided background information about the study and researcher, how individuals were selected, and how their privacy would be protected. The questionnaire clarified that there would be no financial reward for participating in the study and further explained the benefits of the study. The questionnaire specified that participation was voluntary; there was no risk of harm; respondent would be free to choose to reply to any questions and to ignore those with which they are not comfortable with or prefer not to answer; information gathered would be stored in a secure location, kept confidential and will be destroyed five years after completion of the thesis; their names will not be used in the study at any time, in any reports, publications or presentations; and access to the information from the study would be limited to the researcher.

All data collected was stored in password-protected electronic devices and cloud-based platforms.

5.6.1 Data Preparation and Processing

After collecting data, the researcher must prepare it to be analysed (Malhotra, 1993). Data preparation is the procedure followed to clean and organise unstructured and raw data before it can be analysed (Abdallah, Du & Webb, 2017). It is "bringing order, structure and meaning to the mass of collected data" (Marshall & Rossman, 1999:150). The objective of preparing and arranging data systematically is so that the researcher can utilise various statistical methods (descriptive and inferential statistics) to interpret the data and draw inferences (Saunders, Lewis & Thornhill, 2009).

Three steps of data preparation were followed, namely: data editing and cleaning; data coding and transformation; and final review.

5.6.2 Data Editing and Cleaning

During the data editing phase, the respondent data file was exported from EvaSys Survey System into Microsoft Excel whereafter it was reviewed and cleaned of errors. The aim of data editing was to disregard data that was redundant, incomplete or incorrect, and to begin to create high-quality data for data analysis phase. The corrections were made to limit measurements errors and support result validity (Jones & Hidiroglou, 2013).

5.6.3 Coding and Data Transformation

The statements were coded to turn the original data into a form that could be handled easily by statistical computer software. Table 5.10 provides the subsections of the questionnaire of which the data was coded. Jones and Hidiroglou (2013:19) asserted that "the objective of data coding is to code collected data so that they can be summarised and analysed".

Table 5.10: Coded subsections of the questionnaire

Subsections														
Section 4	4.1	4.2	4.3	4.5	4.6	4.7	4.8	4.10	4.11	4.12	4.13			
Section 5	5.1	5.8												
Section 6	6.1	6.2	6.3	6.4	6.5	6.7	6.8	6.9	6.10	6.11	6.12	6.13	6.14	6.15
Section 8	8.1	8.2	8.3	8.4	8.5	8.6	8.7	8.8	8.9	8.10	8.11	8.12	8.13	8.14
Section 8	8.15	8.16	8.17	8.18	8.19	8.20	8.21	8.22	8.23	8.24	8.25	8.26	8.27	8.28
Section 8	8.29	8.30	8.31	8.32	8.33	8.34	8.35	8.36	8.37	8.38	8.39	8.40	8.41	8.42
Section 8	8.43													
Section 9	9.1	9.2	9.3	9.4										

Source: Own

5.6.4 Coded data into Microsoft Excel

Lastly, all coded data was reviewed in a Microsoft Excel file. The missing responses of one respondent on the management competencies subscales was 33% of the total subscales. It exceeded the preset limit of 10% missing data of the completed items (Jones & Hidiroglou, 2013). As a result, it was excluded from data analysis.

5.6.5 Data Analysis

Structural equation modelling is widely used in business, strategic management and marketing research to measure latent variables as it tests causual relationships between latent variables (Henseler, Ringle & Sinkovics, 2009; Babin, Hair & Boles, 2008). According to Henseler, Ringle and Sinkovics (2009), there are two approaches that structural equation model follows, namely covariance-based structural equation model (CB-SEM) and variance-based structural equation model or partial least squares structural equation model (PLS-SEM). CB-SEM is a maximum-likelihood modelling approach that estimates the theoretical covariance and empirical covariance matrixes and is appropriate for confirmatory studies (Reinartz, Haenlein & Henseler, 2009). As a confirmatory study, it requires that the model be specified before data can be analysed. It further requires large samples. PLS-SEM, on the other hand, is a multi-linear regression modelling technique that is suitable for exploratory research (Henseler, Ringle & Sinkovics, 2009). It is useful as it allows for the estimation of very complex models made up of many constructs and variables (Sarstedt, Ringle & Hair, 2017).

In order to estimate the measurement and structural model, this study employed PLS-SEM utilising SmartPLS version 3.2.9. The following reasons are advanced for choosing PLS-SEM: First, the conceptual model is a complex, second-order model that requires analysis to be done in two phases. The first phase assesses how the first-order subconstructs relate to their respective main constructs. The second phase tests the conceptual model using the standardised estimates generated by SmartPLS during the first phase (Hair *et al.*, 2019). Second, PLS-SEM has the ability to test models with a small sample size caused by a small population. The shutdown of the public universities in South Africa due to Covid-19 caused limited access to HoADs and the amount of data gathered. According to Hair *et al.* (2019), PLS-SEM is useful with small sample sizes as it computes the relationships of the measurement and structural models separately. Finally, the study would benefit from PLS-SEM's greater statistical power as it would more likely identify the significance of relationships in the population (Sarstedt *et al.*, 2020).

5.6.6 Ethical Considerations

Research involving human participants in South Africa is regulated by the *National Health Act (Act No. 61 of 2003)* and supervised by the National Health Research Ethics Council (Knight, 2019). In order for research to be conducted in an autonomous institutional setting and not in the public domain, permission is required from the governing structures at such institutions (Singh & Wassenaar; 2016). To this effect, Broadhead and Rist (1976: 325) argued that "gatekeeping influences the research endeavour in a number of ways: by limiting conditions of entry, by defining the problem area of study, by limiting access to data and respondents, by restricting the scope of analysis, and by retaining prerogatives with respect to publication". With respect to this study, permission to conduct research was sought from all public universities in South Africa.

5.6.6.1 Permission to Conduct Research

In line with the concern to protect human subjects, the researcher obtained an ethical clearance certificate from the General/Human Research Ethics Committee (GHREC) of the University of the Free State (see Appendix B). The applications for institutional permission to conduct research at public universities in South Africa were started in July 2019 immediately following receipt of ethical clearance. The ethical clearance number was UFS-HSD2017/1082/1007 (see Appendix B).

In order to obtain gatekeeper permission from South African public universities, the researcher followed the following procedural steps:

1. The researcher visited the websites of universities and made contact via email with the relevant people responsible for granting gatekeeper permission. A copy of the application is attached (Appendix C).

2. Fourteen universities responded to the enquiries in Step 1.

3. The researcher followed the universities' requirements for gatekeeper permission and made applications on their institutional forms or systems accompanied by the following documents:

    • The ethical clearance certificate issued by the GHREC of the University of the Free State.

- The research proposal.
- Copies of research instrument to be used.
- Copies of informed consent forms.

4. The gatekeeper permission applications were served at the universities' respective institutional research ethics committee meetings for screening or approval or rejection.

5. If the respective research ethics committees only had screening powers, a recommendation was made to the relevant gatekeeper faculty to approve or reject.

6. The final outcome was communicated to the researcher.

As discussed in Section 2.4 of Chapter 2, the Covid-19 pandemic disrupted South African universities as most of the focus was on helping staff carry the critical operations of the universities remotely and students to navigate the pandemic. As a result, there was a noticeable lack of responses and urgency in the processing of gatekeeping applications from the universities. Other gatekeeping challenges were:
- Inordinate delays in approval processes.
- Plethora of paper and system processes and committees applicable at each institution.

Of the 26 public universities contacted:
- 4 universities did not respond when contacted.
- 8 universities responded, but did not grant gatekeeper permission.
- 14 universities granted gatekeeper permission.

The university types that granted gatekeeper permission are indicated in Table 5.3.

5.6.6.2 Research Risk

Although the research risk of the study was specified as low to nil, universities were careful to ensure that the data collected did not infringe on the rights of respondents. According to Knight (2019: 2), the *Protection of Personal Information Act (POPI)* (Act No. 4 of 2013) provides clarity regarding "individual's right to privacy, with implications for how researchers manage the collection, storage and management of or access to data, and takes into account both anonymity and confidentiality issues". While there was a need to gather basic demographic data (age, gender, education,

qualifications, academic and professional experience) and departmental profiles (number of staff and students), the study focused on the job of the HoAD (job and appointment process) and management competencies perceived to be important in the job.

5.6.6.3 Informed Consent and Voluntary Participation

Informed consent is central to conducting research involving human participants in an ethical manner. According to Nijhawan *et al.* (2013), the requirement to obtain informed consent is governed by the Nuremberg Code, the Declaration of Helsinki, and the Belmont Report. It involves "notifying the subject about his or her rights, the purpose of the study, procedures to be undertaken, potential risks and benefits of participation, expected duration of study, extent of confidentiality of personal identification and demographic data, so that the participation of subjects in the study is entirely voluntary" (Nijhawan *et al.*, 2013: 1).

For this study, informed consent was obtained from respondents on the web-based survey. Respondents were given the freedom to withdraw from the study at any stage of data collection. Participation in the study did not pose any foreseeable physical, emotional, psychological, or social harm. The researcher did not have any close or family relationships with any of the respondents.

5.6.6.4 Confidentiality

Kaiser (2009) noted that confidentiality is a central concept of research ethics and is a common practice in social research. In conducting research, the researcher is expected to protect respondents from any form of physical harm. Data collection was informed by the *POPI Act 4 of 2013*. For this survey, the confidentiality of respondents was protected by using the EvaSys Survey System version 8.0 platform. No respondent was identified or was identifiable individually. Respondent names were not used and will remain confidential and anonymous. Their affiliations were not mentioned. Only general information such as university type, size, race, age, qualifications, academic rank, and discipline/field of study were mentioned. No individual was identified or will be identifiable in any subsequent reports or documents published out of this study. Electronic data is stored in password-protected electronic

devices and password-encrypted cloud-based platforms. Hard copy documents are stored in a lockable safe at the researcher's residence.

5.7 CONCLUSION

This chapter provided the research methodology for the study. The positivist research approach accompanied by a quantitative method were chosen. The research strategy was presented. The research design chosen was a non-experimental, exploratory, and descriptive. A detailed discussion of the development of the research instrument design, the validity and reliability, and the administration was provided.

The pilot study was discussed. The online questionnaire was developed on EvaSys Survey System version 8.0, which was used to collect the data. The shutdown of public universities due to Covid-19 negatively affected the securing of gatekeeper permission as well as access to HoADs. Confidentiality and anonymity of respondent data was ensured by securing electronic and physical storage of data. Data analysis employed PLS-SEM. The next chapter presents data analysis.

CHAPTER 6: DATA ANALYSIS AND PRESENTATION

6.1 INTRODUCTION

This chapter contains a detailed presentation and the empirical results of this study. Data gathered through the questionnaire used in this study was analysed to ensure that it was presented clearly with the aid of tables, percentages, and graphs, where possible. The results are presented under the following sections: response rate (Section 6.2), demographic statistics (Section 6.3), structural equation model analysis (Section 6.4), and summary of the results (Section 6.5).

6.2 RESPONSE RATE

Response rate is considered an important indicator for data analysis in research studies that employ surveys (Asire, 2017). The response rate is determined by counting the number of respondents and dividing it by the number of people sampled (Fowler, 2014). The target sample for this study included HoADs at public universities in South Africa. These were HoADs whose universities granted gatekeeper permission and who exercised managerial tasks in their jobs. In total, 466 questionnaires were distributed to HoADs at public universities. The survey opened for participation in January 2020 and closed on 30 June 2020. The distribution of the questionnaires varied from university to university as it depended on the approval of gatekeeper permission. The number of universities that granted gatekeeper permission is provided in Table 5.3 of Chapter 5 and is reproduced below (Table 6.1).

Table 6.1: University types that granted gatekeeper permission

University type	Total no. of universities	Gatekeeper permission received	Percentage of universities
Traditional university	12	7	58.3%
Comprehensive university	6	5	83.3%
University of technology	8	2	25.0%
Total number of universities	**26**	**14**	**53.8%**

Source: Own

The number of questionnaires distributed, number of respondents, and response rate percentage are presented in Table 6.2.

Table 6.2: The total number of questionnaires distributed and response rates

University type	No. of questionnaires distributed	No. of questionnaires returned	Response rate percentage
Total no. of HoADs	466	124	26.6%

Source: Own

Considering that this was an anonymous survey, three email reminder notices were sent to all HoADs whose universities granted gatekeeper permission. From the total of 466 questionnaires sent to the HoADs of their respective departments, 124 respondents completed and submitted the survey. This constituted a response rate of 26.6% and formed the base of the analysis of the results.

As with other studies that employ questionnaires, this study was confronted with the problem of nonresponse and its impact on the validity of inferences. Fan and Yan (2010) noted that the response rate for online surveys is 11% lower than for mail and telephone survey modes. In this study, the low response rate was attributed to the Covid-19 pandemic and the closure of South African universities due to the pandemic. This limited access both to HoADs and the gathering of data. The HoADs focused on performing the critical operations of universities remotely and assisting students with navigating the pandemic. There was a noticeable lack of email responses and urgency from HoADs.

In the following section, descriptive analysis is used to present the demographic profiles of respondents.

6.3 DESCRIPTIVE STATISTICS

The summarisation of data and calculation of descriptive statistics is considered to be one of the first important steps in research (Kaur, Stoltzfus & Yellapu, 2018). Descriptive statistics measure the frequency, central tendency, dispersion/variation, and position of data in the study (Mishra *et al.*, 2019), and is used to present data as frequency tables and charts for demographic respondent information. Respondent characteristics are presented and explained in the following subsections.

6.3.1 Demographic Information

Demographic information is considered one of the basic characteristics of data. For this study, the following demographic is presented:

Type of university

The respondents were asked to indicate their university type. The results in Table 6.3 indicate that of those who responded to this question, 45.3% were from traditional universities and 42.7% were from comprehensive universities, while the lowest representation was from a university of technology (12%). Seven respondents did not indicate their university type.

Table 6.3: Type of university

Type	Frequency	Percentage
Comprehensive university	50	42.7
University of technology	14	12.0
Traditional university	53	45.3
Total	**117**	**100.0**
Missing	7	
Total	**124**	

Source: Own

Home department

An HoAD is a leader and manager responsible for an academic department, which is his or her home department. The respondents were asked to indicate the academic department of their belonging. Table 6.4 shows the respondents were from 57 academic departments: 4.8% were from the economics department, followed by the accounting, business studies, education, language studies and tourism departments (4.0%). The rest (91.2%) were located in 51 departments and were spread across different faculties.

Table 6.4: Home department

Department	Frequency	Percentage
Accounting	5	4.0
Anaesthesiology	1	0.8
Animal science	1	0.8
Architecture	1	0.8
Auditing and taxation	1	0.8
Biochemistry	1	0.8
Botany	1	0.8
Business studies	5	4.0
Business, commerce and management education	1	0.8
Chemistry	1	0.8
Communication science	1	0.8
Community dentistry	1	0.8
Computer science	2	1.6
Consumer and food sciences	1	0.8
Curriculum studies	1	0.8
Development studies	1	0.8
Drama	2	1.6
Ecology	2	1.6
Economics	6	4.8
Education	5	4.0
Engineering	2	1.6
Environmental sciences	3	2.4
Fashion design	1	0.8
Genetics	1	0.8
Geosciences	1	0.8
Governance	2	1.6
Heritage studies	1	0.8
History	2	1.6
Human sciences	1	0.8
Information and corporate management	1	0.8
Information science and systems	3	2.4
Journalism and media studies	1	0.8
Jurisprudence	1	0.8

Department	Frequency	Percentage
Language studies	5	4.0
Legal studies	1	0.8
Life sciences	2	1.6
Marketing	1	0.8
Mathematics	3	2.4
Mathematics, natural sciences and technology	1	0.8
Medical sciences	3	2.4
Microbiology	1	0.8
New testament and related literature	1	0.8
Nutrition and dietetics	1	0.8
Physics	1	0.8
Plant and soil sciences	1	0.8
Political studies	3	2.4
Psychology	3	2.4
Public health	1	0.8
Religion studies	1	0.8
Social science	2	1.6
Social work	4	3.2
Sociology	1	0.8
Statistics	1	0.8
Theology	3	2.4
Tourism	5	4.0
Visual art	1	0.8
Zoology and entomology	1	0.8
Total	**124**	**100.0**

Source: Own

Gender

Respondents were asked to indicate their gender. Figure 6.1 shows that of the 124 respondents, 54.0% were male and 43.5% were female, while 2.4% did not indicate their gender. Therefore, the majority (54.0%) of respondents were males.
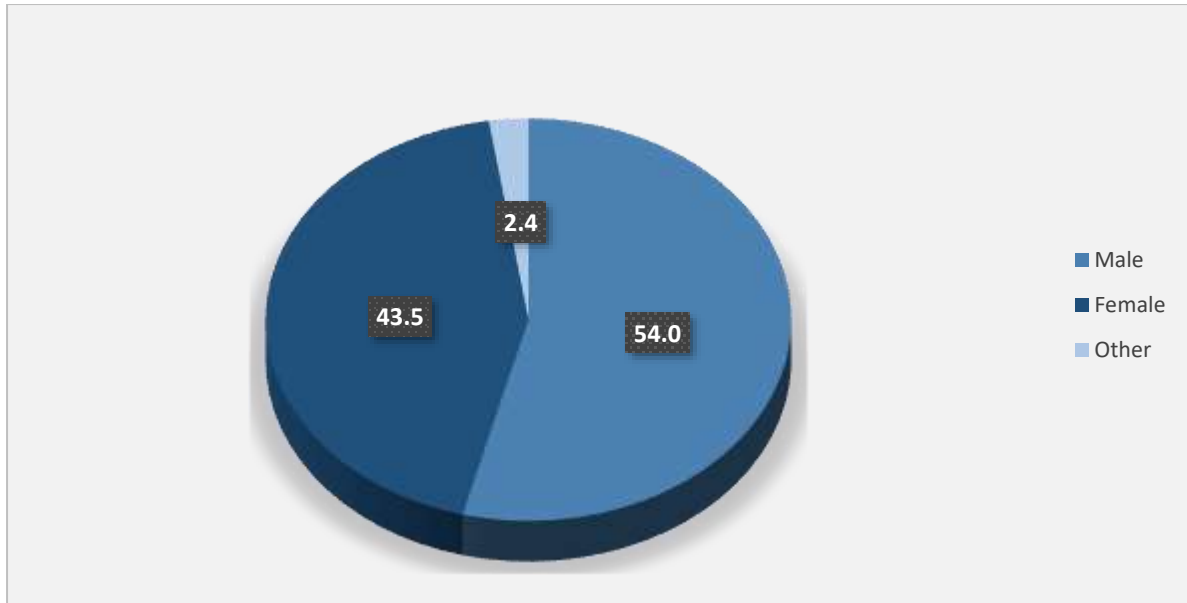
Figure 6.1: Gender in percentage

Source: Own

Age group

Respondents were asked about their age. Table 6.5 indicates that age ranged between 21 and 49 years. The majority of HoADs were between 31 and 40 years, representing 44.3% of respondents. The second largest category was 21 to 30 years, representing 30.0%. Only 25.7% of respondents were 41 to 49 years.

Table 6.5: Age groups

Category	Frequency	Percentage	Cumulative frequency	Cumulative percentage
21–30	34	30.0	34	30.0
31–40	50	44.3	84	74.3
41–49	29	25.7	113	100.0
Total	**113**	**100.0**	**113**	**100.0**
Missing	11			
Total	**124**			

Source: Own

Table 6.6 shows that the average age of respondents was 35 years (mean = 34.90). The standard deviation was 8, which indicates that the variability of the sample in terms of age was minimal.

Table 6.6: Age central tendency measures

Mean	34.90
Median	36.00
Standard deviation	7.873

Source: Own

Race

Respondents were asked to indicate their race. The racial composition of the respondents in Figure 6.2 shows that 51.6% of respondents were white. The other respondents comprised black people (27.2%), coloured people (5.7%), Indian people (4.1%), and others who preferred not to indicate their race (8.2%). The majority of people were white (51.6%) followed by black (27.2%).
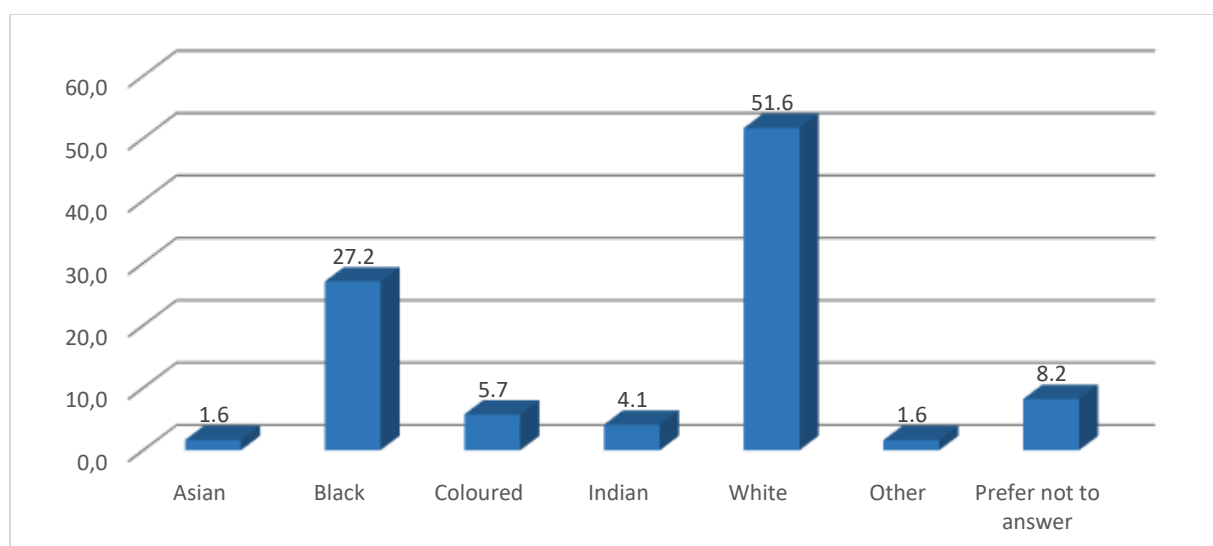
Figure 6.2: Race in percentage

Source: Own

Current academic rank

Sample data was collected to establish the current academic ranks of respondents. The results in Figure 6.3 show that 30.6% of respondents were professors in their academic departments, followed by senior lecturers (29.0%) and associate professors (25.8%), respectively. Only 4% indicated that they were senior professors. Those with a professor title account for 60.4% of the sample data, indicating that the jobholder's seniority is valued.

Current Academic Rank in %
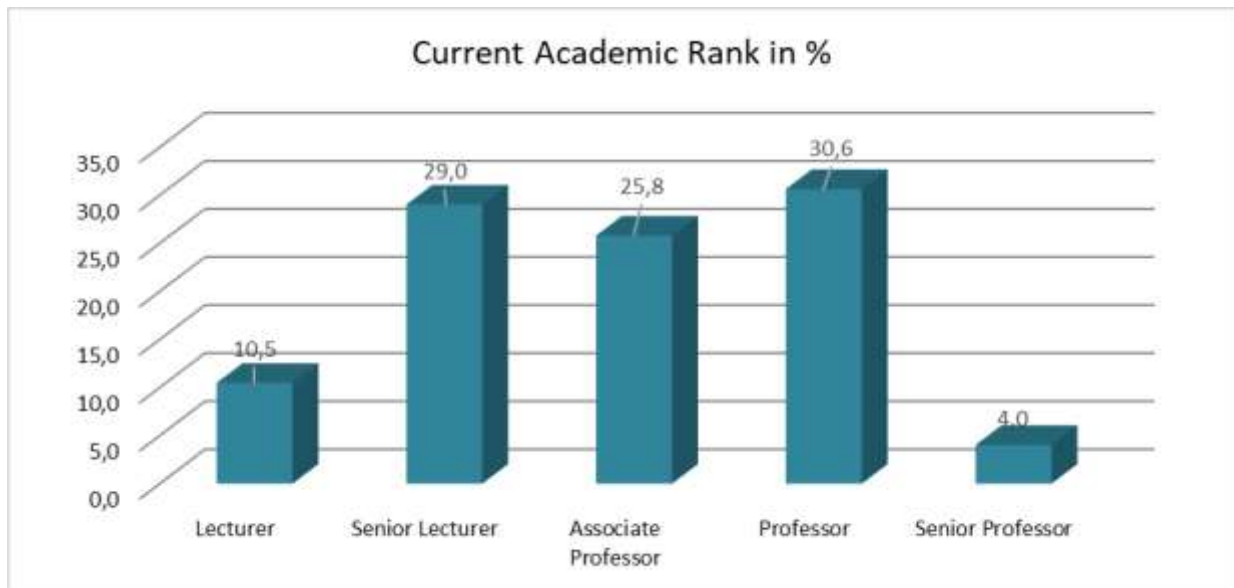
Figure 6.3: Current academic rank in percentage

Source: Own

Highest educational qualification

Respondents were asked to state their highest academic qualification. Figure 6.4 shows that the majority of respondents (86.9%) had a doctoral degree, followed by those with a master's degree (12.3%) and, lastly, those with an undergraduate certificate (0.8%).

Highest Educational Qualification in %
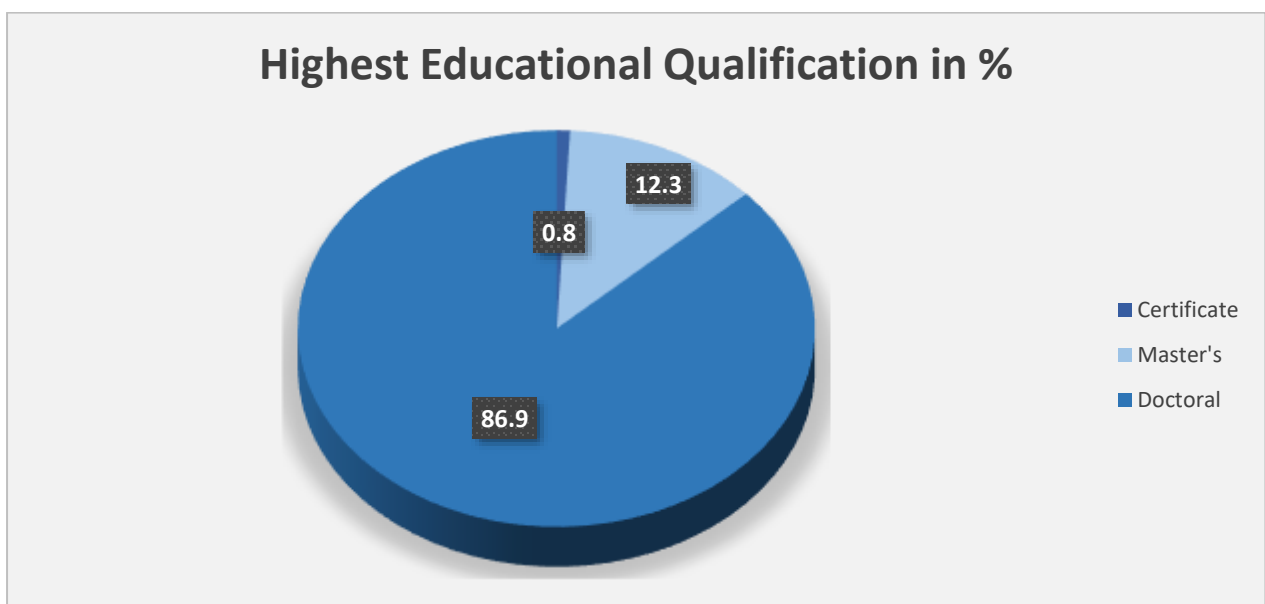
Figure 6.4: Highest educational qualifications in percentage

Source: Own

Years working in academia

Respondents were asked how long they have worked in academia. Table 6.7 shows that 43.4% of respondents have been working in academia between 11 and 20 years. The second largest category comprised the 21–30-year category with 27.0% of respondents, whereas 15.6% of respondents were found in the category 31–40 years, and 13.9% in the category 1–10 years. According to the results in Table 6.8, respondents have been in academia for almost 19 and a half years on average (mean = 19.35). Given that the majority of this group (60.4 percent) were professors in response to the question of academic rank, it is evident that the sampled population has sufficient experience in academia to provide meaningful input regarding the nature of the survey.

Table 6.7: Years in academia groups

Category	Frequency	Percentage	Cumulative frequency	Cumulative percentage
1–10	17	13.9	17	13.9
11–20	53	43.4	70	61.9
21–30	33	27.0	103	91.2
31–40	19	15.6	113	100
Total	**122**	**100.0**	**113**	**100.0**
Missing	2			
Total	**124**			

Source: Own

Table 6.8: Years in academia

Mean	19.35
Median	19.00
Standard deviation	7.881

Source: Own

Next, the respondents' number of years as academic department head is described.

Years as HoAD

Data was collected to determine the number of years that an HoAD spends in the role. Table 6.9 indicates that the majority of respondents (62.4%) have done the job for four

years or less. Additionally, 38.5% of the respondents have done the job for two years or less. Figure 6.5 reveals that 15.6% of the respondents either have less than one or less than two years' experience as HoADs. Only 79.5% have been HoADs for up to six years and 6.6% for more than 10 years.

Table 6.9: Years as HoAD

	Frequency	Percentage	Cumulative frequency	Cumulative percentage
Less than 1 year	19	15.6	19	15.6
1 year	9	7.4	28	23.0
2 years	19	15.6	47	38.5
3 years	14	11.5	61	50.0
4 years	15	12.3	76	62.4
5 years	11	9	87	71.3
6 years	10	8.2	97	79.5
7 years	5	4.1	102	83.6
8 years	4	3.3	106	86.9
9 years	4	3.3	110	90.2
10 years	4	3.3	114	93.4
More than 10 years	8	6.6	122	100.0
Total	**122**	**100.0**		
Missing	2			
Total	**124**			
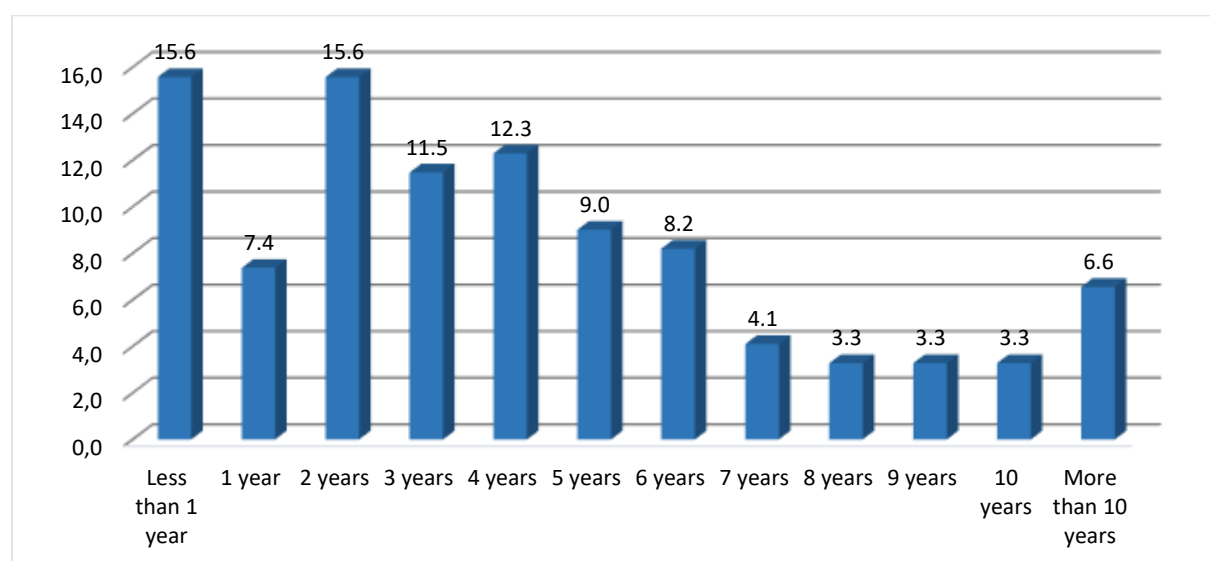
Figure 6.5: Years as HoAD in percentage

Source: Own

Faculty in which the academic department resides

The respondents were asked to indicate the faculties in which their academic departments reside. The results in Figure 6.6 reveal that the respondents' academic departments were spread across ten faculties. More specifically, the results indicate that 21.4% of respondents were from the faculty of humanities, followed by the faculty of science (20.5%), and thirdly from the faculty of economic management sciences (17.1%). The least represented faculties were the business school (0.9%) and the faculty of law (1.7%).
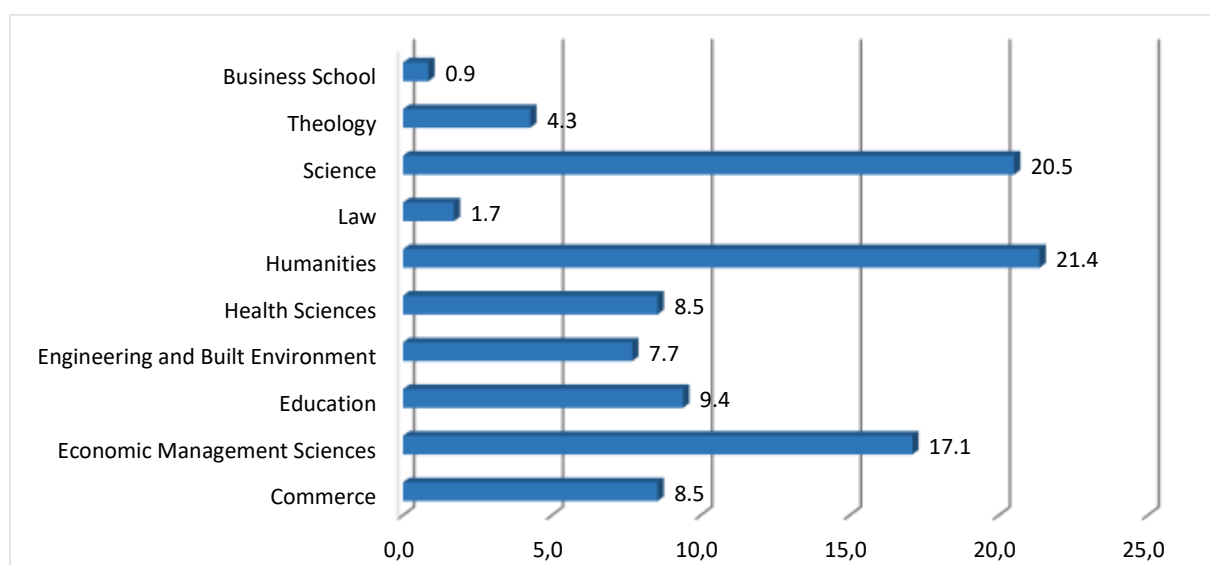
Figure 6.6: Faculty in which the academic department resides in percentage

Source: Own

Experience as HoAD

The experience of the respondents was measured by the number of terms they have served as HoADs. As such, 35.1% of respondents indicated that they have served less than one term, 25.4% have served one term, and 39.5% have served two terms or more (see Figure 6.7). The fact that 61.5% of survey respondents have only been HoADs for one term or less suggests that the majority of those who participated may be inexperienced in the role.

135
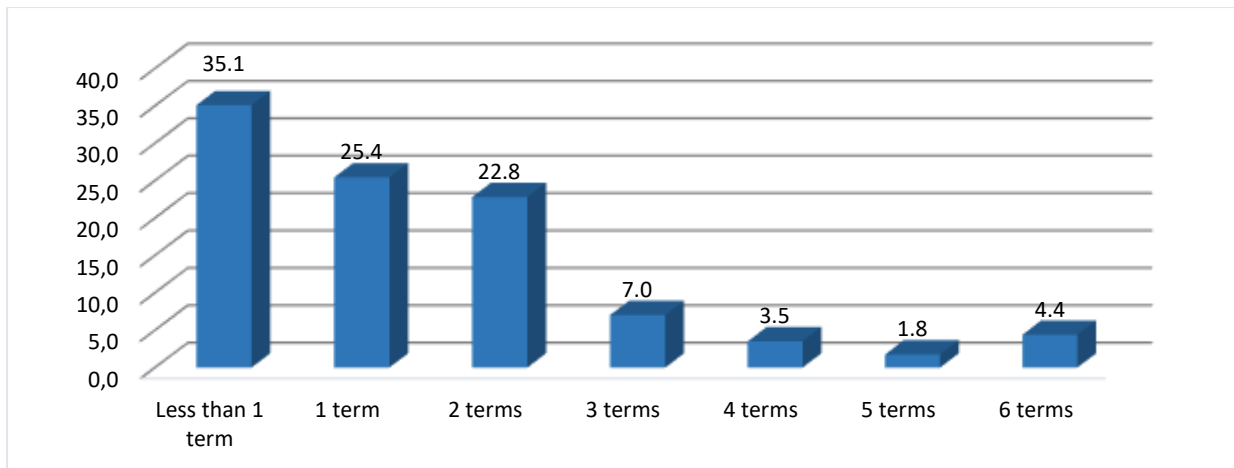
Figure 6.7: Terms served as HoAD in percentage

Source: Own

Length of term of office

Respondents were questioned about the length of their current term of office. The results in Figure 6.8 indicate that 39.0% of respondents have been serving as HoADs for five years. The results further show that for 35.2% of respondents their current term was three years, while 1.9% indicated that their term was two years.
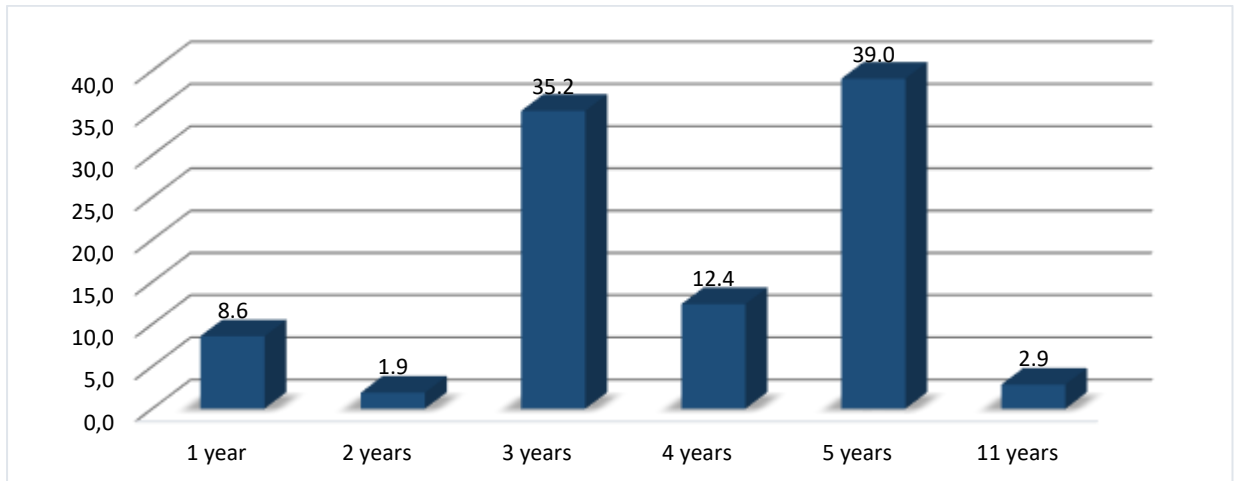
Figure 6.8: Length of term of office in percentage

Source: Own

Previous experience

The respondents were asked to indicate their employment experience prior to their appointments as HoADs. Their responses are shown in Table 6.10. A total of 30.6% of respondents indicated they had previous experience in government, 21.8% had corporate experience, 16.2% had higher education experience, 11.3% had worked in

professional practice before, 7.3% worked in the not-for-profit sector. Of the respondents, 13% had experience in other sectors.

Table 6.10: Previous experience

Sector	Responses	Percentage
Corporate	27	21.8
Government	38	30.6
Not-for-profit sector	9	7.3
Professional practice in personal capacity	14	11.3
Higher education institution	20	16.2
School teacher	3	2.4
Research institute	6	4.8
International organisation	1	0.8
Own business	3	2.4
Minister of religion	1	0.8
Other	2	1.6
TOTAL	**124**	**100.0**

Source: Own

Direct line manager to whom you report

In terms of direct reporting lines, respondents were asked to whom they reported. The majority reported directly to the deans of their faculties (96.7%) and 3.3% reported to their deputy deans (See Figure 6.9).
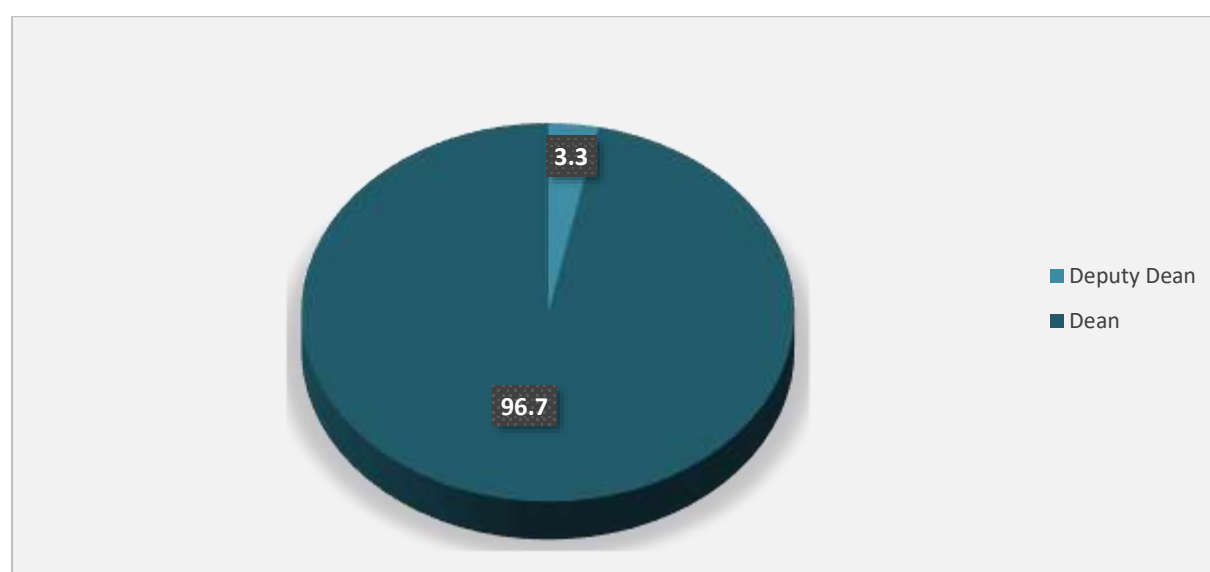
Figure 6.9: To whom you report in percentage

Number of staff and students in an academic department

Data was collected to determine the composition of academic departments. Table 6.11 and Table 6.12 indicate the number and average number of full-time academic staff, support staff, part-time academic staff, as well as the average number of honours, master's and PhD students in the respective departments.

Table 6.11: Staff and students in the department

Variable	Category	Frequency	Percentage	Cumulative frequency	Cumulative percentage
Number of academic staff	1–10	53	43.4	53	43.4
	11–20	38	31.1	91	74.6
	21–30	17	13.9	108	88.5
	31–40	8	6.6	116	95.1
	More than 40	6	49.0	122	100.0
Number of support staff	1–10	100	82.6	100	82.6
	11–20	10	8.3	110	90.9
	More than 20	11	9.1	121	100
Number of part-time academic staff	1–10	83	84.7	83	84.7
	11–20	6	6.1	89	90.8
	More than 20	9	9.2	98	100.0
Number of honours students	1–10	28	26.2	28	26.2
	11–20	17	15.9	45	42.1
	21–30	23	21.5	68	63.6
	More than 30	39	36.4	107	100.0
Number of master's students	1–10	42	38.5	42	38.5
	11–20	19	17.4	61	60
	More than 20	48	44.0	109	100.0
Number of doctoral or PhD students	1–10	63	60.6	63	60.6
	11–20	18	17.3	81	77.9
	More than 20	23	22.1	104	100.0

Table 6.12: Average number of staff and students in the academic department

	Number of respondents	Mean	Standard deviation
Number of full-time academic staff	122	16	11.729
Number of support staff	121	6	8.145
Estimated number of honours students	105	26	17.957
Estimated number of part-time academic staff	98	8	11.694
Estimated number of master's students	109	24	18.544
Estimated number of doctoral or PhD students	104	15	15.567

Source: Own

As displayed in Table 6.11, the majority of the respondents (43%) stated that their departments had between one and ten academic staff members. Furthermore, 31% indicated that there were between 11 and 20 staff members in their departments. The average number of academic staff in a department was 16 (Table 6.11).

The respondents were asked to indicate the number of support staff in their academic department. Table 6.11 shows that the majority of respondents (83%) reported that their department had between one and ten support staff members. Only 17% of respondents indicated that their department had more than ten support staff members. Table 6.12 reports that an academic department had six support staff members on average.

The respondents were required to indicate the number of part-time academic staff in their academic department. Table 6.11 displays that the majority of respondents (85%) stated that their academic departments had between one and ten part-time academic staff members while 9% said they had more than 20 staff members. Table 6.12 indicates that the average number of part-time academic staff in a department was eight.

Table 6.12 shows that the number of honours students averaged 26 in an academic department. As displayed in Table 6.11, 36% of respondents reported that they had more than 30 honours students, 26% of respondents indicated that they had between one and ten students in their departments, while 22% said they had between 21 and 30 students.

According to Table 6.11, the majority of respondents (44%) had more than 20 master's students in their academic departments, 39% of the HoADs indicated that they had between 1 and 10 master's students. As displayed in Table 6.12, the average number of master's students in an academic department was 24.

Doctoral or PhD students averaged 15 across all departments (Table 6.12). The majority of respondents (61%) indicated that they had between one and ten students whereas 20% indicated that they had more than 20 students in their academic departments.

Administrative assistance

The respondents were asked whether they had an administrative assistant. Figure 6.10 reveals that most respondents (59%) did have an administrative assistant in their capacity as head of department. This means that 41% of respondents do not have administrative support in the form of an assistant.
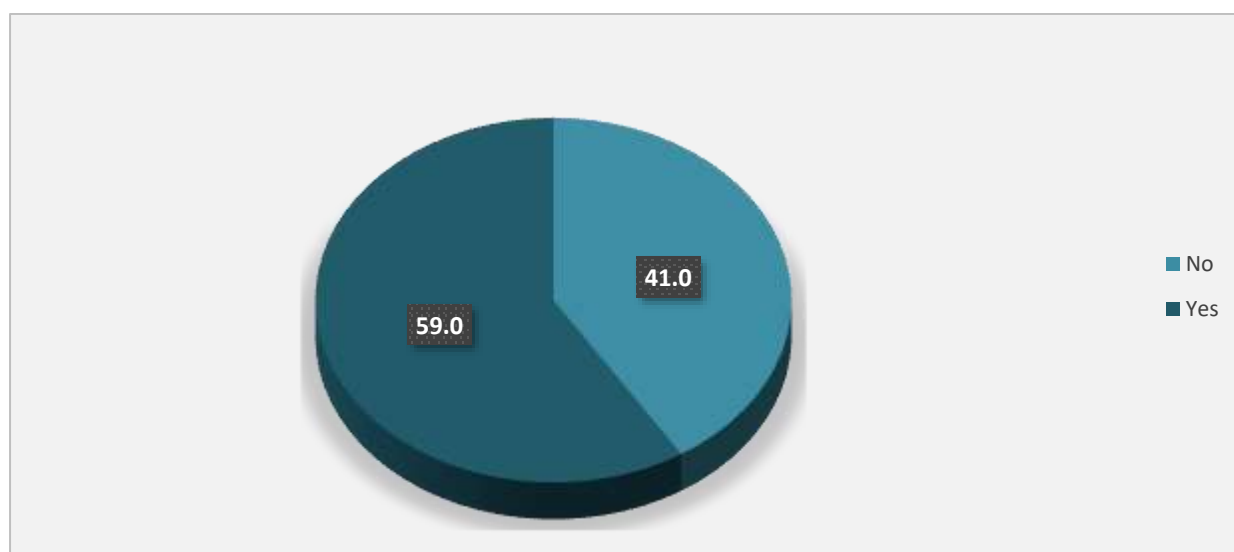
Figure 6.10: Administrative assistant in percentage

Source: Own

Description of how you got into the current position

The respondents were asked to indicate the procedure they followed to get appointed as HoAD. Figure 6.11 indicates that 41.0% of respondents were nominated for their current position by their departmental staff and 38.5% applied for the position after it was advertised. In terms of the appointment process, only 26.2% indicated that they

were appointed into the HoAD job on the advice of a selection committee in an openly competitive process. The HoADs who were chosen by faculty deans constituted 14.8%. Only 4.9% were appointed in their current position in a closed recruitment process. Of the HoADs, 14.8% reported that they were directly selected by their academic staff. Those not permanently appointed but in an acting position of departmental head accounted for 23.0% of respondents.
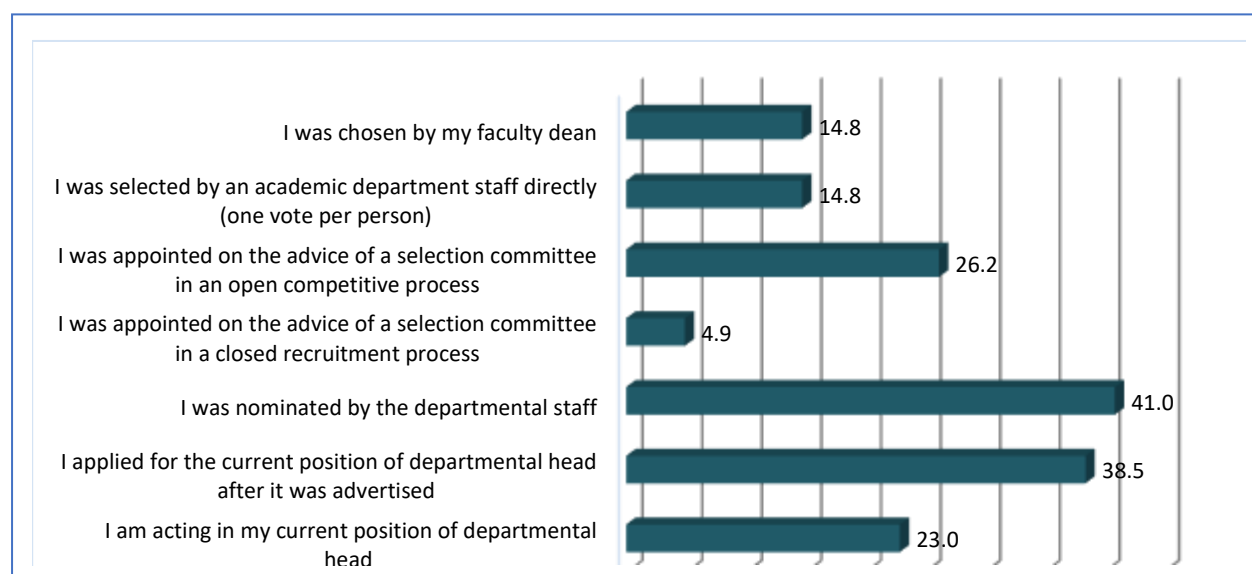
Figure 6.11: Description of how you got into the current position in percentage

Source: Own

University human resources policies

This question sought to find out which documents were contained in their university human resources policies. Figure 6.12 indicates that the majority of respondents (91.5%) said that the appointment procedures of HoADs were contained in the human resource policies of their university. Only 76.3% indicated that their responsibilities were contained in the human resources policies. In terms of the job description, only 65.3% reported that it was contained in their university human resources policies.
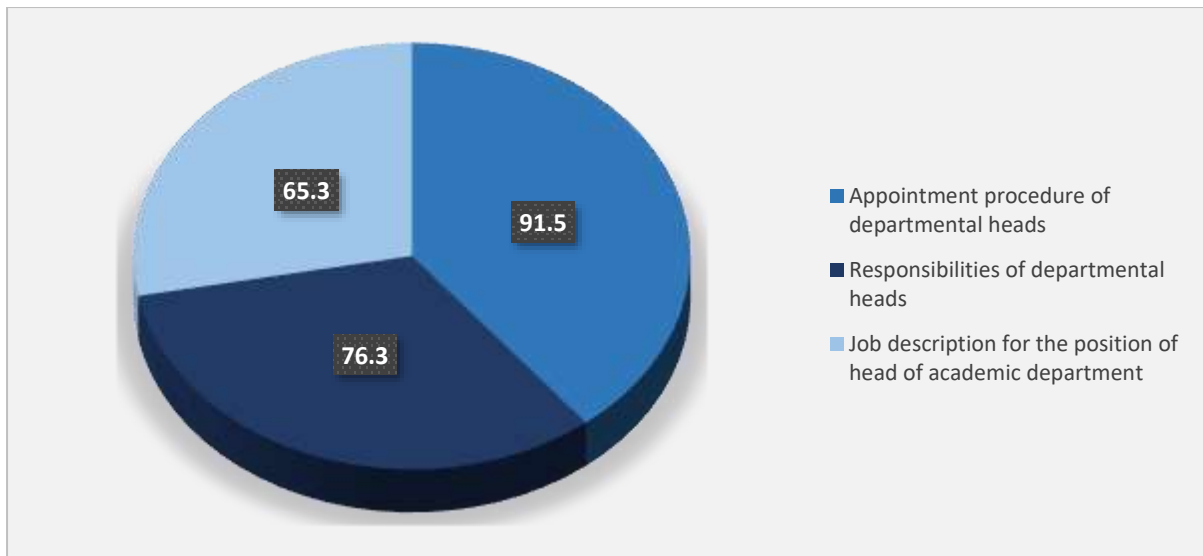
Figure 6.12: Contained in university human resources policies in percentage

Source: Own

The accuracy of the job description

Respondents were asked about the accuracy of their job descriptions. As displayed in Figure 6.13, 60.5% of respondents indicated that the job description provided by their human resources department accurately describes what they do whereas 39.5% stated that their job description is not accurate.
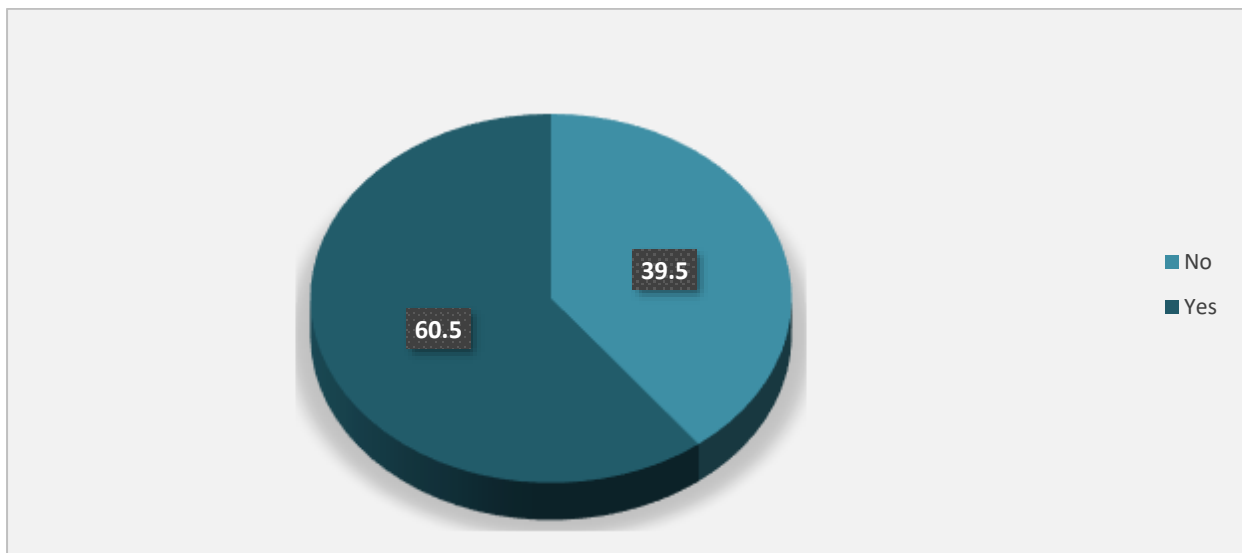
Figure 6.13: Accurate job description in percentage

Source: Own

Figure 6.13 shows that most respondents (60.5%) indicated that their job description provided an accurate description of what they do. For those respondents who stated

'no' (as shown in Figure 6.14), 45.1% of respondents indicated that they did not have a job description, while 35.3% stated that their job description was too broad.
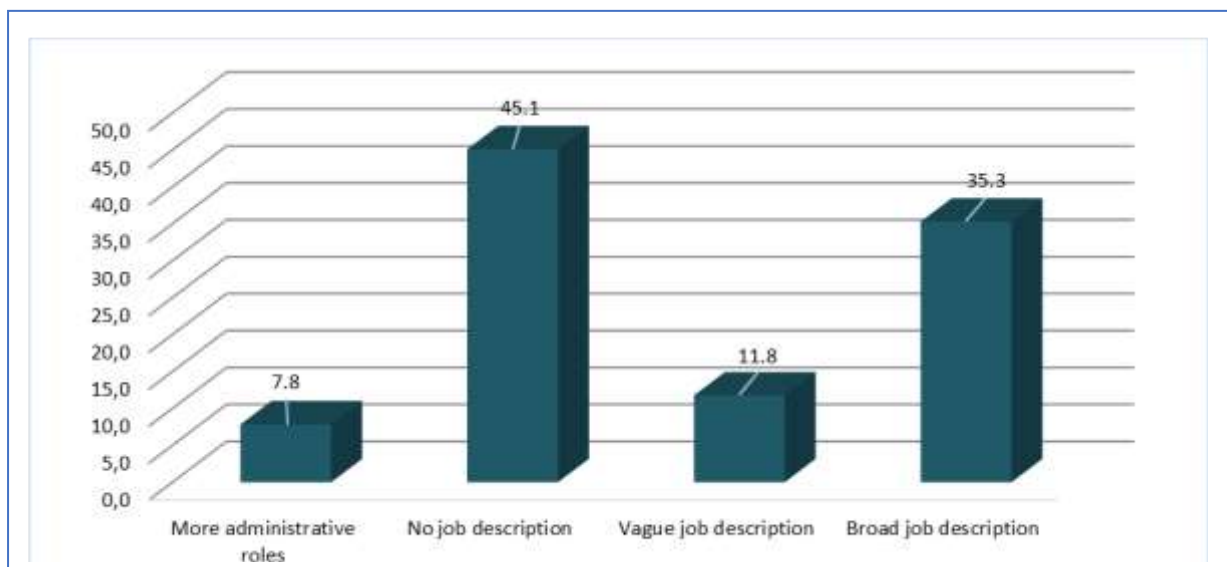
Figure 6.14: Elaboration on accuracy of job description in percentage

Source: Own

Renewal of term

The respondents were asked whether their term was renewable. The majority of respondents (79.2%) indicated that their term could be renewed (see Figure 6.15).
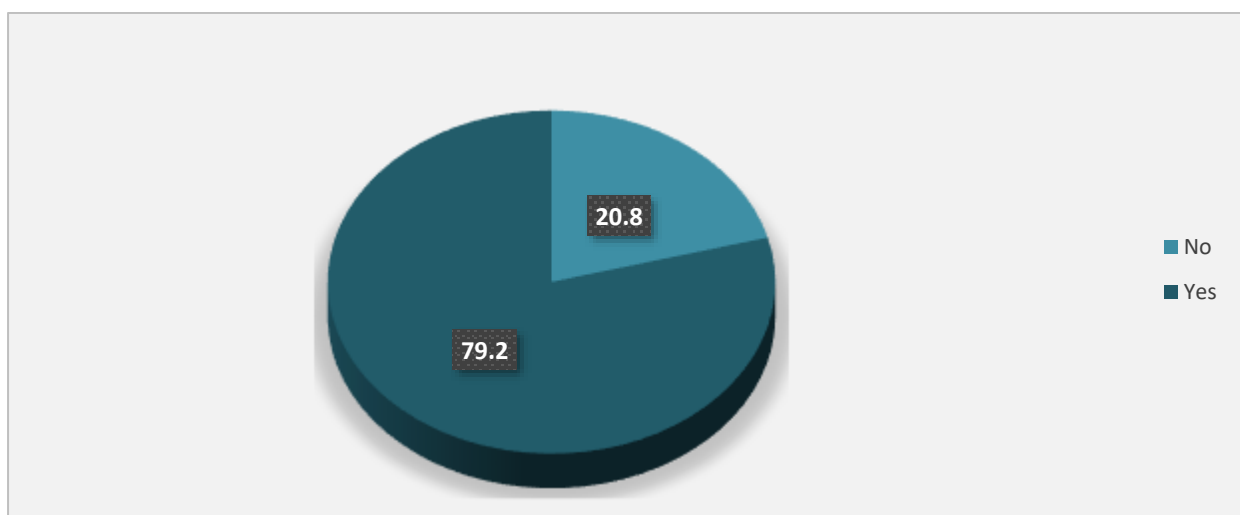
Figure 6.15: Renewal of term in percentage

Source: Own

As displayed in Figure 6.16, of those respondents who indicated that their term could not be renewed, 36.7% indicated that they were only permitted a maximum of two terms as HoAD. Only 30.0% of respondents indicated that they would be retiring.
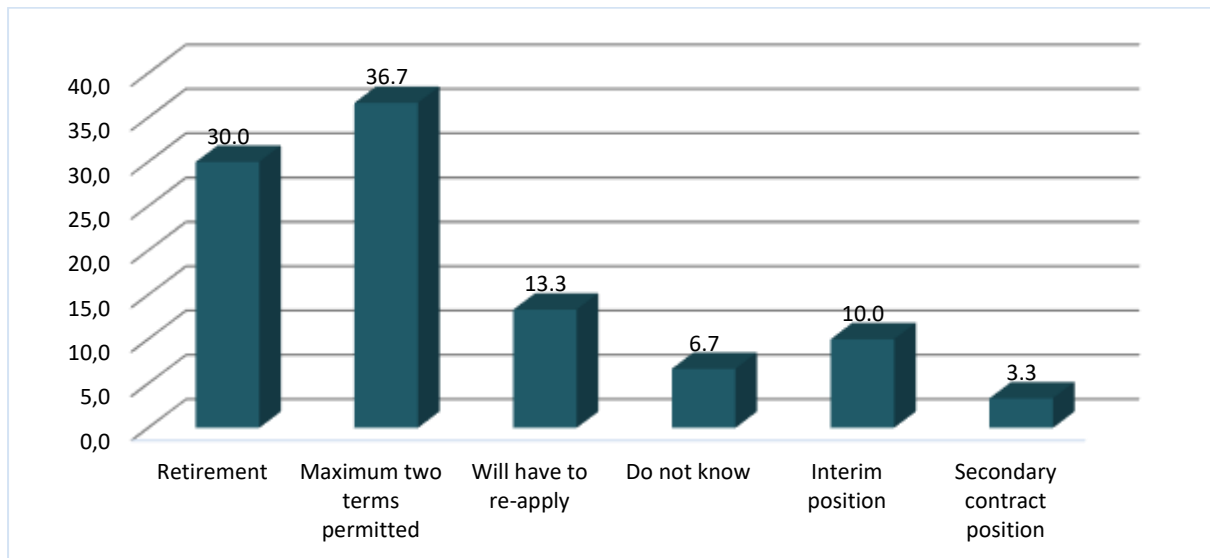
Figure 6.16: Renewal of term in percentage

Source: Own

Likely to seek reappointment

The question was asked whether respondents were likely to seek reappointment for another term if they were eligible. Figure 6.17 reveals that most respondents (59.7%) were not likely to seek reappointment even if they were eligible while 40.3% indicated that they would seek reappointment. The majority will not continue as HoADs, which means that the positions are likely to be filled by new HoADs with no experience.
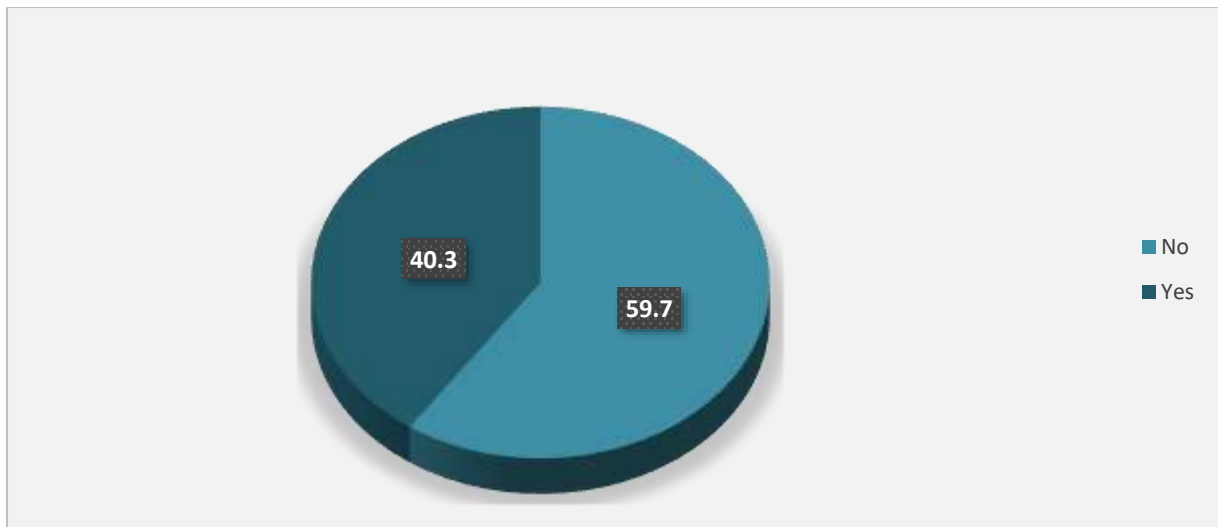
Figure 6.17: Likely to see reappointment in percentage

Source: Own

As displayed in Figure 6.18, those who indicated that they were not likely to seek reappointment, 18.1% specified that there was not enough time for research and academics. Another 16.7% said they found the work too strenuous while 12.5% indicated that they would not seek reappointment because they wanted to give others an opportunity. Only 15.3% would not seek reappointment because they would exceed two terms. Merely 13.9% indicated that they would be retiring. Those who did not like the job constituted 4.2%.
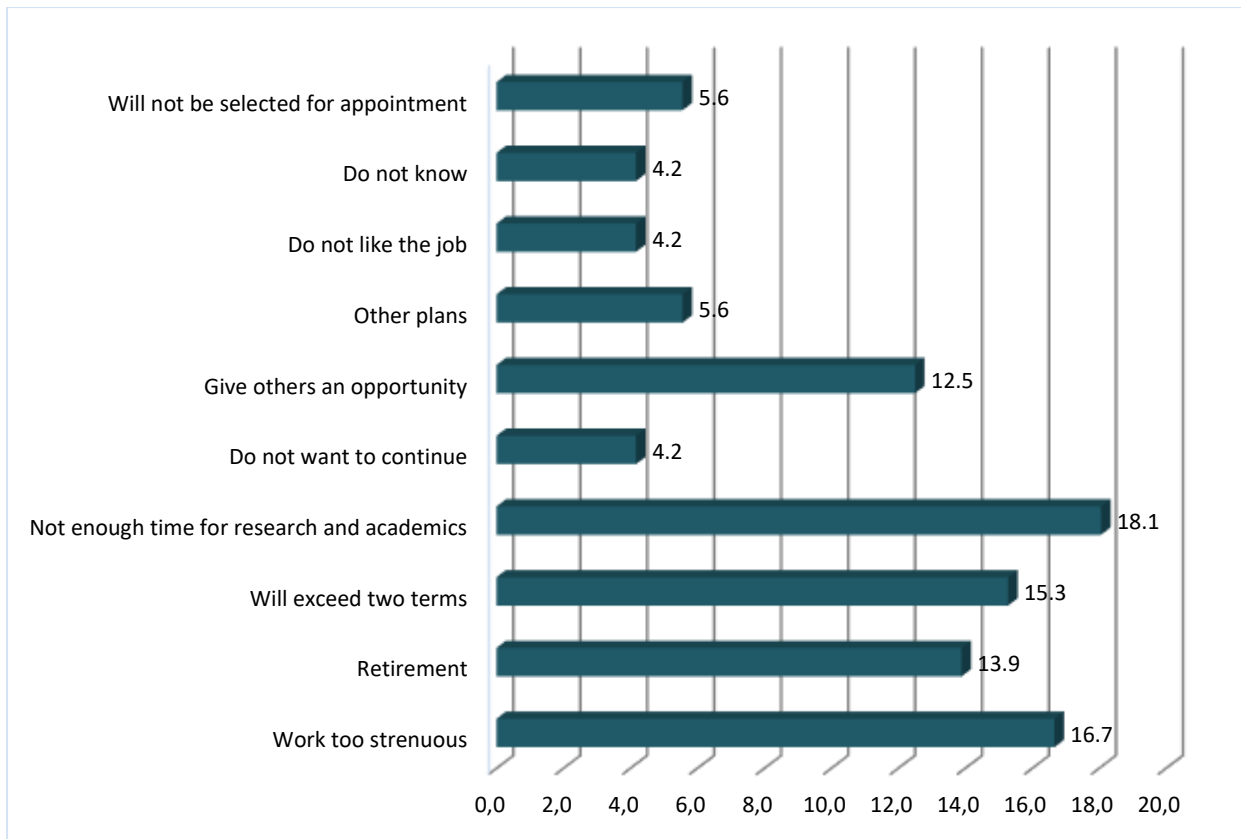
Figure 6.18: Elaboration on reappointment in percentage

Source: Own

Intentions after completion of current term

Respondents were questioned about their intentions after completing their current term. Figure 6.19 shows that the majority of respondents (48%) said they would return to their department rank in the academic department and only 15% would continue as HoADs for another term. Those who would take research and administration leave constituted 14% and 4%, respectively, and only 16% would retire. The fact that 48% of respondents intend to return to academic ranks indicates that the academic department will not lose the experience gained.
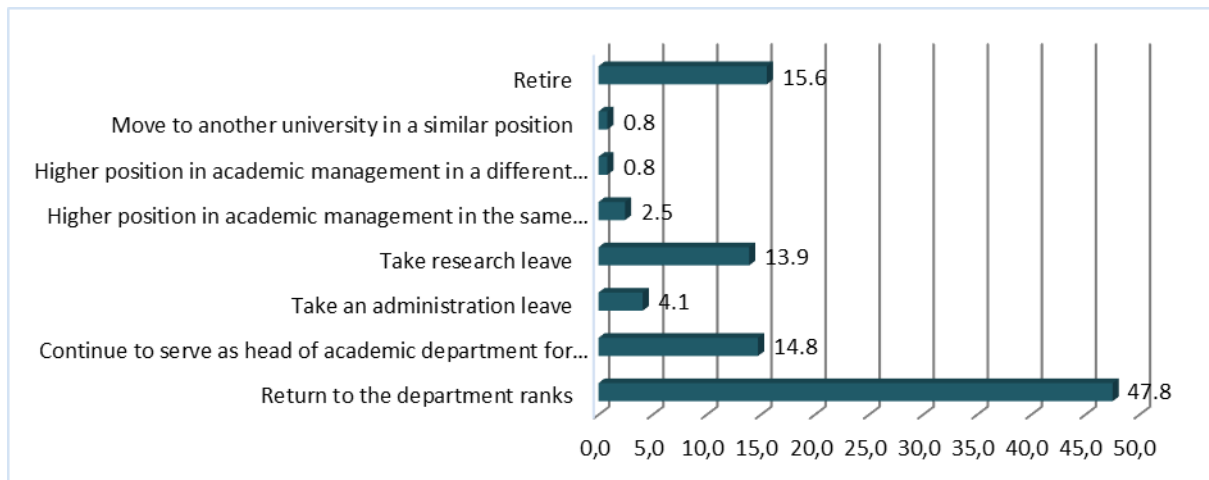
Figure 6.19: Intentions after completion of current term in percentage

Source: Own

Performance evaluation

Respondents were asked whether their performance was evaluated and which aspects of their job were evaluated. Figure 6.20 shows that most respondents' (83.5%) performance as HoAD was evaluated. Only 16.5% of respondents reported that their performance was not evaluated.
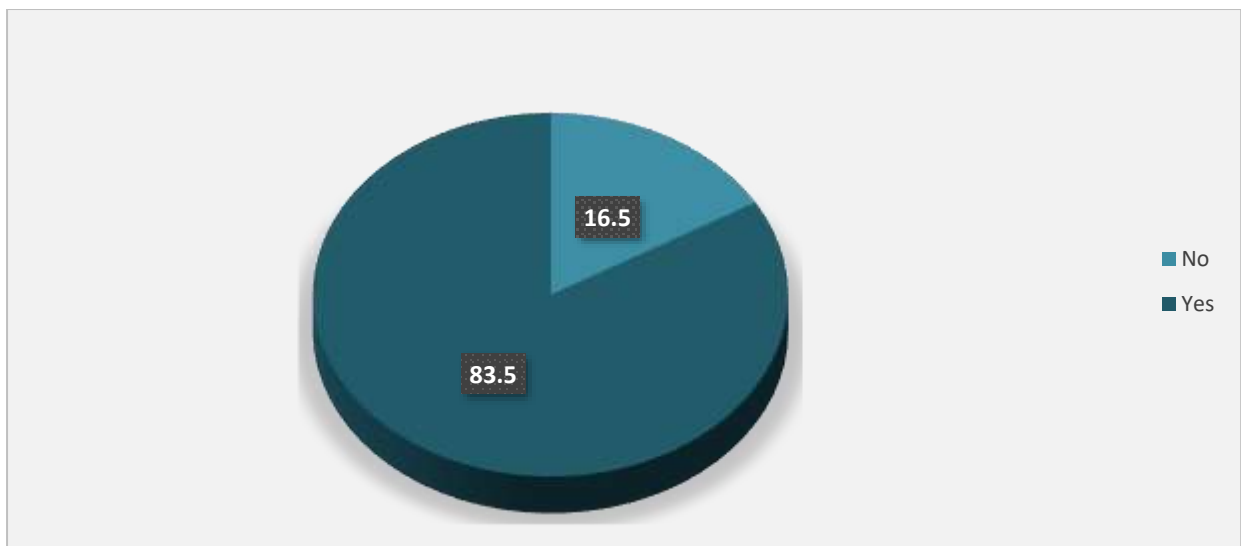
Figure 6.20: Performance evaluation in percentage

Source: Own

Table 6.13 indicates that respondents were evaluated on research, teaching, and community service productivity. The majority (94.2%) indicated that they were evaluated on their research productivity, followed by teaching productivity (89.3%), community service productivity (81.6%), and other evaluation criteria (43.7%). The responses indicate that administration and management skills do not rank high in the performance scorecard of HoADs.

Table 6.13: Aspects of performance evaluation

	Responses	Percentage
Research productivity	97	94.2%
Teaching productivity	92	89.3%
Community service productivity	84	81.6%
Other	45	43.7%

Source: Own

Respondents were asked to elaborate other evaluation criteria. Figure 6.21 shows that only 43.5% indicated that they were evaluated on administration and management of the academic department. Staff/departmental outputs and budget and finances accounted for 19.6% and 17.4% of responses for evaluation criteria, respectively.
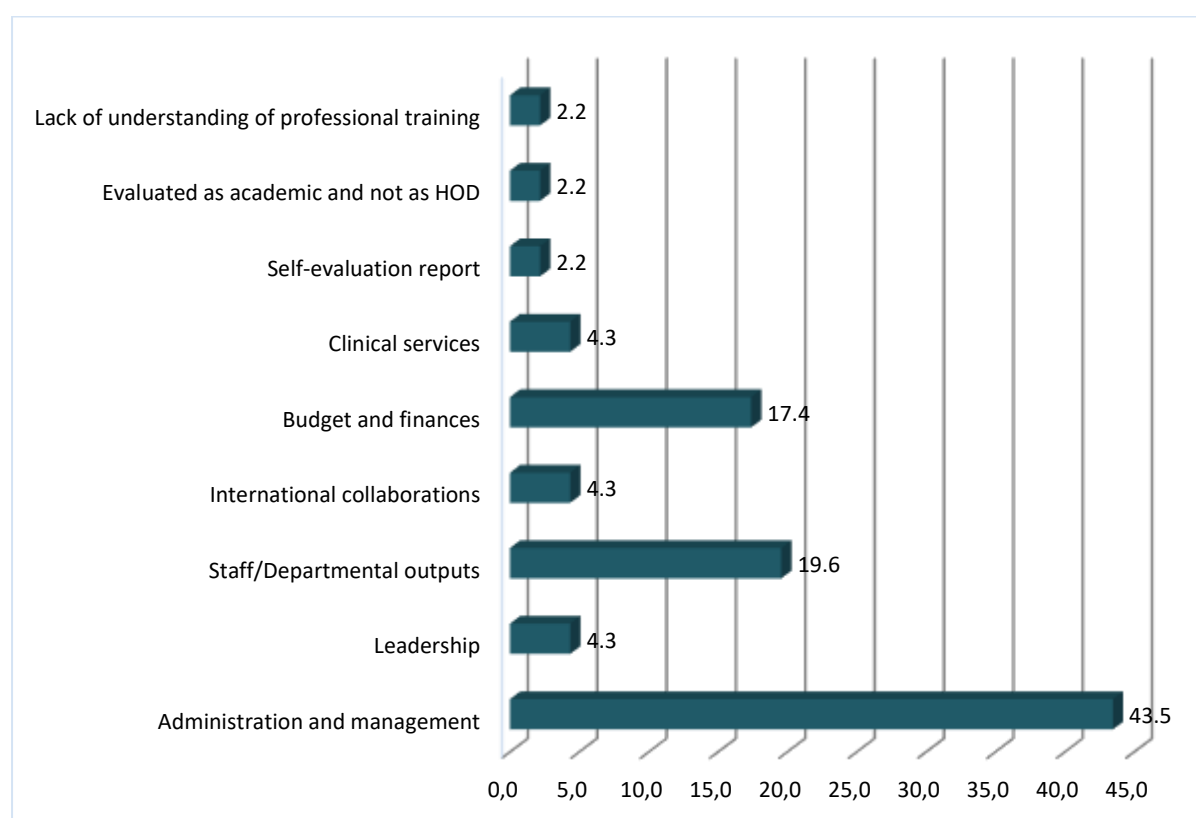
Figure 6.21: Other aspects of performance evaluation in percentage

Source: Own

Remuneration tied to performance

The question was asked to determine whether respondents' remuneration was tied to performance. The results shown in Figure 6.22 indicate that for most respondents remuneration (74.6%) was not tied to their performance.
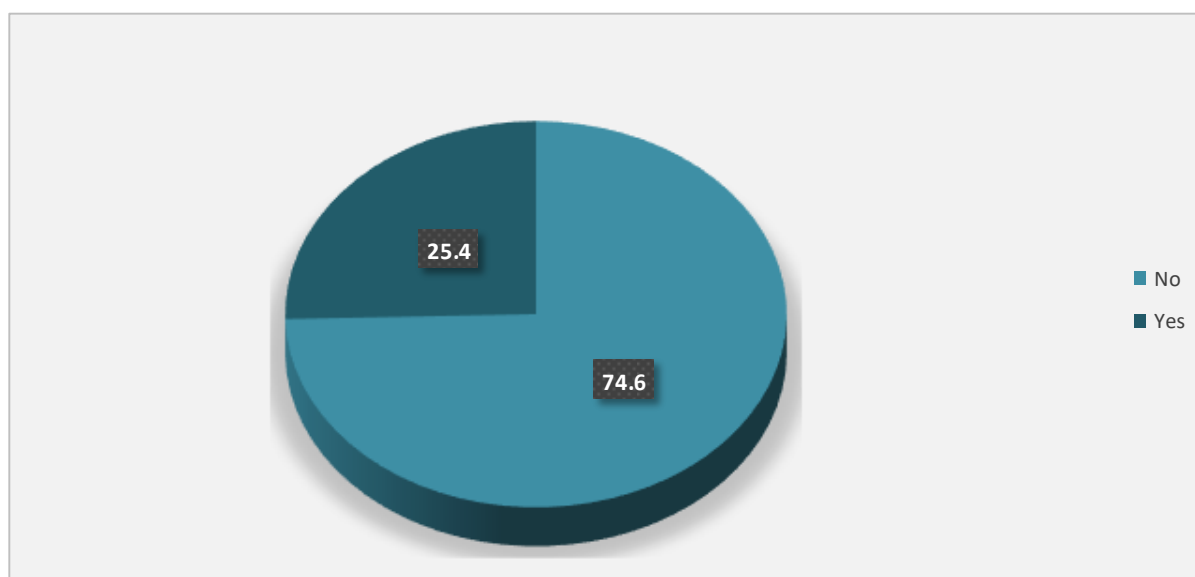
Figure 6.22: Remuneration tied to performance

Source: Own

Conclusion to demographic information

The descriptive statistics provides an insight in to the characteristics of the 124 respondents. The ages of the respondents varied between 21 and 49, the average being 35. In terms of gender, males comprised 54.0% and females 43.5% while 2.4% did not indicate their gender. Of those who responded, 51.6% were white.

It is significant to note that all university types were represented in the survey: 45.3% of respondents were from traditional universities, 42.8% from comprehensive universities, while 12.0% were from universities of technology. Respondents were spread across 57 academic departments and ten faculties. Most respondents (96.7%) indicated that they reported directly to the deans of their faculties.

Eighty seven percent of the respondents were in possession of a doctoral degree. Prior to their appointments as HoADs, 30.6% of respondents indicated previous experience in government, 21.8% in the corporate sector, 16.2% in higher education, and 11.3% in professional practice. Furthermore, 97.1% of respondents reported that at their universities, the term of an HoAD was five years or less. Of the respondents, 60.5% stated that they had been in their position for one term or less.

Of interest is that 59.7% of respondents were unlikely to seek reappointment at the end of their current terms. The data showed that 47.5% would return to departmental ranks as academics and researchers. The respondents further indicated that their performance was evaluated based on research, teaching, community service, and administration and management productivity.

6.4 MANAGEMENT COMPETENCIES CONSTRUCTS

Section 5.5 of Chapter 5 discussed the 43 statements that make up the management competencies construct and subconstructs. Three constructs were discussed, namely self-management competency (SLFMAN), external management competency (EMC), and internal management competency (IMC). For the EMC construct, the subconstructs were, first, resource mobilisation and management (RMM); second, diversity and uncertainty management (DUM) and, third, developing networks and partnerships (DNP). Subsequently, the IMC construct comprises leadership (L), strategic planning (SP), and staff management (STFMAN).

The following sections deal with the results from the structural equation model. Before that, the following descriptive analysis is provided for the respective constructs and subconstructs in Table 6.14.

Table 6.14: Descriptive analysis of the constructs and subconstructs

Construct	Subconstruct	N	Mean	Median	Std deviation
SLFMAN	–	124	6.49	6.60	0.59
EMC	RMM	124	6.31	6.33	0.83
	DUM	124	6.22	6.33	0.73
	DNP	124	5.69	5.75	0.95
IMC	L	124	6.42	6.43	0.59
	SP	124	6.31	6.40	0.68
	STFMAN	124	6.25	6.25	0.72

Source: Own

The mean scores for the management competencies subconstructs on a seven-point Likert scale lie between 6.22 (SD = 0.73) for DUM (as the lowest score) and 6.49 (SD = 0.59) for SLFMAN (as the highest score). All the mean scores are above the middle value of a seven-point scale (the seven scales divided by two equals 3.5), which indicates that the respondents expressed generally positive responses to the management competency constructs in this study. Overall, all the standard deviation (SD) values indicated a variability and spread around the mean. A standard deviation close to zero indicates that data is clustered close to the mean, whereas a high or low standard deviation indicates that data is above or below the mean, respectively. The standard deviations were all less than one, indicating that the respondents' opinions remained consistent and centered near the mean.

To be able to understand the relationships between the management competency subconstructs and to achieve the primary objective of the study, the results for the structural equation model are provided in the next section.

6.5   STRUCTURAL EQUATION MODELLING ANALYSIS

As discussed in Section 5.6 of Chapter 5, the structural equation model analysis was conducted to test the causal relationships between the latent variables (Henseler, Ringle & Sinkovics, 2009). The conceptual model was tested using PLS-SEM and the SmartPLS version 3.2.9 was utilised. According to Hair *et al.* (2014), PLS-SEM is a widely used path analysis technique that aims to test models that predict structural relationships and develop theory (Richter *et al.*, 1990). Instead of individually testing several relationships in a model, the structural equation model allows multiple

relationships to be tested in one model (Hussain *et al.*, 2018). According to Henseler, Ringle and Sinkovics (2009), the procedure to follow in the structural equation model is the evaluation of the outer measurement model and the inner model.

Since the conceptual model is a second-order model, the analysis was done in two phases. The first phase consisted of assessing how the first-order subconstructs relate to their respective main constructs (Hair *et al.*, 2019). The second phase consisted of testing the conceptual model using the standardised estimates generated by SmartPLS during the first phase (Sarstedt, Ringle & Hair, 2017). The structural equation model methodology includes the confirmatory factor analysis and structural model analysis.

6.5.1 Conceptual Model

A detailed discussion of the conceptual model is given in Section 4.2.2. of Chapter 4. The conceptual model of the study presented in Figure 6.24 (see also Figure 4.1), depicts three constructs, namely SLFMAN, EMC and IMC. The model posits that the inherent SLFMAN of HoADs reflect what the individual brings to the job and acts as a predictor of EMCs and IMCs, respectively.

Figure 6.23: Conceptual model

Source: Own

As discussed in Section 4.2.2 of Chapter 4, both EMCs and IMCs are regarded as second-order formative constructs made up of subconstructs extracted from literature. For EMCs, the subconstructs are RMM, DUM, and DNP. All three subconstructs emanate externally to the department where the outcomes of the duties are generally not under the control of the HoAD.

Similarly for IMCs, the three subconstructs refer to competencies that are part of the day-to-day management of the department itself where job performance is generally under the control of the HoAD. These include leading, strategic planning and STFMAN.

This study further argues that the relationships between SLFMANs and EMCs and IMCs are moderated by the type of university, race of the HoAD, gender of the HoAD, and experience of the HoAD regarding the number of terms served.

As discussed in Chapter 4, the following hypotheses are proposed:

- **H1:** SLFMAN has a positive and significant relationship with EMCs.
- **H2:** SLFMAN has a positive and significant relationship with IMCs.
- **H3**: Gender moderates the relationship between SLFMAN and EMCs.
- **H4**: Gender moderates the relationship between SLFMAN and IMCs.
- **H5**: Race moderates the relationship between SLFMAN and EMCs.
- **H6**: Race moderates the relationship between SLFMAN and IMCs.
- **H7**: Number of terms moderates the relationship between SLFMAN and EMCs.
- **H8**: Number of terms moderates the relationship between SLFMAN and IMCs.
- **H9:** University type moderates the relationship between SLFMAN and EMCs.
- **H10**: University type moderates the relationship between SLFMAN and IMCs.

6.5.2 Constructs, Subconstructs, Items and Loadings

According to Brown (2015), confirmatory factor analysis is the step of the structural equation model that deals with measurement models – that is, the relationships between observed measures or indicators and latent variables or constructs. It aims to establish the number and nature of factors that account for the variation and covariation among a set of indicators.

The measuring of constructs and their relationships has been studied widely since the early 1990s (Crocetta *et al.*, 2021). Constructs give an operational definition to a given phenomenon of theoretical importance (Cronbach & Meehl, 1956). In construct development, the unobserved phenomenon is measured through substitute indicators (observed variables, measured variables, or manifest variables), thus making the process of construct definition critical (Gilliam & Voss, 2013).

Early studies of the structural equation model assumed that all constructs had to be measured with a reflective measurement model (Crocetta *et al.*, 2021). It has since been recognised that the causal relationships in the structural equation model can be

divided into either reflective or formative (Jarvis, MacKenzie & Podsakoff, 2003). In a reflective model, the causal direction is from constructs to measurement, while in a formative model, it is from measurement to constructs (Edwards, 2011; Fornell & Bookstein, 1982). The measurement of the construct is done via causal indicators that are extracted from multiple sources (Bagozzi & Heatherton, 1994; Van Riel *et al.*, 2017). The model for this study is a second-order formative model as each subconstruct contributes to the forming of the main construct.

According to Roni, Djajadikerta and Ahmad (2015), a basic first-order model comprises "a composite of question-statement or indicators" and can be useful in determining how the indicators affect each other. They added that when a study investigates a group of related first-order constructs, a higher-order model or second-order model supported by appropriate theories and statistical tests becomes necessary. Theory validation is considered the most important determinant of whether a higher-order factor is appropriate in a given study (Hair *et al.*, 2010).

In the case of this study, the choice of a second-order approach is premised on the suggestion that SLFMAN reflects the inherently important social, emotional and attitudinal personal characteristics that the HoAD brings to the job and acts as a predictor of EMCs and IMCs (Christian, 2017; Cowley, 2018; Kalargyrou & Woods, 2009). As established in Sections 4.2.3.2 and 4.2.3.3 of Chapter 4, EMCs and IMCs are respectively regarded as second-order formative constructs made up of subconstructs extracted from the literature. It is thus necessary to determine the relationship between the various constructs as indicated in Figure 6.23. The factor analysis is illustrated by the items and loadings in Table 6.15.

Confirmatory factor analysis is an important step when evaluating a measurement model (Ozkok *et al.*, 2019). It indicates the correlation between the unobserved variable and the observed measure (Moore & Brown, 2012). In describing a factor, Moore and Brown (2012: 361) called it an "unobserved variable that influences more than one observed measure and accounts for the correlations among these observed measures". The objective is to ascertain the extent to which the items load on the construct that is used for hypothesis testing (Hamid, Sami & Sidek, 2017).

Table 6.15: Constructs, subconstructs, items and factor loadings

Constructs	Subconstructs	Item code	Factor loadings
SLFMAN		SLFMAN1	0.697***
		SLFMAN2	0.837***
		SLFMAN3	0.817***
		SLFMAN4	0.730***
		SLFMAN5	0.807***
		SLFMAN6	0.526***
		SLFMAN7	0.784***
		SLFMAN8	0.736***
		SLFMAN9	0.821***
		SLFMAN10	0.818***
EMC	RMM	RMM1	0.931***
		RMM2	0.917***
		RMM3	0.906***
	DUM	DUM1	0.816***
		DUM2	0.808***
		DUM3	0.838***
		DUM4	0.813***
		DUM5	0.759***
		DUM6	0.708***
	DNP	DNP1	0.899***
		DNP2	0.902***
		DNP4	0.656***
IMC	L	L1	0.533***
		L2	0.720***
		L3	0.811***
		L4	0.655***
		L5	0.793***
		L6	0.753***
		L7	0.661***
	SP	SP1	0.825***
		SP2	0.761***
		SP3	0.682***
		SP4	0.847***
		SP5	0.827***
	STFMAN	STFMAN1	0.725***
		STFMAN2	0.762***

Constructs	Subconstructs	Item code	Factor loadings
		STFMAN3	0.787***
		STFMAN4	0.736***
		STFMAN5	0.731***
		STFMAN6	0.803***
		STFMAN7	0.842***
		STFMAN8	0.834***

*****Indicates the significance of the factor at the 99% confidence interval*
Source: Own figure based on SmartPLS output

Figure 6.24 illustrates the loadings of the items reflecting the model and indicate how much each item's weight loads on each respective construct and subconstruct. The statements that made up each subconstruct are given in Appendix E. According to the confirmatory factor analysis results, STFMAN (factor loading score = 0.463) is the most important factor of IMCs as it loads the strongest to the construct, while DUM (factor loading score = 0.519) loads the strongest to the construct EMCs.
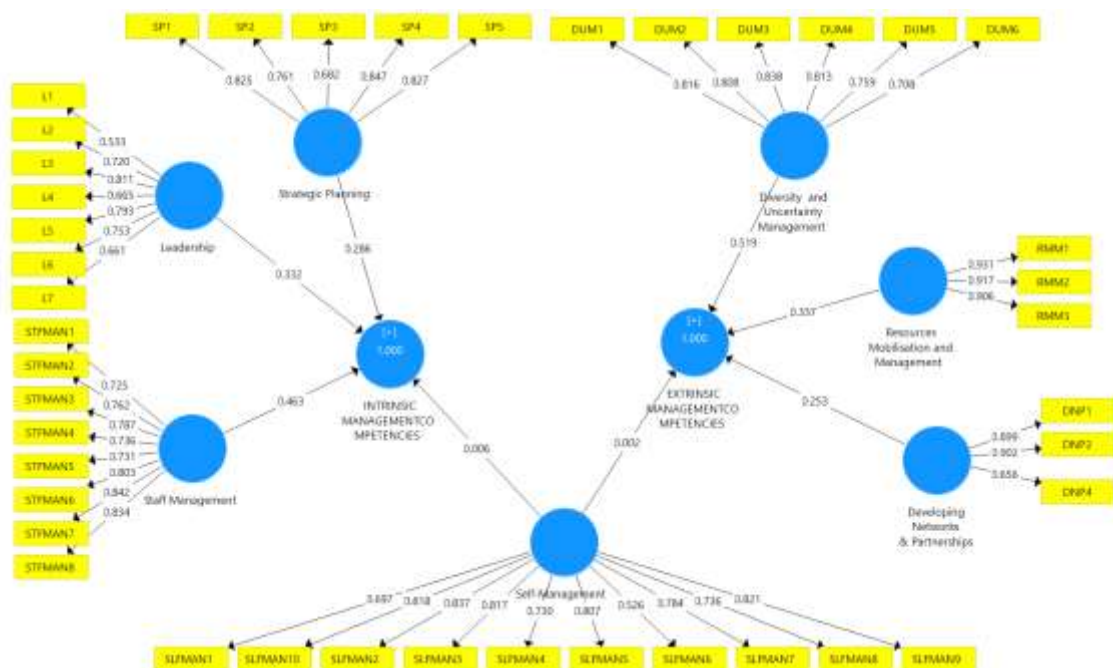
Figure 6.24: Confirmatory factor analysis results with factor loadings

Source: Extracted from the SmartPLS output

6.5.3   The Outer Measurement Model

This section evaluates the outer measurement model by testing the reliability, convergent and discriminant validity of the constructs and subconstructs. Examining

the reliability and validity of the measures is an important step before testing the hypothesis (Hair *et al.*, 2019).

6.5.3.1 Reliability of the scales

Reliability is the degree to which the measurement of a construct provides stable, dependable and consistent results (Taherdoost, 2016). Cronbach's alpha and composite reliability are generally used to assess a scale's reliability (Field, 2013). The required cut-off value for both is 0.7 although 0.6 is sometimes permissible (Malhotra *et al.*, 2017). Table 6.16 shows that all the Cronbach's alphas range from 0.764 to 0.918, indicating an overall acceptable level of internal consistency for the three constructs and subconstructs considered in the model. These Cronbach's alphas are further supported by the composite reliability coefficients ranging from 0.864 to 0.942. Based on both the Cronbach's alpha and composite reliability values, all constructs are considered to be reliable.

6.5.3.2 Convergent validity

Convergent validity is "the degree to which multiple items that measure the same concept are in agreement" (Hassan, Hamid & Zakaria, 2014: 6). According to Hair *et al.* (2014), convergent validity takes the factor loading of the indicator, composite reliability and the average variance extracted (AVE) into account. Convergent validity is established when the value of AVE exceeds 0.50 (Hair *et al.*, 2014; Richter *et al.*, 1990). According to the results in Table 6.16, convergent validity is considered to be evident due to all the factor loadings being either above or equal to 0.5.

Table 6.16: Statistical evidence of reliability and convergent validity

Constructs	Sub-constructs	Item code	Factor loadings	p-value	Cronbach's alpha	Composite reliability	AVE	Final number of items
SLFMAN	–	SLFMAN1	0.697	***				
		SLFMAN2	0.837	***				
		SLFMAN3	0.817	***				
		SLFMAN4	0.730	***				
		SLFMAN5	0.807	***				
		SLFMAN6	0.526	***	0.918	0.932	0.581	10(10)
		SLFMAN7	0.784	***				
		SLFMAN8	0.736	***				

Constructs	Sub-constructs	Item code	Factor loadings	p-value	Cronbach's alpha	Composite reliability	AVE	Final number of items
		SLFMAN9	0.821	***				
		SLFMAN10	0.818	***				
EMC	RMM	RMM1	0.931	***				
		RMM2	0.917	***	0.907	0.942	0.843	3(3)
		RMM3	0.906	***				
	DUM	DUM1	0.816	***				
		DUM2	0.808	***				
		DUM3	0.838	***				
		DUM4	0.813	***	0.880	0.909	0.487	6(6)
		DUM5	0.759	***				
		DUM6	0.708	***				
	DNP	DNP1	0.899	***				
		DNP2	0.902	***	0.764	0.864	0.684	3(4)
		DNP4	0.656	***				
IMC	L	L1	0.533	***				
		L2	0.720	***				
		L3	0.811	***				
		L4	0.655	***	0.832	0.875	0.505	7(7)
		L5	0.793	***				
		L6	0.753	***				
		L7	0.661	***				
	SP	SP1	0.825	***				
		SP2	0.761	***				
		SP3	0.682	***	0.849	0.892	0.625	5(5)
		SP4	0.847	***				
		SP5	0.827	***				
	STFMAN	STFMAN1	0.725	***				
		STFMAN2	0.762	***				
		STFMAN3	0.787	***				
		STFMAN4	0.736	***	0.907	0.925	0.607	8(8)
		STFMAN5	0.731	***				
		STFMAN6	0.803	***				
		STFMAN7	0.842	***				
		STFMAN8	0.834	***				

***Indicates the significance of the factor at 99% confidence interval.
Source: Own table based on SmartPLS output

Furthermore, the statistical evidence supports the convergent validity of the measurements as the lowest AVE (0.487) is close to the recommended threshold of 0.5; all other AVEs are above 0.5 (Hair *et al.*, 2014; Richter *et al.*, 1990). A value of AVE less than 0.5, according to Hair et al. (2019), is not acceptable because it fails to explain more than half of the variance by its items or variance. As a result, the item DNP3 from the DNP subconstruct was deleted to achieve the AVE value of 0.684. Four items initially represented the subconstruct DNP, but DNP3 has been removed to increase the subconstruct's AVE value above 0.5 and improve the model. The results support the reliability and the convergent validity of the items retained in the final model. The items retained in the final measurement model are good measures of their respective constructs.

6.5.3.3 *Statistical evidence of discriminant validity*

In order to avoid issues of multicollinearity, it is critical to assess discriminant validity in studies involving latent variables (Hamid, Sami & Sidek, 2017). Discriminant validity is the extent to which a latent variable or construct discriminates from other latent variables (Taherdoost, 2016). It is established by calculating the square root of AVE in each latent variable (Fornell & Larcker, 1981). The assessment of discriminant validity used the Fornell– Larcker criterion, with cross-loadings used for evaluation (Fornell & Larcker, 1981).

The discriminant validity was assessed by comparing correlations between all pairs of constructs with the square root of AVE of each construct (Malhotra *et al.*, 2017). Correlations that are greater than the square root of AVE are indicative of poor discriminant validity between the constructs involved. For instance, 0.827 (square root of DNP) is lower than 0.830, which is the correlation coefficient between DNP and EMCs. The results in Table 6.17 suggest that there are 21 discriminant validity concerns between the constructs as some AVE square roots are above their respective interconstruct correlation values.

Table 6.17: Correlation matrix to assess the discriminant validity

	DNP	DUM	EMCs	IMCs	L	RMM	SLFMAN	STFMAN	SP
DNP	0.827								
DUM	0.703	0.792							
EMC	0.830	0.947	0.749						
IMC	0.707	0.795	0.860	0.698					
L	0.633	0.768	0.817	0.909	0.710				
RMM	0.625	0.734	0.878	0.791	0.759	0.918			
SLFMAN	0.569	0.772	0.801	0.847	0.785	0.751	0.763		
STFMAN	0.668	0.743	0.802	0.944	0.772	0.728	0.821	0.779	
SP	0.643	0.671	0.745	0.896	0.751	0.689	0.701	0.770	0.791

Source: Own table based on SmartPLS output

Farrell (2010) suggested four methods to address discriminate validity issues in a study. First, the common method factor addresses the bias that might have been caused by the inflated relationship between the constructs on the questionnaire (Rodríguez-Ardura & Meseguer-Artola, 2019). Reducing the variance inflation decreases the estimated shared variance between the constructs and the subconstructs, resulting in an increase in AVE (Farrell, 2010). This route was not followed as it would have compromised the theoretical foundation of the model and also increased its the complexity (Farrell, 2010).

Second, items (such as cross-loading) that did not load could be removed by running exploratory factor analysis (Farrell, 2010). This method was decided against as it would have resulted in the reduction of 21 items out of the total number of 46. Exploratory factor analysis would have compromised the theoretical make-up of the construct.

Third, the number of constructs could be reduced by combining them into one overall construct. It did not make theoretical sense to combine the constructs as they are distinctly different in the literature reviewed.

The fourth suggestion advocated for further research and collecting of more data (Farrell, 2010). The small sample and low response rate are discussed in Section 5.6

of Chapter 5. The suggestion of further research as a method to deal with discriminant validity concerns is therefore appropriate and supported for this study.

6.5.4 Structural Model Analysis

The next step was to measure the inner structural model outcomes. Figure 6.25 is a graphical representation of the structural model (inner model), which followed the guidelines suggested by Hair *et al.* (2019). Having established a reliable and validated measurement (or outer model), the following steps were observed: first, evaluate the predictive relevancy of the model using coefficient of determination (R^2); second, evaluate the relationships between the constructs and subconstructs utilising beta values (β) (Hussain *et al.*, 2018); finally, determine the moderating variables (gender, race, type of university and term served as HoAD) which were introduced in the model to create the interaction variables needed to test the moderating effects.
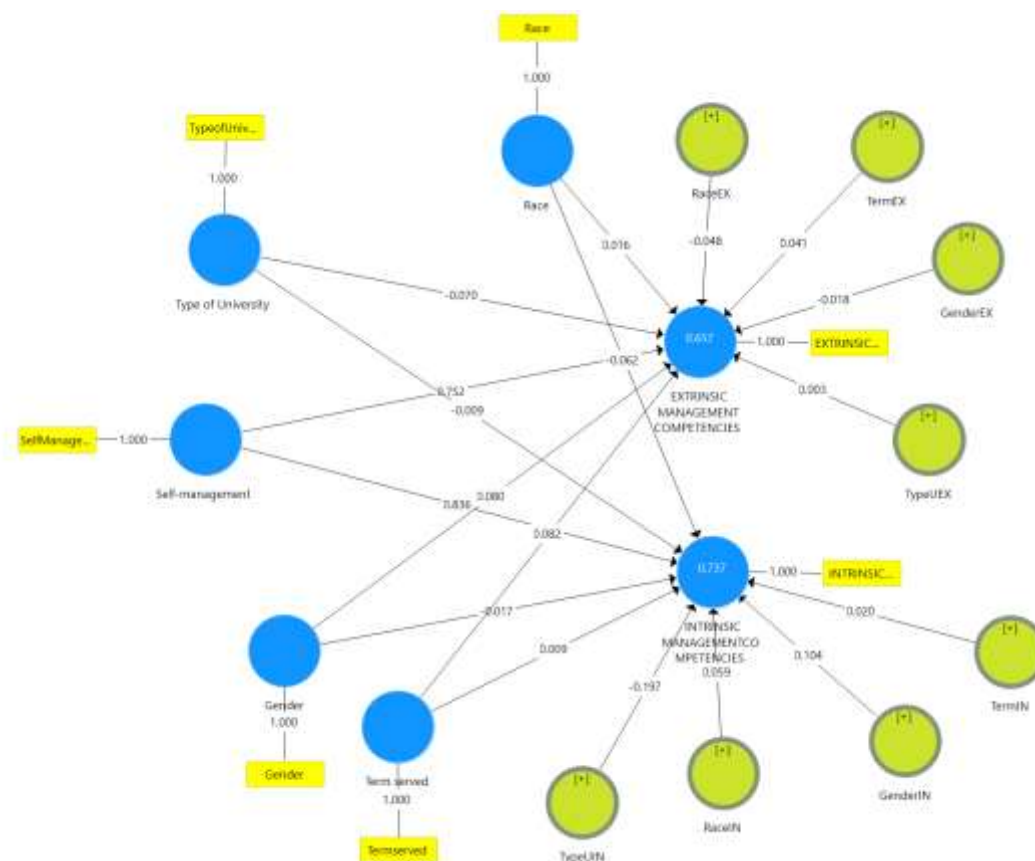
Figure 6.25: Structural model

Source: Own figure based on SmartPLS output

6.5.4.1 Structural estimates

The inner model structural model was evaluated by the coefficient (R^2) and the path coefficient (β-value) (Hair *et al.*, 2014; Henseler, Ringle & Sinkovics, 2009). The estimates are discussed next.

6.5.4.1.1 Coefficient of determination (R^2)

The coefficient of determination explains the predictive power of the model (Hair *et al.*, 2014; Rigdon, 2012). This is done by measuring the interaction between the exogenous and the endogenous variables (Hair *et al.*, 2014). According to the results presented in Figure 6.25, the structural model explains 65.7% of the variance of EMCs and 73.7% of the variance of IMCs. According to Hair *et al.* (2019) and Henseler, Ringle and Sinkovics (2009), R^2 values of 0.25, 0.50 and 0.75 are weak, moderate and substantial, respectively. All R^2 values are more than 0.50 (0.657 > 0.50 and 0.737 > 0.50), thus indicating moderate support for the structural model. The effects represent complete predictive accuracy. The next step determines the statistical significance of the path coefficients.

6.5.4.1.2 Path estimation

Path estimation is critical for hypothesis testing in PLS-SEM (Kock, 2014). According to Hair *et al.* (2014), path estimates are hypothesised relationships that link the constructs. Each hypothesised relationship is tested by calculating the p-value (one-tailed or two-tailed) associated with the path coefficient (Kock, 2015). The p-value threshold is usually 0.05 and is used in conjunction with a one-tailed linear test of a directional hypothesis (Kock, 2014).

Hair *et al.* (2019) explained that when the path coefficient values are between −1 and +1, it represents a strong positive relationship when they are close to +1 and a strong negative relationship when they are close to −1. Path estimation was performed to examine the significance of the path relations in the inner model. Each path relationship was examined though the regression coefficient (beta values or β). Table 6.18 presents the path coefficients and establishes the relationships of SLFMANs on EMCs and IMCs, respectively. The beta coefficients indicate both the direction and strength of the relationship, while the p-values estimate the significance of the relationships. The significance of the relationship is measured through the

p-value being below 0.05. Table 6.18 shows that the two path relations were positive and significant. A graphical representation of the paths is presented in Figure 6.25.

Table 6.18: Standardised regression weights and hypothesis conclusion

	Hypothesis	β	p-value	Decision
H1	SLFMANs -> EMCs	0.752	0.000	SLFMAN has a statistically significant relationship with EMCs at the 5% level and it was positive (β = 0.752, p < 0.05). Therefore, this hypothesis is accepted.
H2	SLFMANs -> IMCs	0.836	0.000	SLFMAN has a statistically significant relationship with IMCs at the 5% level and it was positive (β = 0.836, p < 0.05). Therefore, this hypothesis is accepted.

Source: Own

The proposed hypotheses were discussed in Sections 4.2.3.2 and 4.2.3.3 of Chapter 4. The results of paths for SLFMANs towards the dependent variables EMCs and SLFMAN towards IMCs revealed that both were positively significant. Thus, hypotheses H1 and H2 are accepted.

6.5.4.1.3 Testing moderating effects

Moderation analysis was conducted to investigate whether gender, race, university type and number of terms as HoAD moderate the relationships between SLFMANs and EMCs, and SLFMANs and IMCs, respectively. Moderation effects are tested to establish the strength of the relationship between two variables that are dependent on a third variable (Preacher, Rucker & Hayes, 2007). For this study, this analysis was done to test whether gender, race, experience in terms of completed number of terms, and type of university moderate the relationship between SLFMANs and EMCs and IMCs, respectively.

Table 6.19 presents the results of the hypotheses proposed in Section 4.2.3.4 of Chapter 4.

Table 6.19: Moderation analysis and hypothesis testing decisions

	Hypothesis	β	p-value	Decision
H3	SLFMANs -> Gender -> EMCs	−0.018	0.817	There was insignificant interaction effect of gender between SLFMANs and EMCs (p = 0.817 > 0.05). Therefore, hypothesis H3 is rejected.
H4	SLFMANs -> Gender -> IMCs	0.104	0.139	There was insignificant interaction effect of gender between SLFMANs and IMCs (p = 0.139 > 0.05). Therefore, hypothesis H4 is rejected.
H5	SLFMANs -> Race -> EMCs	−0.048	0.622	There was insignificant interaction effect of race between SLFMANs and EMCs (p = 0.622 > 0.05). Therefore, hypothesis H5 is rejected.
H6	SLFMANs -> Race -> IMCs	0.059	0.484	There was insignificant interaction effect of race between SLFMANs and IMCs (p = 0.484 > 0.05). Therefore, hypothesis H6 is rejected.
H7	SLFMANs -> Number of terms as HoAD -> EMCs	0.041	0.602	There was insignificant interaction effect of number of terms between SLFMANs and EMCs (p = 0.602 > 0.05). Therefore, hypothesis H7 is rejected.
H8	SLFMANs -> Number of years as HoAD -> IMCs	0.020	0.823	There was insignificant interaction effect of number of terms between SLFMANs and IMCs (p = 0.823 > 0.05). Therefore, hypothesis H8 is rejected.
H9	SLFMANs -> University type -> EMCs	0.003	0.979	There was insignificant interaction effect of type of university between SLFMANs and EMCs (p = 0.979 > 0.05). Therefore, hypothesis H9 is rejected.
H10	SLFMANs -> University type -> IMCs	−0.197	0.019	There was significant interaction effect of type of university between SLFMANs and IMCs (p = 0.019 > −0.197). Therefore, hypothesis H10 is accepted.

Source: Own

6.6 SUMMARY OF RESULTS

Table 6.21 summarises the results of the study and the decisions made. These results will be discussed in Chapter 7.

Table 6.20: Summary of the results and decisions

Hypothesis		β	p-value	Decision
H1	SLFMANs -> EMCs	0.752	0.000	Supported
H2	SLFMANs -> IMCs	0.836	0.000	Supported
H3	Gender -> SLFMANs and EMCs	−0.018	0.817	Not supported
H4	Gender -> SLFMANs and IMCs	0.104	0.139	Not supported
H5	Race -> SLFMANs and EMCs	−0.048	0.622	Not supported
H6	Race -> SLFMANs and IMCs	0.059	0.484	Not supported
H7	Number of terms -> SLFMANs and EMCs	0.041	0.602	Not supported
H8	Number of terms -> SLFMANs and IMCs	0.020	0.823	Not supported
H9	University type -> SLFMANs and EMCs	0.003	0.979	Not supported
H10	University type -> SLFMANs and IMCs	−0.197	0.019	Supported

Source: Own

The results as displayed in Table 6.21 indicate the following:

H1: SLFMAN has a positive and significant relationship with EMCs.

The data was used to analyse whether self-management competency was significantly and positively related with EMCs. The results indicate that self-management competency is significantly and positively related with EMCs ($β=.752$, $p=0.000 < 005$). This means that if HoADs self-management competency improves by one standard deviation, there are 99% chances that extrinsic management competencies will also improve by 75.2% of its own standard deviation. Thus, **H1:** that there is a significant and positive association between self-management competency and EMCs is supported.

H2: SLFMAN has a positive and significant relationship with IMCs.

The study set out to establish whether self-management competency was significantly and positively related with IMCs. The results indicate that self-management competency is significantly and positively related with IMCs ($β=.836$, $p=0.000 < 005$). This means that if HoADs self-management competency improves by one standard

deviation, there are 99% chances that intrinsic management competencies will also improve by 83.6% of its own standard deviation. Thus, **H2:** that there is a significant and positive association between self-management competency and IMCs is supported.

H3: Gender moderates the relationship between SLFMAN and EMCs.

The data was used to analyse whether there was significant gender interaction between self-management competency and EMCs. The results indicate that gender interaction between self-management competency and EMCs was insignificant ($\beta = -0.018$, $p = 0.817 > 0.05$). This means that the impact of self-management on extrinsic management competencies does not significantly differ across the gender of HoADs. Thus, **H3:** that there is a significant gender interaction between self-management competency and EMCs is not supported.

H4: Gender moderates the relationship between SLFMAN and IMCs.

The data was used to analyse whether there was significant gender interaction between self-management competency and IMCs. The results indicate that gender interaction between self-management competency and IMCs was insignificant ($\beta = 0.104$, $p = 0.139 > 0.05$). This means that the impact of self-management competency on IMCs is almost the same across the gender of HoADs. Thus, **H4:** that there is a significant gender interaction between self-management competency and IMCs is not supported.

H5: Race moderates the relationship between SLFMAN and EMCs.

The data was used to analyse whether there was significant race interaction between self-management competency and EMCs. The results indicate that race interaction between self-management competency and EMCs was insignificant ($\beta = -0.048$, $p = 0.622 > 0.05$). This means the effect of self-management competency on EMCs is almost the same among white and non-white HoADs. Thus, **H5:** that there is a significant race interaction between self-management competency and EMCs is not supported.

H6: Race moderates the relationship between SLFMAN and IMCs.

The data was used to analyse whether there was significant race interaction between self-management competency and IMCs. The results indicate that race interaction between self-management competency and IMCs was insignificant ($\beta = -0.059$,

p = 0.484 > 0.05). This means the effect of self-management competency on IMCs is almost the same among white and non-whites HoADs. Thus, **H6:** that there is a significant race interaction between self-management competency and IMCs is not supported.

H7: Number of terms moderates the relationship between SLFMAN and EMCs.

The data was used to analyse whether there was significant number of terms interaction between self-management competency and EMCs. The results indicate that number of terms interaction between HoADs self-management competency and EMCs was insignificant ($\beta = -0.041$, p = 0.602 > 0.05). This means the impact of self-management on EMCs is almost the same among HoADs who served 2 terms and less and those who served more than 2 terms. Thus, **H7:** that there is a significant number of terms interaction between self-management competency and EMCs is not supported.

H8: Number of terms moderates the relationship between SLFMAN and IMCs.

The data was used to analyse whether there was significant number of terms interaction between self-management competency and IMCs. The results indicate that number of terms interaction between HoADs self-management competency and IMCs was insignificant ($\beta = -0.020$, p = 0.823 > 0.05). This means the impact of self-management on IMCs is almost the same among HoADs who served 2 terms and less and those who served more than 2 terms. Thus, **H8:** that there is a significant number of terms interaction between self-management competency and IMCs is not supported.

H9: University type moderates the relationship between SLFMAN and EMCs.

The data was used to analyse whether there was significant university type interaction between self-management competency and EMCs. The results indicate that university type interaction between self-management competency and EMCs was insignificant ($\beta = 0.003$, p = 0.979 > 0.05). This means the impact of self-management on extrinsic management competencies is almost the same among HoADs from traditional and non-traditional universities. Thus, **H9:** that there is a significant university type interaction between self-management competency and EMCs is not supported.

H10: University type moderates the relationship between SLFMAN and IMCs.

The data was used to analyse whether there was significant university type interaction between self-management competency and IMCs. The results indicate that university type interaction between self-management competency and IMCs was significant (β = −0.197, p = 0.019 < 0.05). This suggests that the effect of self-management on intrinsic management competencies is stronger among HoADs from non-traditional universities compared to HoADs from traditional universities. Thus, **H10:** that there is a significant university type interaction between self-management competency and IMCs is supported.

6.7 CONCLUSION

This chapter presented the analysis of data collected from the respondents. Data was collected from the HoADs of three university types in South Africa, namely traditional universities, comprehensive universities and universities of technology. The response rate was 27%. Most respondents worked at traditional universities. The respondents were spread across 57 academic departments and more than ten faculties. The majority of the HoADs were white males. It was established that most of the HoADs had no intention to serve more than one term.

Structural equation modelling (PLS-SEM) was chosen to test the relationships between the constructs and the subconstructs in the conceptual model. Two hypotheses were tested. Four moderating effects, namely race, gender, number of terms as HoAD and university type, were introduced to test the strength between SLFMANs and EMCs, and SLFMANs and IMCs. The inner model was tested and supported.

The next chapter discusses the findings of the study, the achievement of the primary and secondary objectives, managerial implications, recommendations and areas of further research.

CHAPTER 7: DISCUSSION, FINDINGS AND CONCLUSION

7.1 INTRODUCTION

This chapter discusses the major findings of the study. In terms of structure, the achievement of objectives is discussed, followed by the practical recommendations to HoADs, human reosurces managers, senior management of universities and higher education sector in South Africa. Finally, the limitations of the present study and areas of future research are presented.

7.2 SUMMARY OF THE MAJOR FINDINGS

The primary objective of this study was to develop a management competencies framework for HoADs at South African public universities. The proposed management competencies framework aimed to identify the competencies required to function successfully as a HoAD and assist HoADs in improving their competencies. Furthermore, it is expected that the framework will be used to develop existing South African HoADs by human resource managers and university leaders.

First, it was necessary to develop a conceptual model based on the literature review and empirical research. The conceptual model presented in Figure 7.1 was developed with accompanying hypotheses (Table 7.1) in Chapter 4 and tested in Chapter 6 by using a structural equation model. The model comprises three constructs (SLFMAN, EMC and IMC) and six subconstructs. The subconstructs that explain EMCs are RMM, DUM and DNP; in turn, the subconstructs for IMCs are L, SP and STFMAN. SLFMANs influence EMCs and IMCs and, subsequently, the execution of duties outside and inside the academic department. As indicated in Chapters 4 and 6, moderation effects (gender, race, number of terms as HoAD, and university type) were tested to establish the strength of the relationship between SLFMANs and EMCs, and SLFMANs and IMCs, respectively.

As mentioned in Section 6.2 of Chapter 6, data was collected from 124 HoADs spread across three public university types in South Africa. A summary of the results and subsequent decisions are presented in Table 7.1. The reported structural equation model results were assessed based on estimate paths coefficient beta values and their corresponding p-values. Decisions regarding the significance of the path

coefficient between SLFMANs and EMCs, and SLFMANs and IMCs were made based on the adopted confidence interval of 95% and the acceptable cut-off for a statistical significance level of $p \leq 0.05$. A p-value of less than 0.05 (≤ 0.05) is regarded as statistically significant and thus suggests evidence to accept the alternative hypothesis.
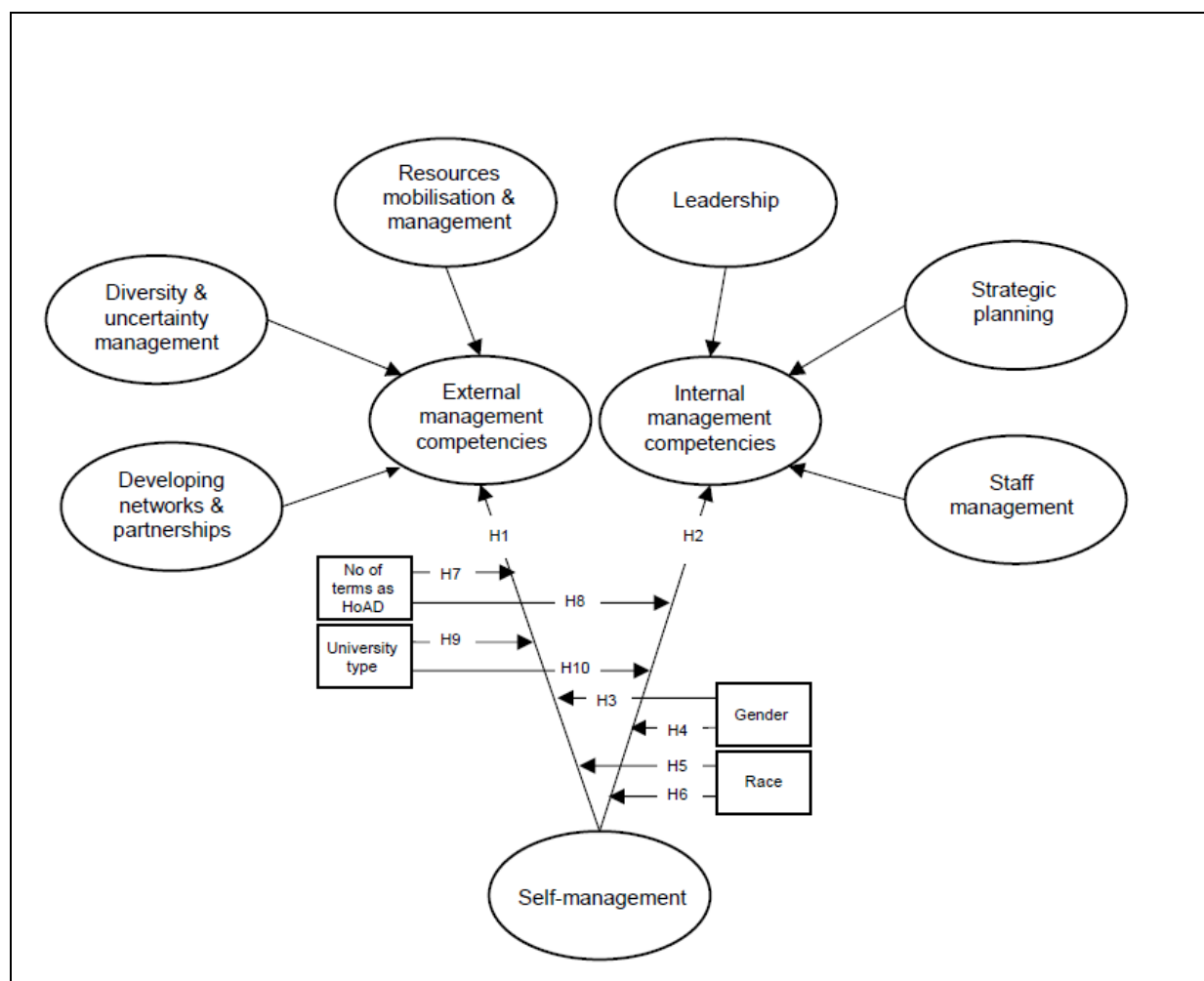
Figure 7.1: Conceptual model for the study

Source: Own

Table 7.1: Summary of the results and decisions

Hypothesis		β	p-value	Decision
H1	SLFMANs -> EMCs	0.752	0.000	Supported
H2	SLFMANs -> IMCs	0.836	0.000	Supported
H3	Gender -> SLFMANs and EMCs	−0.018	0.817	Not supported
H4	Gender -> SLFMANs and IMCs	0.104	0.139	Not supported
H5	Race -> SLFMANs and EMCs	−0.048	0.622	Not supported

	Hypothesis	β	p-value	Decision
H6	Race -> SLFMANs and IMCs	0.059	0.484	Not supported
H7	Number of terms -> SLFMANs and EMCs	0.041	0.602	Not supported
H8	Number of terms -> SLFMANs and IMCs	0.020	0.823	Not supported
H9	University type -> SLFMANs and EMCs	0.003	0.979	Not supported
H10	University type -> SLFMANs and IMCs	−0.197	0.019	Supported

Source: Own

These main findings are discussed through the next subsections.

7.2.1 Self-management and EMCs

It was found that self-management has a strong positive and statistically significant relationship on EMCs ($β = 0.752$, $p < 0.05$) for H1. In this study, EMCs were described by a combination of three subconstructs, namely RMM, DUM, and DNP. The positive relationship between SLFMANs and EMCs means that the personal attributes and characteristics that HoADs at South African public universities possess and bring to their jobs are important as they lead to competence in the execution of managerial tasks that are external to the academic department.

The findings suggest that when HoADs act responsibly and ethically, take responsibility for their actions and behaviour on the job, have an awareness of their strengths and weaknesses, take initiative and maintain a work–life balance, they will execute their tasks external to their academic departments competently, even when they encounter challenges originating from an uncertain environment. They are likely to be trusted by constituencies outside the academic departments and be empowered to develop relationships and partnerships and mobilise resources beyond their academic department. This finding corroborates the results of other studies that posit that SLFMAN enhances the ability to influence the specific behaviours that contribute to external job performance (Christian, 2017; Godfrey *et al.*, 2017; Gomez, 2017; Ross, 2014; Tombari, Vito & Ndukwu, 2018).

7.2.2 Self-management and IMCs

The study found that SLFMANs have a strong positive and significant relationship with IMCs ($β = 0.752$, $p < 0.05$) for H2. The subconstructs of IMCs comprised leading, strategic planning and staff management. This finding suggests that HoADs who

possess SLFMANs are likely to be competent when managing tasks and executing duties inside the academic department.

Through SLFMANs, the HoAD is likely able to manage the internal environment of the academic department. The results of the study suggest that the HoAD must have a more hands-on management focus to lead, attend to staff issues, and drive the strategy of the department, typically within the broader context of the faculty it resides in. This finding is consistent with the results of other studies that found that SLFMAN is positively related with competencies that lead to the execution of management tasks inside the department (Steyn & Van Staden, 2018; Suess, 2015; Tombari, Vito & Ndukwu, 2018).

7.2.3 Moderation Analysis

Regarding moderation effects, the moderators of gender, race, number of terms of the HoAD, and university type were assessed in the relationships between SLFMANs and EMCs, and SLFMANs and IMCs. In order to make inference of data resulting from small low response rate, race was reduced to two categories: white people (50.8%) and non-white people (49.2%). Furthermore, the number of terms was reduced to two terms or less (83.3%) and more than two terms (17.7%). Lastly, university type was consolidated into traditional (57.3%) and non-traditional university types (43.7%).

The results of this study suggest that university type has a moderating effect between SLFMANs and IMCs ($\beta = -0.197$, $p < 0.05$) for H10. They study's findings further indicate that the moderating effect of SLFMANs on intrinsic management competencies is stronger among HoADs from non-traditional universities than those from traditional universities. The HoADs at non-traditional university types must exhibit SLFMANs to be able to competently carry out management tasks inside the academic department. More specifically, as discussed in Chapter 2, the post-1994 university system and the establishment of university types on a historically race-based system favouring white people resulted in traditional universities being better resourced than other university types (Subbaye, 2018). It is suggested that the inequalities between university types affect the ability of HoADs to respond to their factors (Ahmed, 2020; Czerniewicz *et al.*, 2020; Saeed, 2020). For example, traditional universities are likely to invest in management structures and systems, thereby creating an empowering

environment for HoADs (Mzangwa & Dede, 2019; Tjønneland, 2017). HoADs in non-traditional universities in South Africa require self-management behaviours to be able to navigate the internal issues of academic departments, such as lack of investment in resources (for example, staff, infrastructure and institutional systems).

The other findings of the study showed that the moderating effects of gender, race, number of terms as HoAD, and university type between SLFMANs and EMCs are statistically insignificant. Although gender does not moderate the relationship between SLFMANs and EMCs and IMCs, respectively, it does suggest that there are no dimensions of SLFMANs, as measured in this study, that are specific to a particular gender.

The study's findings suggest that race does not moderate the relationships between SLFMANs and both EMCs ($\beta = -0.048$, $p < 0.05$) (proposed by H5) and IMCs ($\beta = 0.059$, $p < 0.05$) (proposed by H6). As discussed in Chapter 2, race classification has long been the landscape at public universities in South Africa, beginning with colonialism and entrenching itself during the apartheid era. These findings suggest that race does not have an effect on self-management behaviours that HoADs at public universities in South Africa need to perform their jobs effectively externally and internally to the academic departments.

In terms of the number of terms as HoADs, the findings reveal that experience gained via the number of terms as an HoAD in South African public universities does not influence self-management's predictive ability of EMCs and IMCs. H7 and H8 represent the relationships between SLFMANs and EMCs ($\beta = -0.041$, $p < 0.05$), and SLFMANs and IMCs ($\beta = -0.020$, $p < 0.05$), respectively. A suggested explanation of these findings is that the empirical phase of the study established that the majority (60%) of HoADs will not seek a reappointment after the first term, making the number of terms as a moderator insignificant.

The main findings of the study are the positive relationships between SLFMANs and EMCs, SLFMANs and IMCs, respectively, and the moderating effects of university type on these relationships between SLFMANs and IMCs. The next section provides an overview of the achievement of the objectives of the study.

7.2.4 Achievement of the Objectives

The following section provides a brief overview of the findings, *vis-à-vis* the objectives of the study. Section 7.2.4.1 provides a discussion of the literature review secondary objectives 1, 2, 3, 4, and 5, provided in chapters 2 and 3; second, Section 7.2.4.2 discusses objectives 6 to 10 of the empirical results provided in chapter 6.

7.2.4.1 Literature-based secondary objectives

Discuss the historical background of the South African higher education environment prior to 1994

The secondary objective sought to contextualise public universities by providing a historical background of the higher education sector in South Africa. In 1994, South Africa ended the policy of apartheid and became a democratic state. Politically, the colonisation of South Africa by the Europeans in 1652 influenced the higher education sector and, notably, public universities. Universities were established by colonialists to preserve their way of life and cater for their needs (Pietsch, 2013). The colonial languages, English and Afrikaans, were imposed on the higher education system thus entrenching Eurocentric knowledge systems and marginalising African knowledge (Akena, 2012; Pietsch, 2013).

Higher education was controlled by the state resulting in public universities being under the administration of the national government and by extension becoming state institutions under acts of Parliament (Beale, 2016; Moodie, 1994). Access to university was based on race, ethnicity and language, and mainly excluded black people (Davies, 1996; Giliomee & Mbenga 2007; Sehoole 2006). In 1940, the University of Fort Hare, which was the only black university, had 400 registered black students, while two white universities with an open admission policy, namely UCT and WITS, had less than 100 black students (Beale 1992; Murray, 1987).

The colonial roots that shaped South African higher education laid the basis for introducing the policy of apartheid between 1948 and 1994. The enactment of the *Extension of the University Education Act* and the *University College of Fort Hare Transfer Act* in 1959 deepened the fragmentation of higher education along racial and ethnic lines as inferior and ethnic-based black universities were built for black people

(Nkomo, 2014). The ideologies of colonialism and apartheid, which were the building blocks upon which the race-based higher education sector that prioritised white people was built, resulted in historically black institutions having chronic financial challenges, poor infrastructure, and underprepared black students (Hall & Symes, 2005; Subotzky, 1997). In 1994, 36 public HEIs comprising 21 universities and 15 technikons were managed under eight race-based education departments (Bunting, 2006).

The pre-1994 history of the South African higher education has undoubtedly affected HEIs. The government policies shaped the environment in which the public universities were role players. A study of HoADs at South African public universities was conducted in that historical context of the pre-1994 political legacy. This objective was achieved by Section 2.2 of Chapter 2.

Discuss higher education in post-1994 South Africa

The political changes that ushered a democratic South Africa in 1994 were followed by policies that aimed to redress the apartheid-based higher education sector. A unitary higher education system was conceptualised (Lefa, 2014). The newly established DoE assumed the critical role of being the architect of facilitating a post-1994 higher education environment through instruments of policies and legislation (Cloete, 2014). The *Higher Education Act* (Act 101 of 1997) provided the legislative framework for supervising all HEIs under the new dispensation (DoE, 1997: 1).

Furthermore, the post-1994 policies rationalised the higher education sector through HEIs merging to reduce them from 33 to 23, established three institutional university types (namely, traditional universities, comprehensive universities and universities of technology), and built two new public universities (Badsha & Cloete, 2011; DoE, 2001; Kulati, 2000; Mohamedbhai, 2008). The massification of the higher education system concerning itself with increased enrolments of students from previously disadvantaged groups was supported by new governance structures and accountability bodies that aimed to rid the sector of systemic race-based exclusions at public universities (Badsha & Cloete, 2011).

Alongside the structural reforms taking place in the higher education sector, additional implementation bodies were established, namely SAQA to provide common standards

and assessments of qualifications (SAQA, 2000: 3), the Council of Higher Education to carry out the function of quality assurance within the higher education sector of South Africa (DoE, 1997), and the Tertiary Fund of South Africa, which later became the NSFAS, to address the funding gaps resulting from the policy of massification (Badenhorst, 2019). By 2021, the unitary higher education sector comprised 26 public universities of three institutional types, namely traditional universities, comprehensive universities, and universities of technology. This seconday objective was achieved by Section 2.3 of Chapter 2.

Discuss the current challenges facing public universities in South Africa

Despite the end of colonialism and apartheid and the introduction of the legislative framework that restructured the higher education sector, public universities in South Africa are still challenged by several factors. The challenges emanate from an increasingly volatile, interconnected and disruptive global economy and local imperatives (Chetty & Pather, 2015; Wangenge-Ouma & Kupe, 2020).

The higher education sector across the world has become similar and has increasingly done away with traditional borders (Stensaker *et al.*, 2019). Globalisation and ICT have enabled the internationalisation of higher education through student and staff mobility and international partnerships; however, the progress in internationalisation at South African public universities is compromised by the perceived hostile attitudes that South Africans have towards foreigners – specifically those from fellow African countries (Dagen *et al.*, 2019; De Wit, 2020; Licata & Klein, 2017; Obadire, 2018).

The post-1994 student protests that started in 2015 have become regular occurrences at public universities. Assisted by social media (Twitter handle references: #RhodesMustFall, #OutsourcingMustFall, #SexualHarassmentMustFall and #FeesMustFall) and anchored around the demands for free and decolonised education, the waves of protests at different universities have disrupted teaching and learning (Makhanya, 2019). Some scholars characterised these protests as an indication of public universities that are in crisis (Czerniewicz, Trotter & Haupt, 2019; Ebrahim, 2018; Fomunyam, 2017; Nicolson, Egwu & Payne, 2021).

The policies of redress have fallen short in meeting the expectations created by the freedom that was achieved in 1994 (Albertus, 2019; Mzangwa & Dede, 2019). The inability of students from disadvantaged and poor backgrounds to pay university fees has resulted in large student debts, which places the financial sustainability of public universities at risk (Naidu, 2021; Wangenge-Ouma, 2021). Covid-19 exposed the ICT inequalities between historically white and historically black institutions (Ahmed, 2020). Well-resourced historically white institutions adopted online, open-access and digital learning, and adapted and responded to the pandemic as quick as possible; on the other hand, historically black institutions continued to lag behind (Lembani *et al.*, 2020). Other scholars posited that Covid-19 has introduced a debate regarding the reimagined future and delivery methods of higher education in South Africa (Habib, Phakeng & Kupe, 2020; Osman & Walton 2020; Wangenge-Ouma & Kupe 2020). This objective was achieved by Section 2.4 of Chapter 2.

Identify the management competencies of HoADs

Managers are key to the success of organisations. Their importance has been elevated by a competitive and globalised world that requires organisations to adopt competency-based human resources approaches (Harper, 2018; Montt, 2015). To this end, management competencies have been described as those underlying characteristics including behaviours, skills, motives, and traits possessed by managers leading to superior individual performance and organisational success (Boyatzis, 1982; Barrett & Depinet, 1991; Jamil, 2016; Le Deist & Winterton, 2005; Megahed, 2018; Parry, 1996; Spencer & Spencer, 1993; Verle *et al.*, 2014).

An HoAD occupies a middle management position at a university. The position is regarded as one of the most complex and challenging at a university because of its paradoxical nature and the person's unpreparedness for the role of management (Gappa & Trice, 2010; Gigliotti, 2021). Accordingly, self-management is an important management competency the HoAD brings to the job. It is the ability to be adaptive and flexible in handling change and uncertainty in an ever-changing environment (Goleman, 2001). It is the demonstration of "personal attributes such as honesty, trustworthiness and reliability" (Botha & Musengi 2012: 73), and keeping emotions under control, showing stability, and setting a positive example (Grackova, 2019).

Additionally, HoADs are increasingly required to demonstrate skills in resource mobilisation and management. This entails securing the resources required to manage the academic department and connecting with persons and/or institutions outside the locus of the department who provide these resources (Nambiar, 2017).

Managing the diversity and uncertainty environment is also a needed competency in an HoAD position. Academic departments do not operate in isolation: they are part of the broader university, higher education sector and society and are thus not immune to the macro-environment (Lone *et al.*, 2017). An HoAD needs the skills to manage the diverse workforce and uncertainties characteristic of the higher education sector.

The constituencies that are external to the academic department that the HoAD interacts with requires competency in developing networks and partnerships. The skill to relate with multiple external stakeholders' positions benefits the academic department through external resources, creating relevance of the departmental course offerings, identifying potential collaborations for academic staff, and being invited to serve at influential bodies (Gmelch, 2019; Greven, Strese & Brettel, 2020; St. Marthe, 2012).

The ability to provide leadership in an academic department is a crucial function of an HoAD. Without skilled leadership, the goals and objectives of the department will not be fulfilled. In leading a community of scholars, the HoAD gets things done by embracing a collegial, consultative, consensus-driven and cooperative style of leadership (Seagren, Creswell & Wheeler, 1993).

As a departmental leader in a university structure, the HoAD is expected to develop a strategic plan that strengthens the quality of teaching, research, and community engagement of the department (Cunningham & Smith, 2020). Strategic planning clarifies goals and objectives, and it maps the vision, strengths and weaknesses of the department. This competency is important as it enables the HoAD to guide the department in their contribution to the overall university strategic plan (Goldman & Salem, 2015).

In addition to developing a plan for the internal running of the department, an HoAD requires competencies to manage staff (full- and part-time academic and support

staff), create a functional team, and optimise their performance. As a member of a broader leadership of the university, representing the needs of the department and mediating their concerns to university senior managers is regarded as an important skill required from HoADs (Caron, 2019; Gigliotti, 2021). This objective was achieved by Section 3.5.4 of Chapter 3.

Discuss the general perspectives on the managerial role of HoADs

Both locally and internationally, the job of the HoAD has been described as one of the toughest to discharge in a university setting. Most university administration takes place in the academic departments (Cipriano, 2017; Kruse, 2020). It has also been shaped and influenced by the managerial philosophies that universities have imported from the private sector, resulting in the production of onerous reports (Davis, Jansen van Rensburg & Venter, 2016). HoADs come into the role on the strength of their scholarship and not as experienced managers.

Even though the job of varies from university to university, department to department, and discipline to discipline, HoADs are regarded as part of university middle management (Kruse, 2020). The uniqueness of the job is described as a combination of management, teaching and scholarship outcomes. Their general duties and tasks fall under six categories: (1) departmental and university governance; (2) programme management; (3) human resources management; (4) budget and resources management; (5) external communication; and (6) office management (Gmelch, 2015; Moses & Roe, 1990).

A variety of titles are used to describe HoADs in South African public universities. HoADs are appointed for a term ranging from three to five years as heads of schools, division directors and departmental chairs (Croucamp, 2013; Lyons, 2008). In addition to managerialist philosophies, the local priorities of redressing and restructuring the higher education sector have influenced the job of HoADs (Sing, 2016; Swartz *et al.*, 2019). This objective of the study was achieved by Section 3.5 of Chapter 3.

7.2.4.2 Empirical secondary objectives

The achievement of the literature review study objectives was presented in Section 7.2.4.1. The discussion of the study's findings is presented in this subsection. The

results are discussed with reference to theory and existing literature. The discussion is based on quantitative results and the study's objectives.

Identify the characteristics of HoADs at South African public universities

HoADs manage departments in a variety of structures that differ between universities. According to the study's findings, the majority of HoADs at South African public universities who participated in the study are white males. Furthermore, the majority of HoADs who responded to the study have a doctorate. They are professors at traditional universities between the ages of 31 and 40. This suggests that they are respected scholars in their respective fields and will most likely be respected by their peers. The present study confirmed previous findings regarding the seniosity of individuals appointed into the positions (Hecht *et al.*, 1999).

Also noteworthy is the finding that the majority of HoADs at South African public universities who participated in the study are white males. In line with previous studies, this finding confirms the dominance of white males in layers of management and racial inequality of the South African higher education system (Badat, 2004; Mangolothi, 2019; Mzangwa & Dede, 2019). Before 1994, most traditional universities were primarily for white students and were well-funded by the government, private corporations, and alumni. They projected symbols of Europe and apartheid. This study's finding is that the average age of the respondents was 35 years, implying that the HoADs were born before the end of apartheid in 1994. The clashes between students and university management that began during the 2015 student protests and the calls for the decolonisation of the curriculum and university spaces suggest that white HoADs do not identify with the lived experiences of the majority of the students.

In terms of job experience, most HoADs who responded to the study have been in academia for about 19 years and in the HoAD job four years for at most. The academic rank of professor suggests that they have established themselves as scholars in their discipline and enjoy the respect of their colleagues in the academic department. As stated previously, this is regarded as an important qualification of the job holders (Gmelch, 2015). Furthermore, they would have been motivated to take the job to serve and improve the trajectory of their departments because they are familiar with the challenges facing the higher education sector, their universities, and their academic

departments. This finding is supported by Gmelch's (2015) study on the reasons why HoADs go into academic leadership.

Although eligible for second terms, most respondents indicated that they would not seek reappointment beyond their current first term, but that they would rather reintegrate back into departmental ranks as scholars. This suggests that the majority of incumbents do not aspire to occupy management positions in the long term. This is consistent with prior findings that departmental chairs normally serve for six years and that 65% of them return into departmental ranks as scholars (Gmelch, 2015; Floyd and Dimmock, 2011; Kruse, 2020). This study found that HoADs' performance was primarily evaluated based on research, teaching, and community engagement productivity and that performance in these areas did not translate into higher reward and remuneration. This suggests that the administrative and management tasks and challenges associated with the HoAD role are unappreciated and thus undervalued, despite occupying most of the HoADs' time. Furthermore, because of their scholar identity, HoADs may believe that continuing to serve for an extended period will cause them to fall behind in scholarship and fail to keep up with changes in their discipline. This may explain why they do not stay in a role in the long term.

Staff and students from 57 academic departments of different sizes were represented in the study. Based on this data, it was found that the averages for staff members were 16 academic, eight part-time and six support staff members. In term of students, there were on average 26 honours, 24 master's and 15 doctoral students. This suggests that staff and student are key stakeholders in the academic department and will thus command a significant time of the HoAD.

The primary objective of developing a management competencies framework for the HoADs in South Africa based on a review of relevant literature and research results obtained from empirical research was thus achieved.

Table 7.2 presents a summary of the empirical results.

Table 7.2: Summary of achievement of empirical objectives

Empirical objectives	Technique used	Statistical results	Decision	Comments	Reference section
Identify the relationship between SLFMAN and EMC.	Structural equation model using PLS-SEM	(β = 0.752, p < 0.05)	Supported	The finding suggests that SLFMAN has a positive relationship with the management competencies required by HoADs at South African public universities to manage the external environment out of their immediate control.	Section 6.5.4.1.1
Identify the relationship between SLFMAN and IMC.		(β = 0.836, p < 0.05)	Supported	The finding suggests that SLFMAN has a positive relationship with the management competencies required by HoADs at South African public universities to manage the internal environment in the academic department.	Section 6.5.4.1
Identify the moderation effect of gender on EMC.		(β = <0.018, p = >0.05)	Not supported	The finding suggests that gender does not have a moderating effect on the relationship between SLFMAN and EMC.	Section 6.5.4.1.3
Identify the moderation effect of race on EMC.		(β = <0.048, p = >0.05)	Not supported	The finding suggests that race does not have a moderating effect on the relationship between SLFMAN and EMC.	Section 6.5.4.1.3
Identify the moderation effect of number of terms as HoAD on EMC.		(β = <0.41, p = >0.05)	Not supported	The finding suggests that number of terms as HoAD does not have a moderating effect on the relationship between SLFMAN and EMC.	Section 6.5.4.1.3
Identify the moderation effect of university type on EMC.		(β = 0.003, p = >0.05)	Not supported	The finding suggests that university type does not have a moderating effect on the relationship between SLFMAN and EMC.	Section 6.5.4.1.3

Empirical objectives	Technique used	Statistical results	Decision	Comments	Reference section
Identify the moderation effect of gender on IMC.		($\beta = 0.0104$, $p = >0.05$)	Not supported	The finding suggests that gender does not have a moderating effect on the relationship between SLFMAN and IMC.	Section 6.5.4.1.3
Identify the moderation effect of race on IMC.		($\beta = -0.059$, $p = >0.05$)	Not supported	The finding suggests that race does not have a moderating effect on the relationship between SLFMAN and IMC.	Section 6.5.4.1.3
Identify the moderation effect of number of terms as HoAD on IMC.		($\beta = -0.020$, $p = >0.05$)	Not supported	The finding suggests that number of terms as HoAD does not have a moderating effect on the relationship between SLFMAN and IMC.	Section 6.5.4.1.3
Identify the moderation effect of university type on IMC.		($\beta = -0.197$, $p = < 0.05$)	Supported	The finding suggests that university type does have a moderating effect on the relationship between SLFMAN and IMC.	Section 6.5.4.1.3

Source: Own

7.2.5   Theoretical Contribution and Practical Managerial Implications

This section considers the contribution of the study and the managerial implications. The section is divided into three subsections that address theoretical, methodological, and practical contributions.

7.2.5.1 Theoretical contribution

This study makes a theoretical contribution by uncovering related constructs of management competencies, SLFMANs and EMCs and IMCs, that have not been explored in-depth in previous literature. It has expanded previous studies by contributing to the understanding of the management competencies of HoAD by integrating the theory of trait approach and the postulation that improvement of competencies is accompanied by ongoing training and development (Uslu 2019; Robbins 2001; Kirkpatrick and Locke 1991). Crucially, the study helps articulate the competencies required of HoADs in both external and internal environments and the impact of the HoAD's personal and intrinsic characteristics (SLFMAN) on them. SLFMAN's contribution to EMCs and IMCs suggests that it is vital in management of the external and internal worlds of the HoAD job. It is therefore necessary that SLFMAN becomes a primary requirement in the recruitment and development of HoADs. Existing studies corroborate the findings that RMM, DUM, and DNP stem from an environment external to the academic department (Armstrong & Woloshyn, 2017; Floyd & Dimmock, 2011; Lyons, 2008). Additionally, the IMCs of leadership, strategic planning, and staff management are supported by literature (Caron, 2019; Cipriano, 2017; Croucamp, 2013; Gmelch, 2019; Haney, 2020; Hecht *et al.*, 1999; Jones, 2011a; Kelly, 2009; Kruse, 2020; Lane, 2018; O'Brien, 2006; Ofori & Atiogbe, 2012; Schafer *et al.*, 2005; Pham *et al.*, 2019; Potgieter & Coetzee, 2010; Weaver *et al.*, 2019).

Furthermore, this study adds to the existing body of knowledge in the fields of higher education management and human reosurces management. With regards to the HoADs, self-management is a vital competency comprising HoADs' essential personal traits and characteristics such as integrity, positive thoughts, emotional control, flexible and effective ways in the work environment, outlook on life, and work–life balance, resulting in competencies that enable job performance in both their external and

internal worlds (Aslan & Pamukçu, 2017; Croucamp, 2013; Goleman, Boyatzis & Mckee, 2002; Hogan & Warrenfeltz, 2003; Slocum, Jackson & Hellriegel, 2008).

The next section discusses the practical managerial implications of the study.

7.2.5.2 Methodological contribution

In terms of methodology, the main contribution of the research has been the measurement of key constructs to study the management competencies of HoADs at public universities in South Africa. Whereas previous studies conducted in South Africa made some theoretical contributions, the novelty of this study was the use of a quantitative research design strategy and PLS-SEM as the statistical means for testing structural equation models to develop propositions and explore the relationships between constructs. The study has shown that self-management competency is related to external management competencies and internal management competencies of HoADs.

Another methodological contribution lies in using probability stratified sampling for the target population. The strata were the three university types, namely traditional, comprehensive, and universities of technologies. This sampling technique may be useful in future studies examining the HoADs of public universities.

7.2.5.3 Practical managerial implications

The overall goal has been scholarly endeavour: to contribute to a small body of South African literature and serving decision makers of public universities. Following the findings of the study, practical suggestions are provided to HoADs, human resources departments, senior management of public universities, and USAf, the representative body of universities in South Africa.

Heads of academic departments

One of the practical contributions of this research is the insight provided about the external and internal worlds of HoADs and the associated management competencies. The main finding of this study captures the significance of SLFMAN in the job of the HoAD, resulting in the EMCs and IMCs in the external and internal environments of HoADs, respectively. The study revealed that HoADs require SLFMAN to navigate the

complexities and ambiguity of the role. SLFMAN encompasses skills, abilities, behaviours, personal attributes, and characteristics inherent in the individual, the ability to recover from setbacks, integrity, control emotions, and manage time to improve job performance.

The HoADs might consider a continuous self-assessment and self-awareness of their SLFMAN to adopt a posture of growth and development in the dimensions where they are weak. It is recommended that HoADs use the expertise of executive coaches to assist them in SLFMAN.

An important finding of this study is that majority of HoADs who participated in the study do not intend to continue in the role after their first term but instead will return to the academic ranks. The majority of respondents do not see a long-term career in management because they are caught in a paradoxical situation of being an academic and scholar while also being a part of university management. The HoADs can consider designing their management role by gathering a hybrid team to oversee the execution of tasks aligned with EMCs and IMCs.

The management competency framework developed in this study defined the HoAD role to understand the competencies required for successful job performance in a university setting. The contribution of this research is to understand, based on theoretical and empirical findings, how HoAD management competencies can be developed so that academic departments can be catalysts in the achievement of public universities' core academic success. This framework can be used as a practical tool to that end.

Human resource departments

HoADs have one of the most difficult jobs on university middle management level. They navigate pressures that emanate from within and outside academic departments. The management competencies framework developed for this study is an important guiding document that human resources departments of universities could utilise to recruit, prepare and develop HoADs to face the pressures associated with their jobs.

In terms of recruitment and selection, the study established that what the HoAD brings into the job as a person – the personal attributes and characteristics, the ability to

recover for setbacks, integrity, the ability to control emotions and manage time – leads to competence in the execution of managerial tasks. The study further found that HoADs who possess these dimensions classified as SLFMANs will be competent to carry out managerial functions externally and internally to the academic departments. It is thus recommended that human resources departments administer an assessment instrument of SLFMANs at the recruitment phase as this will describe the potential developmental areas of HoADs.

If appointed in the job, the HoADs should be supported in the management role. The framework identified seven management competencies needed for job performance. Human resources departments should design short courses for HoAD development in line with the required seven management competencies.

Additionally, the study reported that most HoADs do not intend to continue in the role after their first term, but will return back to the academic ranks. They are caught in a paradoxical situation of being an academic and scholar and also being part of university management. Human resources departments should manage the career trajectories and expectations of HoADs who will return to faculty differently from those who will continue with management roles. This should be done via a human resources policy.

The framework was developed for HoADS, who are considered mid-level university managers, but human resources departments can also use it as a management development tool at all levels of university management. It will ensure that management development focuses on specific competencies.

Senior management at universities

The results indicate that there is a high turnover at the end of the first term of HoADs at South African public universities. Senior management at universities across types, including deans of faculties, deputy vice chancellors, and vice chancellors, must recognise HoAD as a significant management role. The function is crucial to the university, being at the coalface, with not only the significant responsibilities of teaching and research, but also the day-to-day interactions with a wide range of academic staff, students and other community partners. To this end, there must be

ongoing dialogue and engagement with their HoADs with an attitude to solicit their views about their jobs, the institutional frustrations and pressures they face, the impact of responsibilities on their scholarly activities, and operational bottlenecks. Senior management must provide a conducive environment supported by policies and structures that assist HoADs to engage with stakeholders and constituencies that are external to the academic department.

It is recommended that vice chancellors and deputy chancellors reach out to their HoADs informally. Vice chancellors and deputy chancellors should be encouraged to connect with HoADs frequently. Regular, casual relationship-building platforms by way of quarterly get-togethers are recommended as they will provide opportunities for dialogue. While these informal settings will not replace formal institutional-wide meetings, they could help gather feedback from HoADs who are at the coalface of university business, generate ideas to shape the jobs of HoADs, and provide a safe environment to voice issues of discontent. HoADs will further benefit from meeting other HoADs and interacting on matters of common interest, resulting in a culture of peer-learning and mentoring. In addition to informal forums between senior management and HoADs, it is recommended that opportunities with senior professional staff be made available.

7.2.5.4 Recommendations for Universities South Africa

As a representative body of the 26 public universities in South Africa, USAf will play a role in implementing some of the study's recommendations. The legacy of colonialism and apartheid resulted in the disproportionate allocation of resources between public universities.

The study revealed that the majority of HoADs will leave their jobs at the end of the first term and return to departmental ranks. The long-term effect of this turnover in departmental leadership translates into a lack of depth in management at public universities. This weakens the entire higher education sector.

It is thus suggested that USAf consider the following recommendations, guided by the management competency framework developed in this study:

1. Organise an annual conference that brings the HoADs of all university types in South Africa education together. The focus should be on providing further management development, facilitating peer-learning and mentoring, learning best practices and innovative strategies, and enabling networking across universities.

2. In order to grow the management competencies and capacity of HoADs in a developing country context such as South Africa, USAf could provide opportunities for HoADs to visit other universities in developing countries for exposure purposes.

3. Produce two issues per year of a peer-reviewed journal dedicated to the life and job of HoADs.

7.2.6 Limitations of the Study

The limitations of the study were as follows:

- The low response rate (27%): The data collection phase of the study coincided with the government containment measures of Covid-19 resulting in the lockdown and shutdown of public universities in South Africa. Despite three reminders, many recipients did not complete the online questionnaire, thus contributing to the low response rate. In terms of responses by university types, the low response rate was noticeable in the HoADs from the comprehensive and university of technologies types. The generalisation of the results about the characteristics of HoADs, academic departments, and university types is thus not readily justifiable.

- The findings and conclusions are based on a sample of HoADs at South African public universities. The results may not be applicable to HoADs at private universities. Further research may be required to generalise the findings in private universities and other contexts.

- Discriminant validity, which measures the extent to which the constructs are related or unrelated, could be considered a limitation. However, to address discriminant validity concerns, further research and the collection of more data are recommended (Farrell, 2010).

7.3   AREAS SUGGESTED FOR FUTURE RESEARCH

This study focused on HoADs at public universities in South Africa. Another study could examine the potential application of the framework at private universities in South Africa. The framework might also be tested in government entities and other industries. Additionally, the management competencies framework presented three constructs and six subconstructs that lead to job performance in the HoAD job. Researchers could undertake further studies on the following topics:

- A longitudinal study could be undertaken to observe whether increases in SLFMANs may result in increases in EMCs and IMCs over a period of time.

- A study that employs a concurrent mixed methods research design which combines the benefits of quantitataive and qualitataive perspectives. Such a study would provide further insights into the relationships of the management competencies and be enriched by the analysis and interpretation of qualitative and quantitative data.

- A further research area could be to conduct a study to measure SLFMAN, EMCs, and IMCs of current HoADs to identify their competency levels and determine "how much" of the competency connected to good administration "held by" administrative assistants compared to HoADs.

7.4   CONCLUSION

The ability of HoADs to manage an academic department is crucial to the running of universities. The preparation of HoADs for the management role is inadequate: they are untrained in management positions. Empirical evidence and literature have shown that most HoADs do not intend to stay in management beyond their one-term commitment.

In order for HoADs to be successful in their jobs, they need to know the management competencies needed for job performance. This study developed a management competencies framework that could assist HoADs at South African public universities. SLFMAN enjoys a positive relationship with the management competencies required to perform managerial tasks that are external and internal to the academic department.

The study contributed to a small body of South African literature on HoADs. The management competencies framework will be useful to human resources departments of universities, senior managers and USAf.

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APPENDIX A: QUESTIONNAIRE

1. Information Sheet

Dear Respondent

We invite you to participate in this study which seeks to investigate the management competencies of heads of academic departments at South African public universities. Kindly read the information below to apprise yourself of the purpose of the study and your role as a participant in the study.

TITLE OF THE RESEARCH PROJECT
A management competencies framework for heads of academic departments at South African public universities.

PRINCIPLE INVESTIGATOR/RESEARCHER'S NAME, CONTACT NUMBER AND EMAIL
Name of principle investigator: Ramokone Manfred Molomo (Student Number: 2010155923)   Contact number: 076 267 8477   Email address: manfred.molomo@gmail.com

FACULTY AND DEPARTMENT
Name of Faculty: Economic and Management Sciences
Name of Department: Business School

STUDY LEADER(S) NAME AND CONTACT NUMBER
Dr Johan Coetzee Contact number: 015 – 401 9266

WHAT IS THE AIM / PURPOSE OF THE STUDY?
The purpose of this study is primarily to construct a framework of management competencies of the heads of academic departments at South African public universities. Specifically, the study seeks to define the competencies of heads of academic departments in South African public universities; the skills, knowledge and attributes of incumbents. This study serves to enrich the literature on academic administration and management in higher education in South Africa.

WHO IS DOING THE RESEARCH?
Ramokone Manfred Molomo is a doctoral student at the University of the Free State·He is also a Manager in the Higher Education Sector. He is not conducting this research on behalf of any public university but rather on behalf of his own dissertation topic.

HAS THE STUDY RECEIVED ETHICAL APPROVAL?
This study has received approval from the Research Ethics Committee of UFS. A copy of the approval letter can be obtained from the researcher.   **Approval number: *UFS-HSD2017/1082/1007***

WHY ARE YOU INVITED TO TAKE PART IN THIS RESEARCH PROJECT?
You are occupying a very important position; head of an academic department. As a head of an academic department at a public university you are in an ideal position to give us valuable first-hand information from your own perspective. This a national study, inviting the involvement of 1550 active heads of academic departments for their views on the competencies required by heads of academic departments. We have learned your name and contact details through the human resources department of your university. The participation in the study is voluntary. Participants may choose to withdraw from the research at any time for any reason, without any explanation or penalty of any kind. Participants will not be requested to supply any identifiable information, ensuring anonymity of their responses.

WHAT IS THE NATURE OF PARTICIPATION IN THIS STUDY?
You will not be requested to supply any identifiable information, ensuring anonymity of your responses. If you are happy to take part and are satisfied with the explanations from the principle investigator, you will be asked to confirm you consent for participation. You will then be asked to respond to the statements in the questionnaire. The questionnaire will take about 30 minutes to complete and we think it will be more appropriate if you respond to it at your convenient time. You will have an option to save and continue later. You will not lose the work you have completed before you saved it.

CAN THE PARTICIPANT WITHDRAW FROM THE STUDY?
Your participation in the research is entirely voluntary and you are free to decline to participate or to stop completing the questionnaire at any time for any reason, even if you have agreed to take part initially. However, once you have submitted your completed questionnaire online, you will no longer be able to withdraw your responses as there will be no way of linking your responses back to you. If you do decide to take part, you will be given this information sheet to keep and be asked to sign a written consent form.

2. Information Sheet [Continue]

WHAT ARE THE POTENTIAL BENEFITS OF TAKING PART IN THIS STUDY?
The study will benefit universities' senior managers, deans of faculties, current and future heads of academic departments and those tasked with human resources recruitment, planning and development. Universities' senior management will benefit from this study by understanding the demands and the requisite competencies of heads of academic departments and planning strategically to address them. The study will also go a long way in helping both heads of academic departments and deans of faculties agree on the development of Heads of Academic Departments (HoADs).

WHAT IS THE ANTICIPATED INCONVENIENCE OF TAKING PART IN THIS STUDY?
There are no known major risks to your participation in this research study. It may be inconvenient for you to fill out an on-line questionnaire. The time it will take to complete the questionnaire will be 30 minutes. The on-line survey will allow you to save and continue later.

WILL WHAT I SAY BE KEPT CONFIDENTIAL?
Records of your participation in this study will be held confidential as far as is permitted by law. Records of information that you provide for the research study and your personally identifying information (name or other characteristics) will not be linked in any way. It will not be possible to identify you as the person who provided any specific information for the study. A report of the study may be submitted for publication, but you will not be identifiable in such a report. Your university will also not be identified or identifiable. Any data collected in the online questionnaire will be stored online in a form protected by passwords and other relevant security processes and technologies.

HOW WILL THE INFORMATION BE STORED AND ULTIMATELY DESTROYED?
Hard copies of your answers will be stored by the researcher for a period of five years in a locked filing cabinet at the researcher's home office for future research or academic purposes; electronic information will be stored on a password protected computer. Future use of the stored data will be subject to further Research Ethics Review and approval if applicable. After a period of five years hard copies will be shredded and electronic copies will be permanently deleted from the hard drive of the computer through the use of a relevant software programme.

WILL I RECEIVE PAYMENT OR ANY INCENTIVES FOR PARTICIPATING IN THIS STUDY?
Your participation in this study is completely voluntary and you may opt out of any question in the survey. All of your responses will be kept confidential. There will be no payment or any incentives for participating in the study.

HOW WILL THE PARTICIPANT BE INFORMED OF THE FINDINGS / RESULTS OF THE STUDY?
If you would like to be informed of the final research findings, please contact Ramokone Manfred Molomo on 076 267 8477 or on manfred.molomo@gmail.com

Thank you for taking time to read this information sheet and for participating in this study.

3. Consent Form

Please complete this form after you have read the Information Sheet.

Title of Study: A management competencies framework for heads of academic departments at South African public universities.   University of the Free State General/Human Research Ethics Committee Ref: UFS-HSD2017/1082/1007

Thank you for considering taking part in this research. The person organising the research must provide information and details about the project. Please read the Information Sheet before you agree to take part. If you have any questions arising from the Information Sheet or explanation provided, please ask the researcher before you decide whether to participate.

3.1	I confirm that I understand that by ticking each box I am consenting to participate in this survey of a management competencies framework for heads of academic departments at South African public universities. study. I understand that it will be assumed that unticked boxes mean that I DO NOT consent to that part of the study. I understand that by not giving consent for any one element I may be deemed ineligible for the study	☐ Please tick
3.2	I confirm that the person asking my consent to take part in this research has told me about the nature, procedure, potential benefits and anticipated inconvenience of participation.	☐ Please tick

3. Consent Form [Continue]

3.3 I have read and understood the study as explained in the information sheet. I have had sufficient opportunity to ask questions and am prepared to participate in the study. I understand that my participation is voluntary and that I am free to withdraw at any time without penalty (if applicable). I am aware that the findings of this study will be anonymously processed into a research report, journal publications and/or conference proceedings.

☐ Please tick

3.4 I agree to participate in this web-based survey as described in consent form

☐ Please tick

4. Personal Details

4.1 Your University Type   ☐ Comprehensive university   ☐ University of Technology   ☐ Traditional university

4.2 Name of Academic Department

_____

4.3 Gender   ☐ Male   ☐ Female   ☐ Other

4.4 Your age in years

☐ 18	☐ 19	☐ 20
☐ 21	☐ 22	☐ 23
☐ 24	☐ 25	☐ 26
☐ 27	☐ 28	☐ 29
☐ 30	☐ 31	☐ 32
☐ 33	☐ 34	☐ 35
☐ 36	☐ 37	☐ 38
☐ 39	☐ 40	☐ 41
☐ 42	☐ 43	☐ 44
☐ 45	☐ 46	☐ 47
☐ 48	☐ 49	☐ 50
☐ 51	☐ 52	☐ 53
☐ 54	☐ 55	☐ 56
☐ 57	☐ 58	☐ 59
☐ 60	☐ 61	☐ 62
☐ 63	☐ 64	☐ 65
☐ 66	☐ 67	☐ 68
☐ 69	☐ 70	☐ 71
☐ 72	☐ 73	☐ 74
☐ 75	☐ 76 and above	

4.5 Race   ☐ Asian   ☐ Black   ☐ Coloured
☐ Indian   ☐ White   ☐ Other
☐ Prefer not to answer

4.6 Current Academic Rank   ☐ Junior Lecturer   ☐ Lecturer   ☐ Senior Lecturer
☐ Associate Professor   ☐ Professor   ☐ Senior Professor
☐ Other   ☐ Research Professor

4.7 If other (please specify)

_____

4.8 Highest Educational Qualification   ☐ Certificate   ☐ Diploma   ☐ Undergraduate degree
☐ B Tech   ☐ Honours   ☐ Masters
☐ Doctoral

4. Personal Details   [Continue]

4.9   Number of years in academia

- ☐ 1
- ☐ 4
- ☐ 7
- ☐ 10
- ☐ 13
- ☐ 16
- ☐ 19
- ☐ 22
- ☐ 25
- ☐ 28
- ☐ More than 30 years

- ☐ 2
- ☐ 5
- ☐ 8
- ☐ 11
- ☐ 14
- ☐ 17
- ☐ 20
- ☐ 23
- ☐ 26
- ☐ 29

- ☐ 3
- ☐ 6
- ☐ 9
- ☐ 12
- ☐ 15
- ☐ 18
- ☐ 21
- ☐ 24
- ☐ 27
- ☐ 30

4.10   Number of terms served as head of academic department

- ☐ Less than 1 term
- ☐ 3 terms
- ☐ 6 terms
- ☐ 1 term
- ☐ 4 terms
- ☐ 2 terms
- ☐ 5 terms

4.11   Previous employment experience

- ☐ Corporate
- ☐ Professional practice in personal capacity
- ☐ Government
- ☐ Other
- ☐ Not-for-profit sector

4.12   If other (please specify)

[   ]

4.13   Direct line manager to whom you report

- ☐ Deputy dean
- ☐ Rector/Vice Chancellor
- ☐ Dean
- ☐ Vice rector/Deputy Vice Chancellor

5. ACADEMIC DEPARTMENT PROFILE

5.1   Faculty in which your academic department/ school resides

- ☐ Commerce
- ☐ Engineering and Built Environment
- ☐ Law
- ☐ Veterinary Science
- ☐ Economic Management Sciences
- ☐ Health Sciences
- ☐ Science
- ☐ Business School
- ☐ Education
- ☐ Humanities
- ☐ Theology

5.2   Number of full-time academic staff in your academic department

- ☐ 1
- ☐ 4
- ☐ 7
- ☐ 10
- ☐ 13
- ☐ 16
- ☐ 19
- ☐ 22
- ☐ 25
- ☐ 28
- ☐ 31
- ☐ 34
- ☐ 37
- ☐ 40
- ☐ 43
- ☐ 46
- ☐ 49

- ☐ 2
- ☐ 5
- ☐ 8
- ☐ 11
- ☐ 14
- ☐ 17
- ☐ 20
- ☐ 23
- ☐ 26
- ☐ 29
- ☐ 32
- ☐ 35
- ☐ 38
- ☐ 41
- ☐ 44
- ☐ 47
- ☐ 50

- ☐ 3
- ☐ 6
- ☐ 9
- ☐ 12
- ☐ 15
- ☐ 18
- ☐ 21
- ☐ 24
- ☐ 27
- ☐ 30
- ☐ 33
- ☐ 36
- ☐ 39
- ☐ 42
- ☐ 45
- ☐ 48
- ☐ More than 50

5. ACADEMIC DEPARTMENT PROFILE   [Continue]

5.3   Number of support staff in your academic department

- ☐ 1
- ☐ 2
- ☐ 3
- ☐ 4
- ☐ 5
- ☐ 6
- ☐ 7
- ☐ 8
- ☐ 9
- ☐ 10
- ☐ 11
- ☐ 12
- ☐ 13
- ☐ 14
- ☐ 15
- ☐ 16
- ☐ 17
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- ☐ 20
- ☐ 21
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- ☐ 23
- ☐ 24
- ☐ 25
- ☐ 26
- ☐ 27
- ☐ 28
- ☐ 29
- ☐ 30
- ☐ More than 30

5.4   Estimated number of Honours students in your department

- ☐ 1
- ☐ 2
- ☐ 3
- ☐ 4
- ☐ 5
- ☐ 6
- ☐ 7
- ☐ 8
- ☐ 9
- ☐ 10
- ☐ 11
- ☐ 12
- ☐ 13
- ☐ 14
- ☐ 15
- ☐ 16
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- ☐ 43
- ☐ 44
- ☐ 45
- ☐ 46
- ☐ 47
- ☐ 48
- ☐ 49
- ☐ 50
- ☐ More than 50

5.5   Estimated number of part-time academic staff

- ☐ 1
- ☐ 2
- ☐ 4
- ☐ 5
- ☐ 6
- ☐ 7
- ☐ 8
- ☐ 9
- ☐ 10
- ☐ 11
- ☐ 12
- ☐ 13
- ☐ 14
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- ☐ 40
- ☐ 41
- ☐ 42
- ☐ 43
- ☐ 44
- ☐ 45
- ☐ 46
- ☐ 47
- ☐ 48
- ☐ 49
- ☐ 50
- ☐ 3

5. ACADEMIC DEPARTMENT PROFILE   [Continue]

5.6   Estimated number of Masters students in your department

☐ 1   ☐ 2   ☐ 3
☐ 4   ☐ 5   ☐ 6
☐ 7   ☐ 8   ☐ 9
☐ 10   ☐ 11   ☐ 12
☐ 13   ☐ 14   ☐ 15
☐ 16   ☐ 17   ☐ 18
☐ 19   ☐ 20   ☐ 21
☐ 22   ☐ 23   ☐ 24
☐ 25   ☐ 26   ☐ 27
☐ 28   ☐ 29   ☐ 30
☐ 31   ☐ 32   ☐ 33
☐ 34   ☐ 35   ☐ 36
☐ 37   ☐ 38   ☐ 39
☐ 40   ☐ 41   ☐ 42
☐ 43   ☐ 44   ☐ 45
☐ 46   ☐ 47   ☐ 48
☐ 49   ☐ 50   ☐ More than 50

5.7   Estimated number of Doctoral or PhD students

☐ 1   ☐ 2   ☐ 3
☐ 4   ☐ 5   ☐ 6
☐ 7   ☐ 8   ☐ 9
☐ 10   ☐ 11   ☐ 12
☐ 13   ☐ 14   ☐ 15
☐ 16   ☐ 17   ☐ 18
☐ 19   ☐ 20   ☐ 21
☐ 22   ☐ 23   ☐ 24
☐ 25   ☐ 26   ☐ 27
☐ 28   ☐ 29   ☐ 30
☐ 31   ☐ 32   ☐ 33
☐ 34   ☐ 35   ☐ 36
☐ 37   ☐ 38   ☐ 39
☐ 40   ☐ 41   ☐ 42
☐ 43   ☐ 44   ☐ 45
☐ 46   ☐ 47   ☐ 48
☐ 49   ☐ 50   ☐ More than 50

5.8   Do you have an administrative assistant in your capacity as head of academic department?   ☐ Yes   ☐ No

6. INCUMBENCY

6.1   Which of these best describes your current situation? (Mark as many as are applicable to you)

☐ I am acting in my current position of departmental head

☐ I applied for the current position of departmental head after it was advertised

☐ I was nominated by the departmental staff

☐ I was appointed on the advice of a selection committee in a closed recruitment process

☐ I was appointed on the advice of a selection committee in an open competitive process

☐ I was selected by an academic department staff directly (one vote per person)

☐ I was chosen by my faculty dean

6.2   Which of the following are contained in your university human resources policies? (Mark as many as are applicable to you)

☐ Appointment procedure of departmental heads

☐ Responsibilities of departmental heads

☐ Job description for the position of head of academic department

6.3   Does the job description for the position of head of academic department provide an accurate description of what you do?   ☐ Yes   ☐ No

6. INCUMBENCY [Continue]

6.4 If your answer is NO, please elaborate

6.5 Number of years as head of academic department at this university
- ☐ Less than 1 year
- ☐ 3
- ☐ 6
- ☐ 9
- ☐ 1
- ☐ 4
- ☐ 7
- ☐ 10
- ☐ 2
- ☐ 5
- ☐ 8
- ☐ More than 10 years

6.6 How long is your current term of office (excluding renewability)?
- ☐ 1 year
- ☐ 4 years
- ☐ 7 years
- ☐ 9 years
- ☐ 2 years
- ☐ 5 years
- ☐ 8 years
- ☐ 10 years
- ☐ 3 years
- ☐ 6 years
- ☐ 9 years

6.7 Can the term be renewed?   ☐ Yes   ☐ No

6.8 If your answer is NO, please indicate why

6.9 Are you likely to seek reappointment if you are eligible?   ☐ Yes   ☐ No

6.10 If your answer is NO, please elaborate

6.11 What will you do upon completion of your term?
- ☐ Return to the department ranks
- ☐ Continue to serve as head of academic department for another term
- ☐ Take an administration leave

- ☐ Take research leave
- ☐ Higher position in academic management in the same university
- ☐ Higher position in academic management in a different university

- ☐ Move to another university in a similar position
- ☐ Retire

6.12 Is your performance evaluated as a head of academic department?   ☐ Yes   ☐ No

6.13 If you answered YES, please indicate how you are evaluated? (Mark as many as are applicable to you)
- ☐ Research productivity
- ☐ Teaching productivity
- ☐ Community service productivity
- ☐ Other

6.14 If other (please specify)

6.15 Is your remuneration tied to your performance?   ☐ Yes   ☐ No

7. INSTRUCTIONS

7. INSTRUCTIONS [Continue]

This survey contains competency descriptions associated with the role of Head of Academic Department (HoAD).

What level of importance would you place on each statement indicated as it relates to your role as HoAD? On a scale of 1 to 7 (1= Not at all important, 7 = Extremely Important), please indicate the degree of importance appropriate to your situation.

Then followed by the questions regarding the measurement of productivity of your academic department.

8. MANAGEMENT COMPETENCIES REQUIRED BY HEADS OF ACADEMIC DEPARTMENTS (HoADs)

		Not at all Important	Very Unimportant	Somewhat Unimportant	Neutral	Somewhat Important	Very Important	Extremely Important
8.1	Provide department staff with clear direction within the distinctive organisational structure of higher education	□	□	□	□	□	□	□
8.2	Solve the problems faced by the department	□	□	□	□	□	□	□
8.3	Motivate staff members to achieve goals	□	□	□	□	□	□	□
8.4	Set an example as a scholar in the department	□	□	□	□	□	□	□
8.5	Set appropriate standards of behaviour	□	□	□	□	□	□	□
8.6	Demonstrate ability to make good decisions	□	□	□	□	□	□	□
8.7	Recruit staff of high caliber	□	□	□	□	□	□	□
8.8	Develop a compelling vision for the department's future	□	□	□	□	□	□	□
8.9	Take account of a wide range of issues across, and related to the department	□	□	□	□	□	□	□
8.10	Identify new opportunities	□	□	□	□	□	□	□
8.11	Develop departmental plans in line with the university's strategic objectives	□	□	□	□	□	□	□
8.12	Implement departmental goals	□	□	□	□	□	□	□
8.13	Keep emotions under control during difficult situations	□	□	□	□	□	□	□
8.14	Demonstrate integrity	□	□	□	□	□	□	□
8.15	Behave in line with the professional, ethical and legal framework of the university	□	□	□	□	□	□	□
8.16	Good time management	□	□	□	□	□	□	□
8.17	Handle criticism well	□	□	□	□	□	□	□
8.18	Balance the demands of a work life and a personal life	□	□	□	□	□	□	□
8.19	Possess communication skills	□	□	□	□	□	□	□
8.20	Demonstrate clear information-processing skills	□	□	□	□	□	□	□
8.21	Working productively in a pressurised environment	□	□	□	□	□	□	□
8.22	Take responsibility for decisions made	□	□	□	□	□	□	□
8.23	Solicit ideas of staff to improve the department	□	□	□	□	□	□	□
8.24	Establish good working relationships with staff	□	□	□	□	□	□	□
8.25	Provide staff with developmental opportunities	□	□	□	□	□	□	□
8.26	Evaluate staff performance against pre-determined objectives	□	□	□	□	□	□	□
8.27	Manage staff promotion process	□	□	□	□	□	□	□
8.28	Delegate work appropriately to staff	□	□	□	□	□	□	□
8.29	Promote team work	□	□	□	□	□	□	□
8.30	Manage staff conflict	□	□	□	□	□	□	□
8.31	Identify resource needs for the department	□	□	□	□	□	□	□
8.32	Negotiate for departmental resources from administrators and other entities	□	□	□	□	□	□	□

8. MANAGEMENT COMPETENCIES REQUIRED BY HEADS OF ACADEMIC DEPARTMENTS (HoADs) [Continue]

8.33	Ensure the optimal utilisation of resources to meet the department's academic goals	☐	☐	☐	☐	☐	☐	☐
8.34	Create an environment supportive of transformation within the department, in line with the university-wide changes	☐	☐	☐	☐	☐	☐	☐
8.35	Demonstrate the capacity to recover quickly from a difficult environment	☐	☐	☐	☐	☐	☐	☐
8.36	Able to adapt to changing circumstances	☐	☐	☐	☐	☐	☐	☐
8.37	Provide developmental opportunities to foster a diverse workforce	☐	☐	☐	☐	☐	☐	☐
8.38	Accept new ideas	☐	☐	☐	☐	☐	☐	☐
8.39	Establish relationships with peers from within the department	☐	☐	☐	☐	☐	☐	☐
8.40	Manage relationships with key external stakeholders	☐	☐	☐	☐	☐	☐	☐
8.41	Build wide networks of contacts	☐	☐	☐	☐	☐	☐	☐
8.42	Use humour appropriately to bring warmth to relationships with others	☐	☐	☐	☐	☐	☐	☐
8.43	Make effective use of political processes to influence others	☐	☐	☐	☐	☐	☐	☐

9. ACADEMIC DEPARTMENT PERFORMANCE

9.1	Do you measure research productivity in your academic department?	☐ Yes	☐ No
9.2	Do you measure teaching productivity in your academic department?	☐ Yes	☐ No
9.3	Do you measure community service productivity in your academic department?	☐ Yes	☐ No

9.4 What units of measurement do you consider as important predictors of productivity? List five in order of importance

10. OPTIONAL

10.1 Thank you very much for taking time to complete this survey.   If you would like to receive a summary of the findings when this project is completed, please enter email address in the box below.

APPENDIX B: GHREC ETHICAL CLEARANCE CERTIFICATE

GENERAL/HUMAN RESEARCH ETHICS COMMITTEE (GHREC)

11-Jul-2019

Dear Mr Molomo, Ramokone RM

Application Approved

Research Project Title:

A management competencies framework for heads of academic departments at South African public universities

Ethical Clearance number:
UFS-HSD2017/1082/1007

We are pleased to inform you that your application for ethical clearance has been approved. Your ethical clearance is valid for twelve (12) months from the date of issue. We request that any changes that may take place during the course of your study/research project be submitted to the ethics office to ensure ethical transparency. furthermore, you are requested to submit the final report of your study/research project to the ethics office. Should you require more time to complete this research, please apply for an extension. Thank you for submitting your proposal for ethical clearance; we wish you the best of luck and success with your research.

Yours sincerely

Prof Derek Litthauer
Chairperson: General/Human Research Ethics Committee

Digitally signed
by Derek
Litthauer
Date: 2019.07.11
15:59:22 +02'00'

APPENDIX C: EXAMPLE OF GATEKEEPER APPLICATION

GATEKEEPER PERMISSION APPLICATION LETTER

From: Manfred Molomo [mailto:manfred.molomo@gmail.com]
Sent: 18 April 2020 09:09 AM
To: Gatekeeper
Subject: Gatekeeper permission

Good day

I am a doctoral student at the University of the Free State (UFS). The topic of my study is: A management competencies framework for heads of academic departments at South African public universities

My study involves <u>human subjects</u> (heads of academic departments) of all public universities in SA. UFS has processed my ethical clearance.

I would like to conduct research at XXX. I am writing to find out the requirements of XXX gatekeeper permission.

Your help will be much appreciated.

Regards

Manfred Molomo
PhD Student

APPENDIX D: CHARACTERISTICS AND COMPOSITION OF HoADs

Table 7.3: Summary of the characteristics of HoADs

	Characteristics of HoADs
1	Most HoADs (45.3%) were from traditional universities.
2	The majority (54%) of respondents were males.
3	Most HoADs (44.3%) fell within the age category of 31 to 40 years.
4	The majority of HoADs were white (51.6%).
5	Nearly one-third (30.6%) of HoADs were professors in their academic departments.
6	The majority of HoADs (91.2%) were spread across 51 departments.
7	Most HoADs (59%) work in academic departments spread across three faculties.

Table 7.4: Summary of the qualifications and experience of HoADs

	Qualifications and experience of HoADs
1	The majority (86.9%) of HoADs had doctoral degrees.
2	HoADs (43%) had, on average, 19.35 years working experience in academia.
3	Nearly two-thirds (62.4%) of HoADs have been in the job for four years or less.
4	The majority (35%) of HoADs served less than one term.
5	Most HoADs' (39%) term of office is five years.
6	Almost one-third (30.6%) of HoADs had previous experience in government.

Table 7.5: Summary of the job of HoADs – appointment process, terms, accuracy of job description, administrative assistance, performance evaluation

	Job of HoADs
1	The majority (92%) of HoADs' appointment procedure was contained in the human resource policies of their university.
2	Nearly two-thirds (61%) of HoADs' job descriptions provided by their human resources department accurately described what they do.
3	Nearly four-fifths (79.2%) of HoADs' terms could be renewed.
4	Most (59.7%) HoADs were not likely to seek reappointment even if they were eligible.
5	Almost half (48%) of HoADs would return to their department rank in the academic department after current term.
6	The majority (84%) of HoADs' performance as departmental head was evaluated.

	Job of HoADs
7	Almost all (94%) HoADs were evaluated on their research productivity, 89% on teaching productivity, 86% on community service productivity, and 44% on other evaluation criteria.
8	Nearly half (46%) of HoADs were evaluated on administration and management of the academic department.
9	The majority (74.6%) of HoADs remuneration was not tied to their performance.
10	Most (59%) HoADs had an administrative assistant.
11	Nearly all (97%) HoADs directly reported to the dean of their faculty.

Table 7.6: Summary of department profile in terms of staff and students

	Departmental profile in terms of staff and students
1	The average number of academic staff in the academic departments was 16.
2	The average number of support staff in the academic departments was 6.
3	The average number of part-time academic staff in the academic department was 8.
3	The average number of honours students in the academic department was 26.
4	The average number of master's students in the academic department was 24.
5	The average number of doctoral students in the academic department was 15.

APPENDIX E: QUESTIONNAIRE CONSTRUCTS AND STATEMENTS

Management competency		Question no.	Statement that describes what is being measured
Leading (L)	L1	8.1	Provide department staff with clear direction within the distinctive organisation of higher education
	L2	8.2	Solve the problems faced by the department
	L3	8.3	Motivate staff members to achieve goals
	L4	8.4	Set an example as a scholar in the department
	L5	8.5	Set appropriate standards of behaviour
	L6	8.6	Demonstrate ability to make good decisions
	L7	8.7	Recruit staff of high calibre
Strategic planning (SP)	SP1	8.8	Develop a compelling vision for the department's future
	SP2	8.9	Take account of a wide range of issues across and related to the department
	SP3	8.10	Identify new opportunities
	SP4	8.11	Develop departmental plans in line with the university's strategic objectives
	SP5	8.12	Implement departmental goals
Self-management (SLFMAN)	SLFMAN1	8.13	Keep emotions under control during difficult situations
	SLFMAN2	8.14	Demonstrate integrity
	SLFMAN3	8.15	Behave in line with the professional, ethical and legal framework of the university
	SLFMAN4	8.16	Display good time management
	SLFMAN5	8.17	Handle criticism well
	SLFMAN6	8.18	Balance the demands of a work life and a personal life
	SLFMAN7	8.19	Possess communication skills

Management competency		Question no.	Statement that describes what is being measured
	SLFMAN8	8.20	Demonstrate clear information-processing skills
	SLFMAN9	8.21	Work productively in a pressurised environment
	SLFMAN10	8.22	Take responsibility for decisions made
Staff management (STFMAN)	STFMAN1	8.23	Solicit ideas from staff to improve the department
	STFMAN2	8.24	Establish good working relationships with staff
	STFMAN3	8.25	Provide staff with developmental opportunities
	STFMAN4	8.26	Evaluate staff performance against predetermined objectives
	STFMAN5	8.27	Manage staff promotion process
	STFMAN6	8.28	Delegate work appropriately to staff
	STFMAN7	8.29	Promote team work
	STFMAN8	8.30	Manage staff conflict
Resources mobilisation and management (RMM)	RMM1	8.31	Identify resource needs for the department
	RMM2	8.32	Negotiate for departmental resources from administrators and other entities
	RMM3	8.33	Ensure the optimal utilisation of resources to meet the department's academic goals
Diversity and uncertainty management (DUM)	DUM1	8.34	Create an environment supportive of transformation within the department in line with the university-wide changes
	DUM2	8.35	Demonstrate the capacity to recover quickly from a difficult environment
	DUM3	8.36	Able to adapt to changing circumstances
	DUM4	8.37	Provide developmental opportunities to foster a diverse workforce
	DUM5	8.38	Accept new ideas
	DUM6	8.39	Establish relationships with peers from within the department

Management competency		Question no.	Statement that describes what is being measured
Develop networks and partnerships (DNP)	DNP1	8.40	Manage relationships with key external stakeholders
	DNP2	8.41	Build wide networks of contacts
	DNP3	8.42	Use humour appropriately to bring warmth to relationships with others
	DNP4	8.43	Make effective use of political processes to influence others