

Exploring Mintzberg's managerial roles of academic leaders at a selected higher education institution in South Africa.

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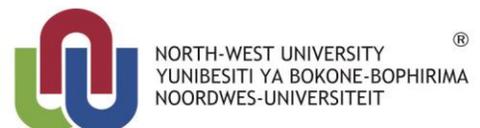
Mini-dissertation submitted in partial fulfilment of the requirements for the
degree in
Master of Business Administration (MBA)
at the
School of Business and Governance
North-West University

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Co-supervisor: Professor Yvonne du Plessis

APRIL 2017

It all starts here [™]



DECLARATION

I, Paul Saah, hereby declare that this mini-dissertation: **“Exploring Mintzberg’s managerial roles of academic leaders at a selected higher education institution in South Africa”**, submitted for the degree of Master of Business Administration (MBA) in the School of Business and Governance, Faculty of Commerce and Administration at the North-West University, Mafikeng Campus, is my own original work and all sources have been stated and acknowledged. This mini-dissertation has not been submitted before by myself or by any other person for any degree or examination in its entirety or in part in any other university or institution of higher learning in order to obtain an academic qualification.

PAUL SAAH

DATE

Supervisor..... Date.....

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- My beloved son, Joshua Chifor Saah, whose birth marked the commencement of my MBA studies, thus giving me reason and strength to work harder than ever before towards the completion of my studies.
- My lovely daughter, Kefeyin Joella Saah, for her endurance and for accepting my prolonged absence in her life. My absence has been for a good cause; to acquire more knowledge and complete my MBA studies which were the greatest wishes in my life.
- Last but not the least, God Almighty, for feeding me with the knowledge and wisdom needed for this study. He has always guided me and ensured my security throughout the years of my studies at the North-West University, Mafikeng Campus, Republic of South Africa.

DEDICATION

I dedicate this study to God Almighty for the knowledge, wisdom, strength and the grace to realise this piece of work. I also dedicate it to my beloved son, Joshua Chifor Saah, who was born in March 2015, one month after I started my MBA studies, my late mother who passed away in the same month (May her gentle soul rest in perfect peace) and to my entire family members. I wish them all God's richest blessings and protection.

ABSTRACT

Academic leaders at Higher Education Institutions in South Africa are applying various management principles to be effective and efficient in performing their duties as managers. It is imperative for these academic leaders to develop and apply effective management skills such as Mintzberg's managerial strategies that will ensure constant improvement. The aim of this study was to explore the extent to which academic leaders at a selected higher education institution in South Africa, apply Mintzberg's managerial roles in executing their functions as leaders within the institution. A descriptive survey research design was used in this study, employing a quantitative approach to inquiry. An online questionnaire was sent to the sample group for data collection. A non-probability sampling technique was used to select participants within a research population comprising of 150 academic leaders. The sample size selected for the study was 109 participants. Out of this number, 91 fully completed the questionnaire while 18 partially did so, giving a response rate of 83.49%.

Data was analysed using the Statistical Package for Social Sciences (SPSS, 23). The following techniques were applied in the analysis: descriptive statistics, factor analysis and cross tabulations. Mintzberg's managerial roles were found to be important to all academic leaders at the selected Higher Education Institution. The results of the study revealed that academic leaders at the selected institution apply all the three Mintzberg's managerial roles. This, therefore, shows that Mintzberg's managerial roles model is a contemporary and most effective management model to be applied by academic leaders in higher education institutions in order to adequately achieve their set objectives. It is recommended that all academic leaders of this selected Higher Education Institution should endeavour to motivate new staff to ensure that they work at their optimum abilities to achieve institutional goals. They should also check their attitude towards the staff and step up the amount of motivation towards them in order to boost productivity and performance as effective leadership starts with the right mind-set. A correct mind-set is founded upon the enthusiasm of leaders to motivate and boost the morale of subordinates.

Keywords: Mintzberg's managerial roles, academic leaders, higher education institution, South Africa

GLOSSARY OF TERMS

Academic leaders: Academic leaders are a specific group of people charged with the responsibility of managing a university or a unit, who work communally in a reinforcing manner to ensure good performance and goal achievement (Scott *et al.*, 2008).

Employees: Employees are people employed by others to work, either part time, or full time, under a contract of employment for a salary or wages, and in a position which is often below that of the executive level (Venter *et al.*, 2014).

Leader: A Leader is someone who is both aspirational, who can motivate and enable others to act in ways that fulfill their potentials and aims (Scott *et al.*, 2008).

Leadership: Leadership refers to a specific group of people charged with the responsibility of managing an organisation or business unit, who work communally in a reinforcing manner to ensure good performance and goal achievement (Scott *et al.*, 2008).

Management role: Refers to managers' daily routine in their organisations (Robbins and Judge, 2013)

Management: Management refers to the mental and physical activities or processes performed in order for something to be done to accomplish desired objectives (Keuning, 1998).

Manager: A manager is an individual who achieves goals through other people in an organisation (Robbins and Judge, 2013).

Organisation: An organisation is a consciously coordinated social unit, composed of two or more people that function on a relatively continuous basis to achieve a common goal or set of goals (Robbins and Judge, 2013).

Role: A role is an organised set of conducts known to be with managerial position and the day-to-day work of individuals used to measure such role (Mintzberg, 1973).

LIST OF ABBREVIATIONS AND ACRONYMS

AD	After the Dead of Christ
BC	Before the Birth of Christ
CEO	Chief Executive Officer
HEI	Higher Education Institution
NWU	North-West University
POSDCORD	Planning, Organising, Staffing, Directing, Coordinating, Reporting and Budgeting
POLC	Planning, Organising, Leading and Controlling
RSA	Republic of South Africa
SPSS	Statistical Package for the Social Sciences
USA	United States of America
WEF	World Economic Forum

TABLE OF CONTENTS

DECLARATION	II
DEDICATION.....	III
ACKNOWLEDGEMENTS	IV
ABSTRACT.....	V
GLOSSARY OF TERMS.....	VII
LIST OF ABBREVIATIONS AND ACRONYMS.....	VIII
TABLE OF CONTENTS.....	IX
LIST OF TABLES.....	XV
CHAPTER ONE	1
INTRODUCTION TO THE STUDY	1
1.1 INTRODUCTION.....	1
1.2 BACKGROUND.....	2
1.3 PROBLEM STATEMENT	5
1.4 RESEARCH QUESTIONS	7
1.5 OBJECTIVES OF THE STUDY.....	7
1.6 SIGNIFICANCE OF THE STUDY.....	7
1.7 RESEARCH METHODOLOGY	8
1.8 ORGANISATION OF THE STUDY.....	8
1.9 SUMMARY OF CHAPTER	9
CHAPTER TWO	10
LITERATURE REVIEW ON MANAGEMENT AND MINTZBERG'S MANAGERIAL ROLES IN HIGHER EDUCATION INSTITUTIONS IN SOUTH AFRICA	10
2.1 INTRODUCTION.....	10
2.2 AN OVERVIEW OF MANAGEMENT	11
2.2.1 Synopsis of management	12

2.2.2 Characteristics and duties of managers.....	13
2.3 FUNCTIONAL APPROACH OF MANAGEMENT (MANAGEMENT FUNCTIONS) .	15
2.3.1 Planning.....	15
2.3.2 Organising	17
2.3.3 Leading.....	17
2.3.4 Controlling.....	18
2.4 THE EVOLUTION OF MANAGEMENT THOUGHT	21
2.4.1 Henri Fayol (1841–1925).....	21
2.4.2 Frederick Winslow Taylor (1856–1915)	22
2.4.3 Luther Gulick (1892–1993)	23
2.5 HISTORICAL REVIEW OF MINTZBERG’S MANAGERIAL ROLES	23
2.6 MINTZBERG'S TEN MANAGERIAL ROLES	25
2.6.1 Interpersonal Roles.....	26
2.6.2 Informational roles	28
2.6.3 Decisional roles	29
2.7 CHARACTERISTICS REQUIRED BY ACDEMIC LEADERS TO EXECUTE MINTZBERG'S MANAGERIAL ROLES.....	36
2.8 ATTRIBUTE REQUIRED BY ACADEMIC LEADERS TO EXECUTE MINTZBERG'S MANAGERIAL ROLES.....	39
2.9 A CONCEPTUAL FRAMEWORK OF MINTZBERG'S MANAGERIAL ROLES IN THE PERFORMANCE OF ACADEMIC LEADERS IN HEIs IN SOUTH AFRICA	43
2.10 ENHANCING MINTZBERG’S MANAGERIAL ROLES BY MANAGEMENT	44
2.11 MINTZBERG’S MANAGEMENT MECHANISMS	45
2.12 IMPORTANCE OF MANAGEMENT IN ORGANISATIONS	46
2.13 IMPORTANCE OF MINTZBERG’S MANAGERIAL ROLES.....	47
2.14 PERFORMANCE AND EFFECTIVENESS OF ACADEMIC LEADERS IN HEIs....	

2.15 SUMMARY OF CHAPTER.....	52
CHAPTER THREE.....	54
RESEARCH METHODOLOGY.....	54
3.1 INTRODUCTION.....	54
3.2 RESEARCH PHILOSOPHY.....	54
3.3 RESEARCH APPROACH.....	56
3.4 RESEARCH DESIGN.....	57
3.4.1 Population of the study.....	57
3.4.2 Sampling Techniques.....	58
3.4.3 Data collection instrument and structure.....	59
3.4.4 Data analysis.....	64
3.4.5 Validity and reliability of data.....	64
3.4.6 Research ethics.....	65
3.5 SUMMARY OF CHAPTER.....	65
CHAPTER FOUR.....	66
DATA ANALYSIS AND INTERPRETATION.....	66
4.1 INTRODUCTION.....	66
4.2 INITIAL RESULTS.....	66
4.3 DEMOGRAPHIC CHARACTERISTICS OF RESPONDENTS.....	67
4.4 FACTOR AND RELIABILITY ANALYSIS.....	82
4.4.1 Sampling adequacy and factorability of the correlation Matrix.....	83
4.4.2 Determination of the number of factors to extract.....	83
4.4.3 Descriptive statistics of Mintzberg managerial roles.....	89
4.4.3.1 Descriptive statistics of the three factors.....	89
4.4.3.2 Results of the correlation test of the three factors.....	90
4.4.3.3 Descriptive statistics on interpersonal, informational and decisional roles...91	

4.4.3.4 Descriptive statistics on decisional roles.....	96
4.4.4 Multivariate analysis of variance on the application of Mintzberg’s managerial roles.....	98
4.4.4.1 The multivariate test on the application of Mintzberg’s managerial roles	99
4.4.4.2 Posthoc for campus	100
4.4.4.2 Posthoc for years of work experience	102
4.6 SUMMARY OF CHAPTER.....	104
CHAPTER FIVE	105
SUMMARY OF FINDING, RECOMMENDATIONS AND CONCLUDING REMARKS	105
5.1. INTRODUCTION.....	105
5.2. OVERVIEW OF CHAPTERS.....	105
5.3 RECOMMENDATIONS	109
5.4 SIGNIFICANCE OF THE STUDY.....	110
5.5 LIMITATIONS OF THE STUDY.....	111
5.6 AREAS FOR FUTURE RESEARCH	111
5.7 CONCLUSION	112
BIBLIOGRAPHY	115
APPENDICES	126
Appendix A.....	126
Appendix B.....	132
Appendix C.....	133

LIST OF FIGURES

Figure 2.1: Literature Review on Management and Leadership in HEIs in South Africa.....	11
Figure 2.2: The Nature of the Management Process	20
Figure 2.3: An Overview of Mintzberg's Managerial Roles	26
Figure 2.4: A Conceptual Framework of Mintzberg's Managerial Roles in Academic Leaders' Performance in HEIs in South Africa.....	43
Figure 4.1: Campus of Respondents.....	68
Figure 4.2: Gender of Respondents	70
Figure 4.3: Age of Respondents.....	72
Figure 4.4: Race of Respondents.....	74
Figure 4.5: Respondents' Highest Educational Level	76
Figure 4.6: Current Job Level of Respondents.....	78
Figure 4.7: Years of Work Experience of Respondents.....	80
Figure 4.8: Number of Years in Current Position.....	82

LIST OF TABLES

Table 2.1: A Tabular Representation of Mintzberg's Managerial Model Portraying the Various Categories, Roles and Activities of Managers.....	31
Table 2.2: Contributions to Management by Earlier Civilisations	46
Table 3.1: Questions Relating to the Application of Mintzberg's Managerial Roles.....	61
Table 4.1: Campus of Respondents	67
Table 4.2: Gender of Respondent	69
Table 4.3: Age of Respondent.....	71
Table 4.4: Respondent's Race	73
Table 4.5: Highest Educational Level of Respondents.....	75
Table 4.6: Current Job Level of Respondents	77
Table 4.7: Years of Work Experience of Respondents.....	79
Table 4.8: Number of Years Work in Current Position.....	81
Table 4.9: Determination of Sampling Adequacy and Factorability of the Correlation Matrix.	83
Table 4.10: Questions on Mintzberg's Interpersonal Roles	84
Table 4.11: Questions on Mintzberg's Informational Roles	85
Table 4.12: Questions on Mintzberg's decisional roles.....	86
Table 4.13: Determination of The Number of Factors to Extract	87
Table 4.14: Equamax Rotated Factor Solution of the Application of Mintzberg's Managerial Roles	88
Table 4.15: Descriptive Statistics of Mintzberg's Managerial Roles.. ..	90
Table 4.16: Correlation Test Results of The Mintzberg's Managerial Roles.....	91
Table 4.17: Descriptive Statistics on Interpersonal Roles	92
Table 4.18: Descriptive Statistics on Informational Roles.....	94
Table 4.19: Descriptive Statistics on Decisional Roles.....	96

Table 4.20: Manova Test of Difference in The Application of Mintzberg's Managerial Roles (Wilks' Lambda)	99
Table 4.21: Posthoc Results of Mintzberg's Managerial Roles Across the Campuses	101
Table 4.22: Posthoc Result of Mintzberg's Managerial Roles for the Number of Years of Work Experience	102

CHAPTER ONE

INTRODUCTION TO THE STUDY

1.1 INTRODUCTION

The higher education system in the world today is characterised by constant changes and innovation. Mmope (2010) asserts that higher education institutions all over the world, and South Africa (SA) in particular, are increasingly evolving and looking for a ground-breaking standard in academic leadership and management to ensure that they triumph in a competitive and dynamic global educational environment. The search for a change of standard in academic leadership and management is the fundamental managerial role within institutions of higher learning to ensure that staff exert greater efforts that will help their organisations accomplish their predetermined objectives and mission.

Selden and Sowa (2011) state that with the introduction of democracy in South Africa in 1994, its higher education system has been undergoing transformation, which is a broader plan of government to correct the imbalances of the past. Thus, government's endeavour is to ensure effective management and leadership in order to curb mismanagement and waste of resources in Higher Educational Institutions (HEIs) by incompetent and immoral academic leaders. Furthermore, the government is ensuring that South African universities are of high standards for students attending these institutions to obtain quality and world-class education (Mmope, 2010).

It is common knowledge that the most important need of HEIs in South Africa is to make a significant improvement in its management and leadership practices. Poor performances in these institutions can equally be blamed on poor management and leadership and not only on staff or students. As such, it is worthwhile to re-examine

requirements for effective managers and academic leaders within the higher education system (Bhowan and MacDonald, 2000). Management in academic institutions within South Africa have since become a pivotal part of higher education, where they have to perform various roles at different levels in order to uphold efficient and effective management principles. Selden and Sowa (2011) state that the survival of higher education institutions is determined by how well they perform, hence, it is imperative for leaders to develop and apply effective leadership skills such as Mintzberg's managerial strategies that will ensure constant improvement of staff performance at work. Fayol was the first scholar to develop formal management principles that address the fundamental issues of how organisations should be structured and managed. Since then, his ideas have set a foundation for management thoughts and greatly influenced succeeding generations of management scholars such as Taylor, Gulick and Mintzberg, whose managerial roles continue to influence the practice of management as an art even till date (Wren and Bedeian, 2009).

1.2 BACKGROUND

The study of organisational management dates back many years, but the development of systematic managerial ideas can be traced from the end of the 19th century that saw the emergence of large industrial organisations due to the Industrial Revolution that started in Europe during the era. Henry Mintzberg, a prominent management scholar, developed the managerial roles approach to management, which is closely linked to the work-activity approach to management that addresses the actual activities of managers that can improve employee performance (Mintzberg, 1973). Ramezani *et al.* (2011) posit that management is an important function which has an impact on employees' performance at the workplace. Hence, managers in organisations are expected to understand their duties and perform their roles adequately to ensure the maintenance of a sustainable conducive work environment where employees can achieve their commitment to hard work and improve their performance at work.

Applying Mintzberg's example of managerial roles is distinctive as it was established from surveillance in a corporate scenario. In this study, the approach is examined in an academic environment. Muna *et al.* (2006) identify Mintzberg's managerial roles as those that are mostly adopted and implemented by academic leaders and also as those managerial roles that have been perceived and recognised to be the most significant and successful roles to be implemented in HEIs, for instance, such as those of South Africa. The utilisation of Mintzberg's managerial roles in an organisation is very relevant in that it is through these roles that academic leaders in HEIs can wield different features into a supportive enterprise or initiative; which is a relevant aspect of coordinating academic affairs in an organisation (Mintzberg, 1973). This is, therefore, an indication that most academic leaders concur with Mintzberg's model as relevant to describing their role, *inter alia*, in higher educational institutions. They also agree that his example should be considered and implemented in organisations to ensure better performance since the roles required to be implemented are enormous, coupled with the fact that the responsibilities are also very challenging (Mintzberg, 1973).

Mintzberg (1973) maintains that a managerial role is an organised set of conducts known to be related to a managerial position and the day-to-day work of managers as individuals used to measure this role. On the same note, Mintzberg classifies the ten management roles into three categories as follows: interpersonal; informational; and decision-making role categories. The managerial roles performed by higher education leaders in academic institutions should inform various aspects of employee satisfaction and talent management. Understanding the managerial roles of academic leadership, including the manner in which they compose themselves as leaders may be an important resource when helping others, who would like to follow such a career path, in the comprehension of this position. Even though Mintzberg's example of managerial roles has been used mainly to describe corporate leaders, this study serves as a framework for comprehending the roles of academic leaders in HEIs as a whole.

An effective management system, including supportive role execution, put in place by an organisation, can go a long way to enhance the general working conditions of employees, which in turn, can influence their performance positively, thereby leading to improved performance. In several cases, employees hold high expectations for their leaders to continue providing them with quality services (Hope, 2012). In an endeavour to provide quality services to employees, most academic leaders in HEIs have developed major deliverable outcomes which, in most cases, have a positive impact on the lives of employees and their performance. Selden and Sowa (2011) state, that, the survival of higher education depends on the development and implementation of effective leadership skills.

Melaletsa (2012) is of the view that employees are the driving force of performance in every higher education institution as they have the capacity to innovate new strategies that can enable institutions achieve their goals and objectives. Therefore, the core of managing performance at the workplace should start first with effective leadership of individual employees within the organisation. In order to effectively lead employees such as academic staff and improve on their performance, academic leaders of higher education institutions are expected to perfect their managerial skills and behaviours toward employees and to be of good example. Sharma (2006) states that higher education institutions and businesses are constantly striving to implore measures of improving employees' performance. When academic leaders influence the behaviour of an employee positively through their role execution, it enhances their effectiveness and efficiency, which will in turn, improve on their performance at work and push them to achieve set goals and objectives.

1.3 PROBLEM STATEMENT

Management roles and functions of academic leaders in HEIs are seemingly complex and very challenging. Despite the intricacies involved in running academic institutions, some leaders are not fully knowledgeable about managerial roles and principles since they have limited administrative experiences. For instance, Tucker (1984) observed 400 academic managers of state universities in Florida and discovered that 68% of them did not have prior administrative experience. Moreover, their turnover rates was between 15 and 20%; 41% were elected by colleagues while 44% of middle and lower level managers or academic leaders were appointed by superiors without taking into consideration, competency and work experience. This situation is very common in HEIs around the world, particularly in institutions of higher learning in South Africa.

When management do not execute their managerial roles as stipulated by Mintzberg in an appropriate manner, such as improper decision-making, lack of information sharing and weak interpersonal relations, among others, academics and students may be dissatisfied with management. Some dissatisfied workers or students may protest, thus resulting in poor academic performance (Blaine, 2006; Fredericks, 2011; and Fengu, 2012). In the Daily Dispatch (2011a), it was reported that the state of the higher education system in South Africa is chaotic, characterised by corruption, poor academic performance, protests and intimidation as well as incompetent academic leaders and staff. Meanwhile, Mohamed (2012) maintains that the World Economic Forum (WEF) has recently condemned and castigated the low level of South Africa's higher education system, which jeopardises the right of university students to effective education. He attributes these educational issues in higher educational institutions in South Africa to the lack of responsiveness by academic leadership in resolving the crisis which is characteristic of the current higher education system. Kunene (2012) argues that the higher education system in South Africa is a mess, which is the cause of some social, political and economic problems plaguing the country. For example, he attributes the 16

August 2012 Marikana strike to lack of quality education of South African citizens. There is much to be done but academic leaders in HEIs, have very little time available for them to discharge their duties. Consequently, many institutions do not meet their expectations, some ignore deadlines and others have many unanswered requests. As a result, therefore, academic staff, students and visitors queue up knocking on the office doors of these leaders for solutions to their problems (Muma, 2004).

Payle (2012) contends that even though the academic leadership of higher education institutions is somehow failing in their responsibilities, the government has to take part of the blame for failing to address issues of mismanagement and revisit the policies of these institutions, which have been the biggest threats to progression and failure of the sector. According to Jones (2012), the government has been developing plans and policies in an endeavour to resolve problems plaguing the sector such that by 2030, the majority, if not all South Africans, will have access to the best quality of higher education leading to significant improvement in the performance of students. Zukiswa (2010) maintains that many concerns have been raised about the downward spiral of university performances and confusion among the leadership, academic staff and students as far as the demand for curriculum is concerned. This situation has led to an increase in the administrative burden of academic leaders.

Therefore, the main problem this study seeks to address is the ineffectiveness of academic leaders in managing HEIs in South Africa, because they possibly do not utilize the pivotal managerial roles of interpersonal relations, informational and decision-making as described by Mintzberg. Hence, this study mainly seeks to examine the extent to which Mintzberg's managerial roles are executed by academic leaders in a selected higher education institution in South Africa.

1.4 RESEARCH QUESTIONS

This study seeks to provide answers to the following research questions:

1. As the official heads of their organizations/departments, how do academic leaders effectively manage interpersonal relationships within their institutions?
2. To what extent do academic leaders execute their managerial duty of searching for information and making it available for staff and students?
3. What guides the choices of managerial decision making by academic leaders in a selected HEIs?

1.5 OBJECTIVES OF THE STUDY

The objectives of the study were:

- To determine how academic leaders manage interpersonal relationships within their institutions;
- To assess the extent to which academic leaders access information and disseminate it to staff and students;
- To determine the guiding principles of managerial decisions made by academic leaders within a selected HEI.

1.6 SIGNIFICANCE OF THE STUDY

This study provided evidence of managerial roles and their importance in an academic environment. It will also highlight which roles are executed in order to evaluate the prominence of roles and which ones might be lacking. Role differentiation among different managerial levels will also assist with possible career development of academic management. Knowledge and application of these roles will contribute in building academic managers who are able to properly manage higher education institutions and

in achieving their goals, thus impacting on the performance of academic leaders and shaping their roles in HEIs in South Africa.

1.7 RESEARCH METHODOLOGY

This section briefly explains the research methodology that will be used to answer the research questions. A positivism paradigm is used and a quantitative survey research design is adopted. The quantitative research approach is used because it gives more statistical information which can be used to generalize the findings. This research will utilize questionnaires to electronically collect data using Survey Monkey. The targeted research population for this study is 150 academic leaders of a selected HEI in South Africa who are the head of programs and units such as the faculty managers, program managers, school directors, IT managers, human resource managers, deans, registrars, campus rectors and their deputies, and the vice chancellor. A non-probability sampling technique will be used to select 150 academic managers/leaders on three campuses of the selected HEI in South Africa. The data collected from the questionnaires administered will be analyzed. The Statistical Package for Social Science (SPSS 23) will be used to analyze the data. The descriptive and factor analysis is used and the interpretation will be descriptive and inferential.

1.8 ORGANISATION OF THE STUDY

Chapter 1 is the general introduction, Chapter 2 is the literature review and focuses on management and leadership roles and how they relate to the academic environment. Details of the various aspects of management and leadership roles are explained as well as their importance. The managerial roles as proposed by Mintzberg explained in relation to the study.

Chapter 3 focuses on the research methodology and the techniques used in conducting this study. The methods used for collecting and analysing data are also described in this Chapter.

Chapter 4 presents the results and explanation of the findings of the study. The results are presented in tables and graphs followed by discussions.

Chapter 5 is the conclusion of the study. It provides a summary of the study and outcomes, possible managerial implications of empirical results and recommendations for future research. This is how the study is presented.

1.9 SUMMARY OF CHAPTER

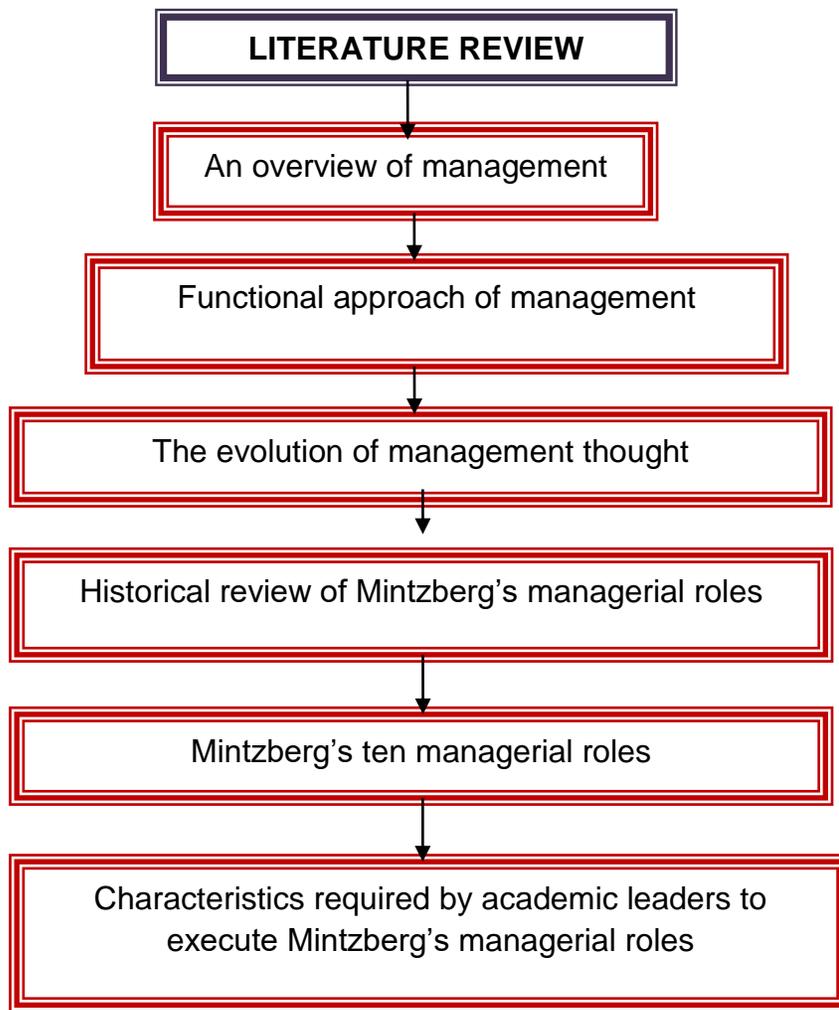
This chapter basically presented the general introduction and a background of organisational management which dates back many years ago. It further discussed the problem statement which is the ineffectiveness of academic leaders in managing HEIs in South Africa, because they possibly do not utilize the pivotal managerial roles of interpersonal relations, informational and decision-making as described by Mintzberg. The chapter equally presented the research questions in relation to the problem statement and established the objectives of the study. Also, the chapter discussed the significance of the study, the research methodology which is a quantitative survey research design and finally the organization of the study.

CHAPTER TWO

LITERATURE REVIEW ON MANAGEMENT AND MINTZBERG'S MANAGERIAL ROLES IN HIGHER EDUCATION INSTITUTIONS IN SOUTH AFRICA

2.1 INTRODUCTION

This chapter presents the literature review in relation to the objectives of the study. The main focus is mainly on management roles and how they relate to HEI in SA as indicated in the flow chart in Figure 2.1.



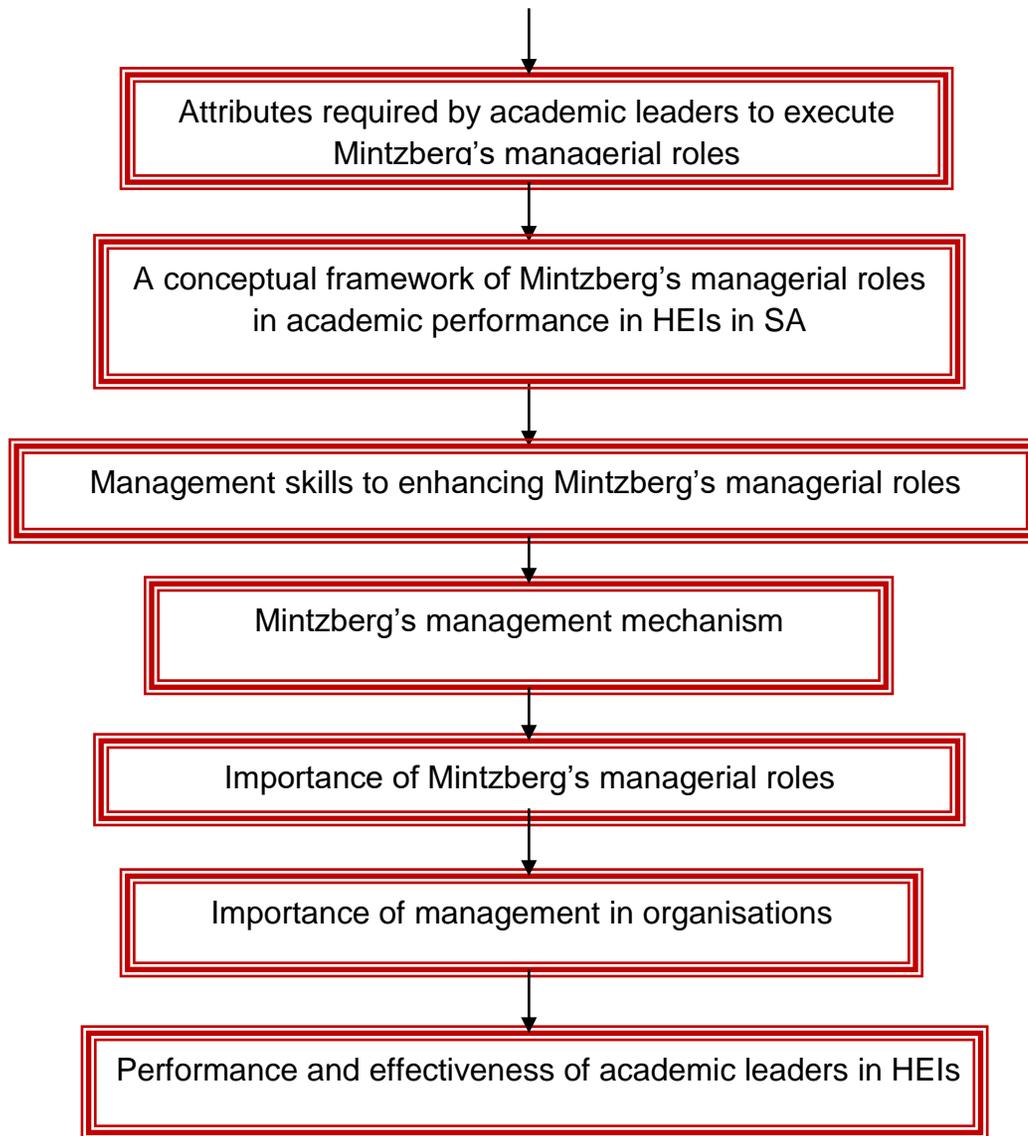


Figure 2.1: Literature review on management and leadership in HEIs in SA

2.2 AN OVERVIEW OF MANAGEMENT

This section provides a general overview of management, the characteristics and duties of managers within an organisation.

2.2.1 Synopsis of management

Much has been written on management; what it is and what it is not. For the purpose of this study, it is important to clarify the basis of management and why it is important as a key function in any organisation. The evolution of managerial ideas can be traced many centuries ago. From time immemorial, people have been living in communities and as time went by, some centuries ago, they saw the need to work together to supply commodities that could not be made available to the public through the effort of a single person. Consequently, organisations and businesses sprout up and the art of management was, therefore, required to coordinate, direct and organise the activities and efforts of individuals (Kroon, 2000). Kroon (2000) further notes that as societies grew larger and larger in size, bigger businesses and larger organisations were formed that needed the services of managers to facilitate these units in order to meet societal needs, thus the introduction of management. Since there was a need for outstanding individuals, otherwise known as managers to take the lead to organise and coordinate organisations, businesses and groups towards their common goals, management principles started evolving slowly. Management is now considered as one of the most significant of all human activities since it is the primary duty of managers in organisations and business units. Moreover, the principles of management are employed by everyone in the day-to-day performance of tasks in order to create suitable conditions under which people work together to achieve set goals and objectives.

Keuning (1998) maintains that management is the mental and physical activities or processes performed in order for something to be done to accomplish desired objectives. However, besides being an activity or a process, the term management is also a particular field of knowledge and a discipline in social sciences in which the work and phenomena of organisations and managers are studied. Smith *et al.* (2007) modified the definition of management and considers it as the procedure of planning,

organising, leading and controlling the material and human resources of an organisation in order to achieve stated organisational goals as productively as possible.

In order to coordinate the activities and efforts of diverse individuals and align them towards organisational goals, it is necessary for a good management system to be in place because it is very difficult, if not impossible, for a single person to achieve alone. In this light, management can be considered as a process, a systematic manner of doing things to ensure that the desired objectives are met. At any point in time, managers are likely to be involved in the many functions of management simultaneously such as planning, organising, leading and controlling. Even though some scholars consider planning as decision-making, the function of leading as directing, some regard organising as coordinating. In spite of the slight disparity of opinions, it has been generally agreed that the four principal functions of management, that constitute the management process, include planning, organising, leading and controlling (Keuning, 1998).

2.2.2 Characteristics and duties of managers

A manager is someone who is in charge of a management process and ensures that tasks are accomplished through other individuals by initiating and directing their activities. Managers are executives who establish rules and make decisions as to what task is to be performed, how it should be performed and who has to accomplish it. As such, they have to be accountable at any time (Keuning, 1998). From this perspective, managers are, therefore, members or employees in organisations who are charged with the responsibility of controlling and preparing the activities of others and ensuring that both human and material resources are aligned towards the achievement of predetermined goals of an organisation. Thus, the principal task of managers is to deploy, combine, allocate and coordinate organisational resources in a manner that its mission and goals are realised as effectively, efficiently and productively as possible. In

this regard, Keuning (1998) insists that managers can be considered to have the following characteristics:

- **Reliance on others:** Managers rely very much on the commitment and contributions of other members or employees of the organisation to achieve their mission. This reliance, more often, relates to peers with whom they have a direct line of authority. This also entails depending on individuals from other divisions, departments, units or other organisations entirely when there is even no direct line of authority. Managers formulate manners of performing their duties through which they can establish cooperation with those whose contributions are highly required to realise the specific predetermined objectives and goals of the organisation.
- **Accountability for the working climate:** Managers are leaders who head divisions, departments, units and even an entire organisation. Therefore, they are charged with the responsibility to cooperate with other individuals and peers to create a favourable working climate and environment. As such, managers are responsible to ensure a reasonable level of harmony between the expected task to be accomplished and the needs or requirements of organisational members. Hence, managers are charged with the responsibility to staff their divisions or departments, educate and train, assess, promote and motivate members to accomplish their tasks in order to realise the mission of the organisation.
- **Receiving and communicating information:** Managers are always updated and well-informed at any point in time, regarding what is happening within and without the organisation. Managers need sufficient information at all times which will enable them to easily deal with problems plaguing the organisation. Thus, managers always have timely and sufficient information to be able to respond effectively to events in their organisations.
- **Making decisions:** Managers are principal decision-makers in organisations since they are always confronted with unexpected issues to battle with and even

plan for actions to undertake in order to overcome such problems. For instance, a clash of interests between divisions or departments or between subordinates or an unexpected interruption to the delivery of important resources, will warrant managers to take immediate decisions that will resolve such problems. When confronted with such issues, managers initially implement immediate short-term measures that will calm the situation in order to allow employees resume their duties as soon as possible. In the long-run, they assess and examine issues deeply to make structural adjustments and formulate rules and policies that will prevent similar problems from happening again in the future.

- **Time management:** Managers ought to have decent time management skills that enable them to always be time conscious. This will permit and assist managers to acquire the skills and art of effective communication. Prioritising is a principal skill for managers who desire to work efficiently and effectively to ensure that organisational missions and goals are met (Keuning, 1998).

2.3 FUNCTIONAL APPROACH OF MANAGEMENT (MANAGEMENT FUNCTIONS)

The functional approach of management explains the daily routine of managers in their organisations. Like Henry Mintzberg (in the 1960s), Henri Fayol (a French scholar) as cited in Robbins and Judge (2013) maintains that in the early 20th century, managers were charged with six main functions as follows: planning; organising; commanding; coordinating; leading; and controlling. These functions have been contemporary reduced to four (planning, organising, leading and controlling) as depicted in Figure 2.2.

2.3.1 Planning

Planning is the primary function of management and involves with searching for resources required to perform specific tasks. It also involves identifying measures of achieving the objectives and mission of an organisation. Thus, the performance of the

activities of an organisation cannot be done in a random manner. A logical, specific and scientific procedure of a plan should be followed. If academic leaders can plan well, then HEIs will be taken to a higher level (Robbins and Judge, 2013)

Hill (2016) posits that there are enormous benefits of effective planning in an organisation. If planning is properly done, organisations will be able to chart a course for the accomplishment of predetermined objectives and goals. This is because the whole process of planning starts with reviewing the present operations and identifying what is supposed to be improved in the organisation in future. Since resources in every organisation are always limited, effective planning will lead to efficient use of resources. An effective planning process provides adequate information to senior academic leaders to take decisions on how to allocate the resources of the institution in a manner that will enable the institution to achieve its objectives. The effective allocation of resources will translate into superior staff performance and high productivity. In addition, resources will not be wasted on projects with little possibility of success. Effective planning also leads to the establishment of aggressive goals that can challenge every staff in the institution to strive to perform to their maximum ability since better performance is a major aspect of the planning process.

According to Hill (2016), effective planning enables academic leaders to manage risks and uncertainty in their institutions. Planning enables the development of “what-if” scenarios where academic leaders make attempts to envision possible risk factors and uncertainties and formulate contingency plans to resolve them. Furthermore, effective planning provides a competitive advantage for an institution of higher learning. If planning is properly done at higher education institutions, such institutions will have a realistic view of the present strengths and weaknesses in relation to those main competitors. Hence, academic leaders will be able to see where competing institutions are vulnerable and craft strategies to take advantage of their weaknesses.

2.3.2 Organising

Robbins and Judge (2013), note that the organising function of management gives managers the responsibility to design the structure of the organisation to achieve its goals. In designing the structure of the organisation, managers define tasks that are to be accomplished, who is to accomplish such tasks, the grouping of the tasks, who is answerable to whom and the place where decisions are to be taken.

According to Caolo (2014), when organisation is properly done at the workplace (such as at a higher education institution), there will be less stress. Organisation is about providing a place for everything and ensuring that everything is in its place, allocating time for every activity and ensuring that every activity is done at the right time. In this way, work is made easier and stress is reduced. When workers need something, they know exactly where to obtain it and also know exactly when they are supposed to perform assigned tasks. Also, when organisation is properly done at a higher education institution, stress levels are reduced, thus leading to improved health of staff. The stress felt by staff when situations are out of control, does not promote good health but rather, damages the health of staff. Caolo (2014) maintains that another benefit of being well organised at the workplace (such as a higher education institution) is that organisation leads to superior performance, thus ensuring greater productivity of staff. When staff of a higher education institution know where the things they need for work are, and what they goals of their organisation are, they will have significantly more time and effort for greater achievements in life and in the future.

2.3.3 Leading

Leading requires managers to motivate and direct their employees towards achieving better performance, choosing the best communication channels and solving problems that arise among employees (Mintzberg, 1960 cited in Robbins and Judge, 2013).

For any higher education institution to be successful, it has to provide services that meet the needs of students and also have staffs that are committed and loyal to academic

leaders. Blencoe (2014) states that in order to gain the commitment and loyalty of staff, academic leaders of higher education institutions need to always consider the social and psychological needs of staff rather than just offering them good salaries. If the duty of leading and motivating staff is properly done at a higher education institution, it will lead to high staff retention; reduce cost of recruitment, superior staff performance and maximum productivity, greater innovation and creativity and a better reputation for academic leaders and their institutions. Above all, if leading is properly done, academic leaders will have more credibility with staff as they will be acting as instructed and have greater respect for leaders and supervisors. If this happens, leaders will have less unproductive behaviour to deal with.

2.3.4 Controlling

The rationale of controlling is to monitor very closely the activities and performances of members or employees in order to ensure that they are constantly in conformity with the plans to achieve the mission of the organisation. The function of controlling enables management at all levels to identify and correct any deviations from the initial plans and consider factors that might warrant or oblige them to revise their objectives and mission. Hence, the control function commits management to measure performance in order to determine how well the objectives and goals of the organisation have been realised or achieved (Robbins and Judge, 2013).

Akrani (2011) argues that effective controlling in an organisation (such as a higher education institution) will lead to the improvement of the quality of services offered by the staff and cost control will lessen the cost of services provided. Hence, the institution can offer good quality services at less cost and also boost its goodwill. In this regard, effective controlling in a higher education institution will enable the institution to make optimum use of available limited resources which will help minimise wastage of financial, material and human resources, thereby leading to increase profitability of the institution. Effective controlling will also set standards for academic leaders to ensure that all work

done or services provided by staff, match these standards. Hence, effective control is like a traffic signal that guides all operations in a higher education institution in the right direction. Through control, staff performances in higher education institutions are evaluated on a regular basis and those with good performances are rewarded with cash prizes and even promotions. This motivates staff to work harder than before and minimise the deviation from planned performance and actual performance in the institution.

Figure 2.2 below shows the nature of interaction of the management process in an organisation otherwise known as the internal environment. It starts with planning and moves to organising, leading and controlling.

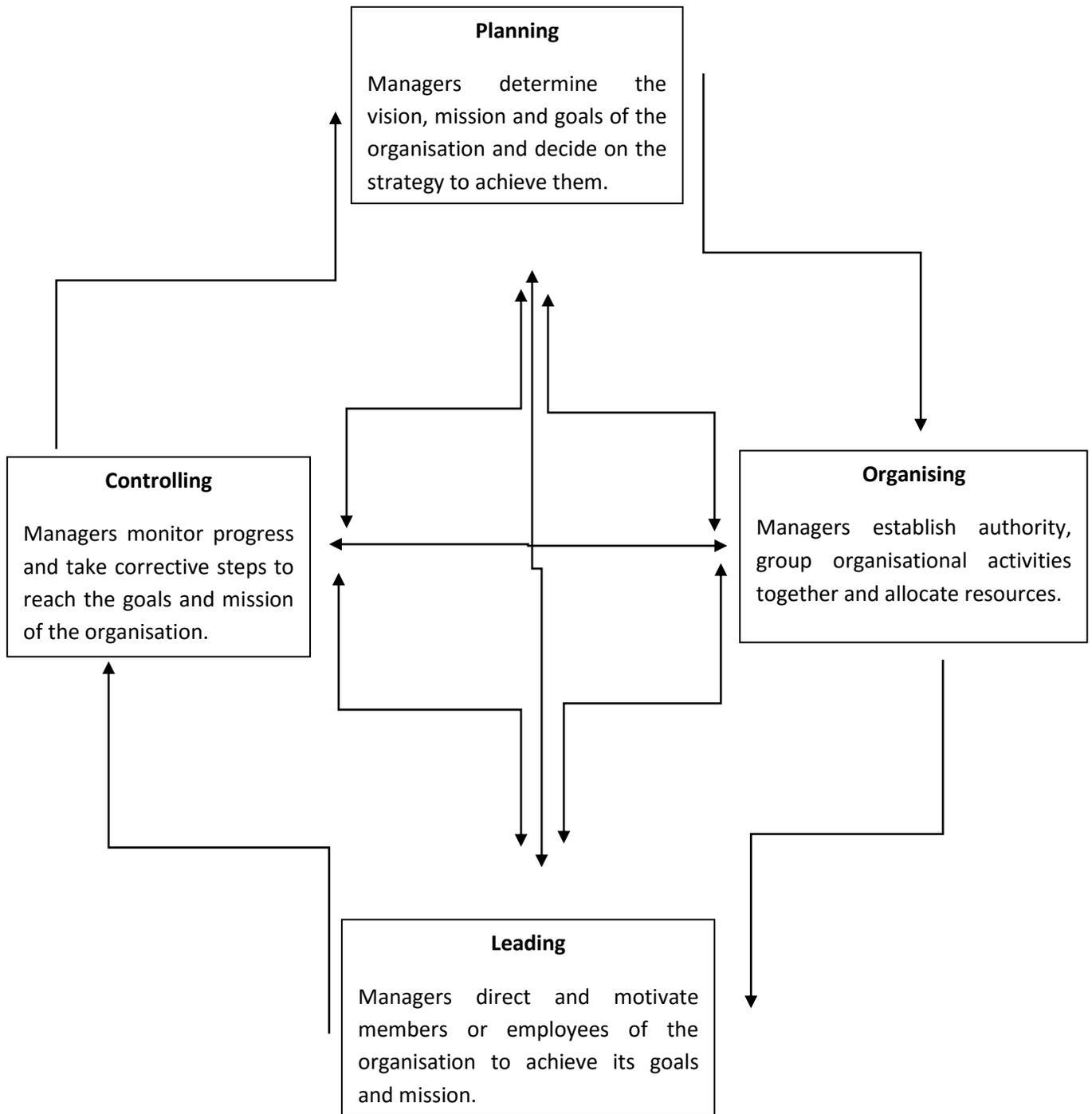


Figure 2.2: The nature of the management process

Source: **Smith *et al.* (2007:9)**

2.4 THE EVOLUTION OF MANAGEMENT THOUGHT

Even though contemporary management principles or models started primarily in the 20th century, there have been severe philosophical thoughts about management in the past. The different ideas and contributions of various scholars such as Henri Fayol, Frederick Winslow Taylor, Luther Gulick and Henry Mintzberg, have led to the development of different approaches to management. In order to understand the origin and development of management thoughts, it is imperative to trace its evolution from the start to its current interpretation by studying or examining the background, thoughts and effects of its principal contributors (starting with the view of Henri Fayol, followed by that of Frederick Winslow, Luther Gulick and Henry Mintzberg, whose contributions to management constitute the focus of this study).

2.4.1 Henri Fayol (1841–1925)

Henri Fayol is a French scholar and mining engineer who spent the later years of his life as an executive managing director of an iron and coal mining company. In his book published in 1916 entitled “General and Industrial Management”, he categorised the study of management concept into many functional fields which have been very useful in training executive and business expansion programmes. Fayol established and laid down particular management principles for managers to implement (which he deemed very important throughout his career as a manager). Fayol believed that these principles could be applicable and useful in business organisations, financial institutions, government departments, military and even religious organisations (Hissom, 2009). The 14 principles deemed necessary by Fayol to expound on are those he considered were the most important in his career as Chief Executive Officer as follows: division of work; authority; discipline; unity of command; unity of direction; subordination of individual interest to general interest; remuneration; centralisation; scalar chain (line of authority); order; equity; stability of tenure of personnel; initiative; and *esprit de corps*. Hahn (2007) argues that Fayol’s 14 principles of management, otherwise known as Fayolism, were

meant to empower managers with the essential building blocks that could be guidelines for their managerial functions as he laid a lot of emphasis on order, stability, fairness, effectiveness and efficiency.

2.4.2 Frederick Winslow Taylor (1856–1915)

Taylor was known as the father of scientific management principles, otherwise referred to as Taylorism. Taylor's management principle is built on Henri Fayol's 14 principles of management but focuses more on scientific management. In his book entitled 'The principles of scientific management', published in 1911, Taylor asserts that management is not only in theory but also the application of its knowledge and principles in organisation or workplace (Turan, 2015).

The fundamental idea behind the scientific management principle (Taylorism) is to eradicate the gap and differences of capitalism in order to prevent the proletarian class from getting poorer and poorer during the revolution of productivity. McNamara (2009) states that with Taylor's scientific management principles, tasks could be standardised, hardworking employees rewarded while lazy ones punished or reprimanded. This approach worked effectively for organisations with assembly lines and other automatic and monotonous or tedious activities. The primary objective of management should be to maximise prosperity which has to do with the development of each worker to the state of their maximum efficiency. Therefore, the greatest assumption of responsibility of management is to observe workers in order to identify preferred methods of performing tasks. Turan (2015) maintains that Taylor considered managers as having some responsibilities that enable them to accomplish certain objectives and missions, which they are not familiar with so as to totally comprehend the scientific approach and implement it.

2.4.3 Luther Gulick (1892–1993)

Luther Halsey Gulick was an American scholar born in 1892. Mace (2013), states that Gulick implemented and extended Henri Fayol's management principles. In the course of expanding on Fayol's principles of management, Gulick introduced the POSDCORB acronym in 1937 in his academic paper on science of administration in which he defined the seven managerial functions (planning, organising, staffing, directing, coordinating, reporting and budgeting).

Even though management thought has been evolving (from Fayol who proposed the 14 management principles for managers to implement), later on, Taylor introduced some principles of scientific management to be applied at the work place while Gulick recommends a management function embedded in POSDCORB. Assessing the way management thought has evolved over time, thus this study focuses on Mintzberg's managerial roles.

2.5 HISTORICAL REVIEW OF MINTZBERG'S MANAGERIAL ROLES

This section presents a brief summary of the management thoughts that led to Henry Mintzberg's primary exploration of management activities. It also describes his empirical study that steered the progress of his taxonomy to elucidate on the management roles of chief executive officers (CEOs). Mace (2013) asserts that Henry Mintzberg is one of the many scholars who expanded on Luther Gulick's fundamental management roles. These were the most accepted and recognised management models at the time. In his book published in 1973 entitled "The Nature of Managerial Work", Mintzberg provides a brief summary of Luther Gulick's management functions of planning, organising, staffing, directing, coordinating, reporting and budgeting (POSDCORB). Gulick's management functions were a pace-setter for Mintzberg that spurred him to later formulate his management model and he further examined and explained the fundamental roles of management.

Mintzberg is one of the most prominent management scholars. As a young student at the Massachusetts Institute of Technology (MIT) in 1967, he undertook a special study to review the literature on the duties of management. In his research, Mintzberg discovered a gap which was lack of descriptive facts in the literature to designate what managers ought to do at the workplace (Kleiner, 2010). Mintzberg closely examined Gulick's POSDCORB functions in order to relate them to particular managerial roles and activities. However, he realised that the definitions and descriptions did not clearly describe the management job and also failed to describe what managers actually do at work (Mintzberg, 1968). Having identified this gap and shortcoming in the literature on Gulick's POSDCORB functions, in 1968, Mintzberg embarked on a critical study and suggested a theory to scrutinise the similarities and differences of management functions. He contended that even though much has been written and published about the job of a manager, very little was known and said about what managers actually do at the workplace. As a result, therefore, Mintzberg recommended that more reflection on the role of managers at the workplace was necessary in order to better understand what they do and give more clarity on the roles of leadership.

In order to clarify his point of argument, in his thesis (1973), Mintzberg conducted a practical study of five different chief executive officers (CEOs) in five different organisations as follows: a CEO of a consulting firm; a chairman of an industry and defence technology development firm; a director of a city hospital; a chairperson of a consumer goods industry; and an overseer of a big semi-urban school system. In the course of his study, Mintzberg had two major intentions at the back of his mind; first, to detect the real behaviour of managers at work and second, to formulate a framework that could best describe managerial functions or activities that could enable managers to perform their jobs more efficiently and effectively. From a designed observational approach, Mintzberg made a record of every activity performed by the various CEOs, 890 pieces of mails, 368 verbal contacts and 25 encounters with each of the five

executives within 25 working days. Consequently, Mintzberg realised that it was very necessary and even possible to separate and categorise management functions into ten roles. Hence, he organised the management functions into three major categories to incorporate the ten managerial roles and various activities known today as Mintzberg's role taxonomy. The ten management roles are presented in Figure 2.3 and explained in detail below.

2.6 MINTZBERG'S TEN MANAGERIAL ROLES

The managerial roles stipulated by Mintzberg (1973) provide a good framework for assessing academic leaders in HEIs in South Africa. Muma (2004) holds that functional specialty has an influence on the relevance of different managerial roles. For instance, Mintzberg's study proposes that in the manufacturing industry, a sales manager capitalises more on interpersonal roles, a production manager lays more emphasis on decisional roles while a specialist, otherwise known as a human resource manager, gives more attention to informational roles. Mintzberg (1973); Muma (2004); Robbins and Judge (2013); and Mace (2013) note that in the 1960s, Henry Mintzberg himself conducted a study of five executives and came to a conclusion that managers have ten different interrelated roles in an organisation classified into three categories as depicted in Figure 2.3: interpersonal; informational; and decisional roles as explained below.

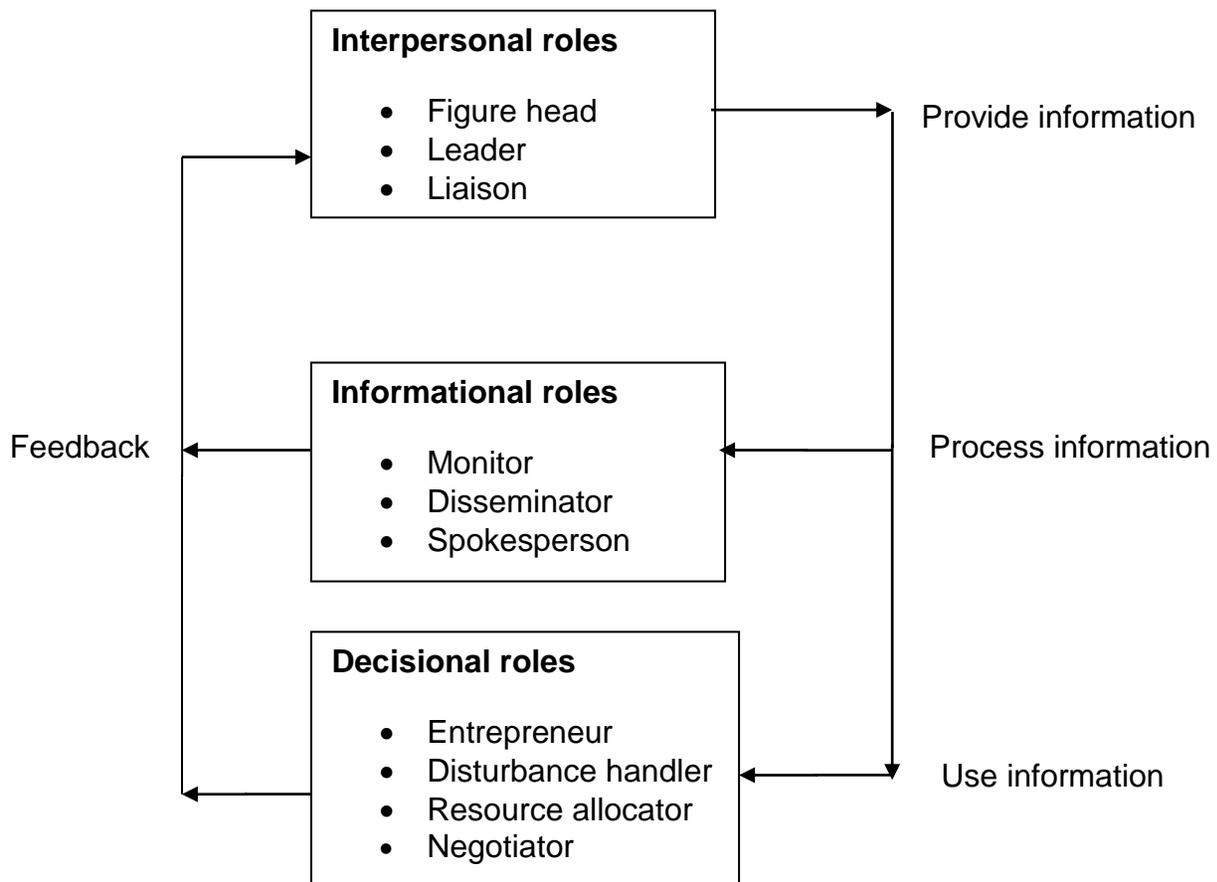


Figure 2.3: An overview of Mintzberg's managerial roles

Source: Muma *et al.* (2006:66)

2.6.1 Interpersonal Roles

Generally speaking, managers are recognised as the official heads in charge of their organisations and suitably handle relevant relationship positions within their institutions. Mintzberg (1973) notes that, the characteristics of the roles and activities of management relate directly to the managers' positions and authority and each basically consists of the development of interpersonal connections. Interpersonal roles of

managers encompass figurehead, leadership and liaison roles. As far as interpersonal roles are concerned, managers are expected to perform the following three roles for the organisation:

- 1. Figurehead role:** This is the ceremonial and symbolic duties of managers whereby, they are expected to represent their organisations locally and internationally, in every meeting they attend on behalf of the organisation and even everywhere they find themselves. Managers are symbols of authority who carry out a range of activities such as approving and signing legitimate documents, contracts, agreements and also doing other ceremonial paperwork on behalf of their organisations (Mintzberg, 1973). Muma (2004) moots that some other managerial figurehead responsibilities involve duties such as talking to paid workers and volunteers, welcoming guests to the organization and conducting tours.
- 2. Leadership role:** The leadership role of managers requires them to recruit, train, motivate and discipline their employees to ensure that organisational goals are adequately achieved. The leadership role and activities are the most important functions of managers because as leaders, they set the pace for their institutions by innovating the goals and missions as well as constructing good relationships for their organisations (Mintzberg, 1973). Mace (20013) states that apart from directing and giving their institutions a sense of purpose, managers are also charged with the responsibility to lead, hire, train, motivate and discipline their subordinates. This function of leadership activities is very important in promoting a prosperous institution that integrates organisational interests with subordinates needs.
- 3. Liaison role:** Also within the category of interpersonal roles, is the liaison role which entrusts managers with the responsibility to create contacts and a cordial relation with partners and informants of the organisation. In this regard, managers make internal contacts with employees and also external contacts with their peer

executives in different organisations through associations (Robbins and Judge, 2013). Mace (2013) argues that the liaison role of management entrust managers with the responsibility of taking part in vertical and horizontal networking of associations on behalf of their organisations with the focus of creating and developing beneficial relationships with partners. This can be achieved by managers taking part in social gatherings and joining professional community and organisations' boards through which expertise can be exchanged to mutually benefit and support member organisations.

2.6.2 Informational roles

Mintzberg (1973) refers to the second set of his managerial duties as informational roles. According to him, the informational duties of managers are those of digging and searching for information that are of interest to their organisations and transmitting them to subordinates. Mace (2013), states that managers are pivots who occupy the focal position and thus, have full access to all information concerning their institutions. Robbins and Judge (2013) maintain that in this category of managerial roles, managers act as monitors, disseminators and spokespersons of their organisations.

- 4. Monitoring role:** This role entrusts managers with the duty to research and gather external information by searching the news media, the internet and social media such as Facebook and twitter and also socialising and talking with peers and experts from other organisations. In this regards, managers learn of change in public taste, especially for manufacturing firms and the plan of action of competitors in order to outwit or double cross them (Mintzberg, 1973). Mace (2013) observes that managers are constantly getting information and responding to it by making amendments that will suit the climate of their institutions and by constantly giving opportunities for subordinates to evolve with the cultural shift of the organisation. The monitoring role also entails deskwork such as making and receiving phone calls, reading emails, attending meetings and reading reports.

- 5. Disseminating role:** Mintzberg (1973) maintains that this role requires managers to carefully select factual and value internal and external information and communicate it to everybody within the organisation. Factual information has validity and is well thought out to be accurate and coming from a reliable source. On the other hand, value information is a manager's natural opinion about information he or she provides to subordinates when he or she deems it is important for decision-making. Robbins and Judge (2013) insist that managers are expected to be communicators entrusted with the responsibility of transmitting all information and decisions to every members or employees in order for them to familiarise themselves with what is happening within the organisation.
- 6. Spokesperson role:** This managerial role focuses on the communication of selected information out to the organisation's environment. This information is actually transmitted by managers to two groups of people - the institution's board and the organisation's public (Mintzberg, 1973). Muma (2004) argues that just like the figurehead role, the spokesperson role of managers warrants them to speak on behalf of the organisation whenever and wherever they represent it.

2.6.3 Decisional roles

Mintzberg (1973) maintains that the procedure of strategic decision-making ranges along a scale. At one end of the scale, are entrepreneurial decisions which help organisations to survive and at the other, is disturbance handler, which is the managers' choice to resolve problems within the organisation. In terms of decisional roles, managers make greater use of information obtained from informational role activities which will help them to choose wisely for their organisations. Robbins and Judge (2013)

agree with Mintzberg's and add that the decisional roles of managers are those that have to do with making choices for the organisation such as entrepreneurial, disturbance handlers, resource allocation and negotiating roles.

- 7. Entrepreneurial role:** This role requires managers to act like entrepreneurs who initiate, coordinate and supervise new projects that can improve the organisation's outcomes or performance (Muma, 2004). The entrepreneurial role requires managers to wilfully initiate projects and continuously think out means to resolve problems and overcome challenges facing their organisations. As far as the entrepreneurial role is concerned, the duty of managers is to make the final decision on whether or not to engage the projects of the organisation and also to make a choice of a reliable person to handle such projects (Mace, 2013).
- 8. Disturbance handler role:** The disturbance handler role entails that managers take corrective measures to resolve impulsive and unpredicted crisis that may arise within organisations. This requires that managers must always be on the alert any time to resolve any spontaneous conflicts that may arise among subordinates. They are also expected to ensure maximum security of the organisation and to reveal every vital information that can possibly cause losses or harm to the organisation's valuable resources (Mintzberg, 1973). This is a managerial role that deals with unexpected issues and complications which can disrupt the efficiency of the system. As disturbance handler, managers are entrusted with the duty to take corrective actions to solve future unforeseen and unpredicted problems likely to plague the organisation (Robbins and Judge, 2013).
- 9. Resource allocation role:** As resource allocators, it is a manager's duty to allocate monetary, human and physical resources to employees for the achievement of organisational goals (Robbins and Judge, 2013). According to Mace (2013), resources such as materials, equipment, money and time are pivotal to an organisation's strategy making system. The major activity of managers in the resource allocation managerial role is to make decisions concerning when and where resources are to be apportioned, under what

circumstances the resources will be apportioned and to whom the resources will be allocated to.

10 Negotiating role: Mintzberg (1973) notes that the decisional role of negotiating is associated with conflict resolution and includes activities such as working with both internal and external parties of the organisation. Apart from bargaining, other activities contained within the negotiating role might include vendor bid activities, or any other activities where the organisation would be best represented by the formal authority (the recognised leader of the institution). Robbins and Judge (2013) concur with Mintzberg and add that as far as the negotiating role of managers is concerned, they are responsible to bargain and discuss pertinent issues on behalf of their organisations with other organisations and units in order to gain advantage for themselves and their organisations.

Mintzberg’s ten managerial roles and their various activities are presented in Table 2.1. After explaining the ten managerial roles, Mintzberg further provides a summary these roles as shown in Table 2.1.

Table 2.1: A tabular representation of Mintzberg’s managerial model portraying the various categories, roles and activities of managers

Categories	Roles	Activities
Interpersonal	Figurehead	Act as a symbolic leader on behalf of the organisation. Perform social and legal duties for the organisation. Greet and welcome visitors and clients. Sign legal documents for the organisation. Attend ribbon cutting ceremonies.

	Leadership	<p>Appraise the quality of work of subordinates and their performance.</p> <p>Incorporate the objectives of subordinates with organisational requirements.</p> <p>Stay in touch with subordinates and assist them with their individual problems.</p> <p>Solve clashes among subordinates.</p> <p>Keep a record of the exceptional abilities of subordinates to facilitate individual advancement.</p> <p>Empower new employees by providing them with adequate training.</p> <p>Make use of authority to ensure that subordinates accomplish their tasks.</p> <p>Guide subordinates on organisational issues, criticise them when appropriate.</p>
	Liaising	<p>Create and maintain individual network of contacts.</p> <p>Attend conferences and meetings to network and maintain contacts.</p> <p>Attend social gatherings as a representative of the department.</p> <p>Belong to associations that can provide useful work-related contacts.</p> <p>Make individual relationships with people outside the organisation.</p> <p>Make contacts with important individuals outside the unit.</p>

Informational	Monitoring	<p>Evaluate political happenings that may affect job performance.</p> <p>Be verse with market changes and trends that may impact the organisation.</p> <p>Be verse with information on the evolution of operations in the organisation.</p> <p>Match up with technological improvements related to job performance.</p> <p>Gather information about trends outside the department.</p> <p>Acquire information about the clientele and competitors.</p> <p>Learn new ideas originating out of the organisation.</p>
	Disseminating	<p>Communicate information to members within the organisation.</p> <p>Inform subordinates of decisions that have been taken.</p> <p>Send memos and reports to various divisions or departments.</p> <p>Convene meetings and make telephone calls.</p> <p>Assess issues which might have an impact on the organisation.</p>
	Spokesperson	<p>Chair meetings as a representative of the organisation.</p> <p>Serve as an expert to individuals who are not members of the organisation.</p> <p>Inform members of the organisation's upcoming</p>

		<p>plans.</p> <p>Provide answers to letters of enquiries on behalf of the organisation.</p> <p>Keep members informed about the organisation's activities.</p>
Decisional	Entrepreneurial	<p>Plan and implement changes in the organisation.</p> <p>Resolve problems by establishing desirable changes in the organisation.</p> <p>Establish strategies to acquire and retain human resources of the organisation.</p> <p>Ensure the availability of essential resources for employees' job performance.</p> <p>Make use of the exclusive advantage of the organisation.</p> <p>Ensure that there is reasonable organisation and co-ordination within the organisation.</p>
	Disturbance handlers	<p>Deal with disputes among subordinates and take corrective action.</p> <p>Resolve conflicts between organisational members.</p> <p>Choose strategic alternatives to resolve problem within the organisation.</p> <p>Overcome crisis situations plaguing the organisation.</p> <p>Larger policy changes.</p> <p>Initiate better organisational changes such as re-orgs and mergers.</p>

	Resource allocation	<p>Allocate material and human resources of the organisation.</p> <p>Take decisions about time parameters for future ventures.</p> <p>Prevent the loss of resources that are of great importance to the organisation.</p> <p>Distribute financial resources within the units or departments of the organisation.</p> <p>Determine which platforms to make available resources for the organisation.</p> <p>Distribute equipment or materials to employees needed for job performance.</p>
	Negotiating	<p>Bargain and discuss important matters on behalf of the organisation with other partners.</p> <p>Mediate for the organisation in order to gain advantage over its competitors.</p> <p>Negotiate with partners for payment before delivery or performance.</p> <p>Detect the interests and needs behind positions and look for alternative means to satisfy such needs.</p> <p>Look for means to resolve problems in the workplace that cause individuals to seek help and reinforcements.</p> <p>Construct mutually beneficial relationships with members of the organisation.</p>

Source: Ruzgar and Kurt (2013)

2.7 CHARACTERISTICS REQUIRED BY ACADEMIC LEADERS TO EXECUTE MINTZBERG'S MANAGERIAL ROLES

Effective leaders are people who have the capacities to make a difference and effect positive changes in their communities, organisations and even in other people's lives by stimulating and inspiring them to accomplish their objectives. As such, leaders are individuals who possess certain personal qualities or characteristics which distinguish them from others.

According to Northouse (2009), leaders have certain characteristics that are common with all leaders. These traits relating to interpersonal role, are outlined below in relation to how each possibly applies to Mintzberg's managerial roles.

- **Self-confidence:** This is about being calm under pressure when tension is very high and believing in oneself. It is very important for every effective leader to be realistically self-confident.
- **Humility:** Taking responsibility for one's mistake, acknowledging one's faults towards colleagues and subordinates and admitting that one is not a super human being to know everything constitute humility. Humbleness of leaders contributes immensely to effective leadership.
- **Trustworthiness:** This implies being truthful to oneself and to others and displaying a high degree of integrity, honesty, credibility which will actually make a positive difference in effective leadership. Trustworthiness requires that leaders be truthful and conduct themselves in a manner that they want others to conduct themselves too.
- **Passion for work and people:** This is having a very strong and intense feeling and compassion for people and for the work one does. This characteristic is highly required and is glaring in entrepreneurial leaders who are so much concerned about the growth of their businesses. Having passion and being more

concerned about people's progress and business growth can actually be a success factor in its survival.

- **Emotional intelligence:** This refers to the qualities of having empathy for other people, understanding one's feelings and regulating one's emotions to enhance living. Leaders' emotional intelligence enables them have a good sense of self-awareness, social awareness, self-management and relationship management. How well leaders can manage their emotions and those of their followers, can have an influence on effective leadership. Leaders' moods and associate behaviours can also have a great influence on bottom line performance. Therefore, leaders should have the ability to accurately analyse situations, resolve them fairly and make reasonable decisions. These characteristics will help to support their interpersonal roles in the Mintzberg managerial role in academic leaders.

According to Northouse (2009), there are some characteristics of leadership which can enhance effective execution of Mintzberg decisional roles as follows:

- **Tolerance:** This is the ability to consider, accept and tolerate the opinions, ideas and even the mistakes of others because human beings all over the world are diverse by nature. As such, leaders need high level of tolerance to be able to cope with people and circumstances that are hurdles to the accomplishment of goals.
- **Courage:** This is the ability of a person to take initiatives, responsibilities and risks without fear. A leader needs courage to be able to face some responsibilities, take calculated risks and be able to put his reputation on the line in order to accomplish goals.
- **Flexibility and adaptability:** This is the ability of being able to adjust and adapt to situations and not being conservative. Leaders need to be flexible and also adaptable so that they can be able to cope with change which is very

constant in nature and more so, because they are expected to be the ones to effect or facilitate changes in their organisations in order to ease the attainment of goals.

Having understood the characteristics of leadership, especially in the higher education milieu and its possible relation to Mintzberg's managerial roles, it seems that interpersonal relationship is mainly impacted by effective leadership, followed by decision-making, however, the informational role is not clearly linked to leadership.

After explaining Mintzberg's ten managerial roles and their various activities, a conceptual framework is developed (see Figure 2.4) showing how these managerial roles expand and possibly affect academic leaders' performance in HEIs in SA.

Academic leaders in HEIs in SA are individuals who are at the head of an academic establishment and perform administrative duties. They include the following: chancellors, vice-chancellors, deputy vice-chancellors, registrars, deans, directors, heads of departments and faculty administrators as the case may be. However, HEIs have their unique ways of governance which is influenced mostly by their nature and history of existence. The appointment and promotion of academic leaders to such administrative positions in HEIs, is based mainly on academic competence and prowess as well as the totality of the individual. In most cases, to be appointed or promoted to such administrative positions, an academician is expected to have a sufficient number of publications in accredited journals, have supervised postgraduate students, demonstrate that he or she can provide mentorship and academic leadership as well as have experience and skill in administration. In this way, they will be able to coach their subordinates and academic staff as well as lead them on the right path to accomplish the predetermined goals of their institutions (Ogunraku, 2015). Having understood the importance of leadership in the execution of Mintzberg's roles within the higher education milieu, it is important to determine how academics see their role in HEI in South Africa.

2.8 ATTRIBUTES REQUIRED BY ACADEMIC LEADERS TO EXECUTE MINTZBERG'S MANAGERIAL ROLES

The function of leadership has to do with the activities or things that are required to be done by leaders that will enable their organisations to function effectively in order to accomplish its objectives and mission. The duties and functions of leadership are what actually establish the relationship between a leader and his or her subordinates (who are also his or her followers). Kouzes and Posner (2002) assert that an effective leader is generally proficient in some different categories of leadership functions. The fundamental concern of leadership duties is not only to direct the tasks of subordinates, but also to establish the processes and structures that can be used to achieve organisational effectiveness in the future. Hence, an outline and a discussion of some fundamental leadership functions required for organisational effectiveness and satisfaction of subordinates are provided below.

Interpersonal

- **Taking risks:** A fundamental function of a successful leader is to challenge the processes by always being willing to take risks of certainty or calculated risks (Smith and Hughey, 2006). Kouzes and Posner (2002) add that effective and successful leaders have as duties or function, to motivate and encourage subordinates and followers by providing challenges that can enhance personal development and growth.
- **Setting a vision:** This function entails that successful and effective leaders initiate a vision that will drive their organisations in the future and also develop strategies to accomplish the predetermined goals of their institutions. Smith and Hughey (2006) believe inspiring a shared vision for organisations, denote the relevance of precipitating a joint commitment of the organisation to the future. By this, effective leadership will assist subordinates to be connected to and also supportive to the accomplishment of organisational vision.

- **Inspiring subordinates:** This is a function of leadership that requires effective leaders to collaborate, communicate and energise followers to overcome challenges and obstacles to achieve personal as well as the organisational vision. Goldring and Greenfield (2002) assert that in order to enable subordinates to act, effective leaders make trusting relationships which incorporate and value every organisational member. Without effective leadership, constituents are helpless because they do not have an energizer to ignite their passion to act. As a compass is to sailors, so is effective leadership to subordinates; leaders guide and provide direction of the path for subordinates to follow.
- **Model the way:** This function of leadership requires that effective leaders should always take the lead to consistently project a good example for subordinates to follow. It is often said that a good teacher teaches by examples. Kouze and Posner (2002) state that model effective leaders tend to deal with complicated issues in an incremental and thoughtful manner, and their values are always consistent with those of subordinates. Effective leaders who advocate values that represent collective values, will succeed in mobilising subordinates to act towards achieving organisational goals and mission.
- **Encourage the heart:** This leadership practice refers to the importance of acknowledging and celebrating the efforts and achievements of subordinates by effective leaders. Smith and Hughey (2006) assert that effective leaders should not concentrate only on formal rewards, but should equally be quick to notice, compliment and credit subordinates in order to validate their contributions by enhancing credibility to motivate them the more.

Decision-making

- **Coaching and training:** This is a leadership practice to mentor and train subordinates and new employees so that they can acquire the necessary attitudes and skills needed to enhance their performance towards the accomplishment of organisational goals. Morgeson *et al.* (2010) note that effective leaders often decode deficiencies in the capabilities of individuals which result from the fact that they perhaps are not well equipped with the required skills and knowledge to do their assigned tasks effectively. In this regard, leadership is expected to overcome these deficiencies by providing adequate training to develop the skills and capabilities of followers such that they can be able to achieve the maximum levels of performance required to accomplish organisational goals. The duty of equipping subordinates with the required skills and capabilities requires that leadership provide targeted training directly to subordinates through demonstrations and instructions with sustainable coaching.
- **Structuring and planning:** This is an important leadership function which requires leaders to structure and plan organisational tasks such that predetermined goals are achieved effectively. Morgeson *et al.* (2010) state that organisational objectives and performance expectations give a target for collective performance. However, to accomplish this performance target, subordinates are expected to understand how they can best coordinate their actions in order to achieve their objectives. Hence, the leadership function of planning and structuring helps determine the best means to achieving organisational performance target. This involves determining how tasks are to be performed, who is to perform what task and when such tasks are to be performed. This behavioural function is referred to as structuring and planning because the practice results in an integrated plan of work that coordinates efforts, directs performance, develops task performance strategies and standardises organisational processes.

Goleman *et al.* (2002) describe the principal functions of leadership by emotional intelligence and note that the importance of a leader's charm and entreaty comes from his or her emotions. Emotion is what drives an individual, enables a leader to guide an organisation and his or her subordinates in a positive or negative manner as the case may be. It should be noted that there are resounding and rich leaders who are always in agreement to their subordinates' needs and desires, but there are also some harsh and dissonant leaders who might be in power only for a short period of time because they are unable to cater for the needs of their subordinates. Good examples of harsh and dissonant leaders were Muammar Gaddafi (former president of Libya) and Nicolae Ceausescu (former ruler of Romania); these are two dictators who were finally executed by their subjects and disgruntled mob.

Goleman *et al.* (2002) further note that emotional intelligence is more significant than only intelligence itself and consists of self-awareness, self-management, social awareness and relationship management. To these authors, self-awareness is a person's aptitude to read and understand his or her own emotions with an accurate self-evaluation. Self-management is a person's ability to control himself, be transparent, trustworthy and have integrity. Social awareness is a person's ability to show sympathy to others, offer quality services to customers as well as organisational awareness. Relationship management is the ability of a person or leader to inspire, develop and influence subordinates as well as resolve conflict among dependants, establish teamwork, bond and collaboration among followers. Lopez (2012) note that good examples of leaders who possessed and exhibited these resonant leadership qualities and characteristics were the famous Nelson Mandela – former president of South Africa from 1994 to 1999, Mohandas Gandhi – the preeminent leader of the Indian independence movement during British rule in India, and Albert Arnold Al Gore who served as the 45th vice president of USA from 1993 to 2001 under president Bill Clinton and won the Nobel Peace Prize in 2007.

2.9 A CONCEPTUAL FRAMEWORK OF MINTZBERG'S MANAGERIAL ROLES IN THE PERFORMANCE OF ACADEMIC LEADERS IN HEIs IN SOUTH AFRICA

Figure 2.4 shows how academic leaders in HEIs in South Africa employ the three categories of Mintzberg's managerial roles to improve performance and effectiveness.

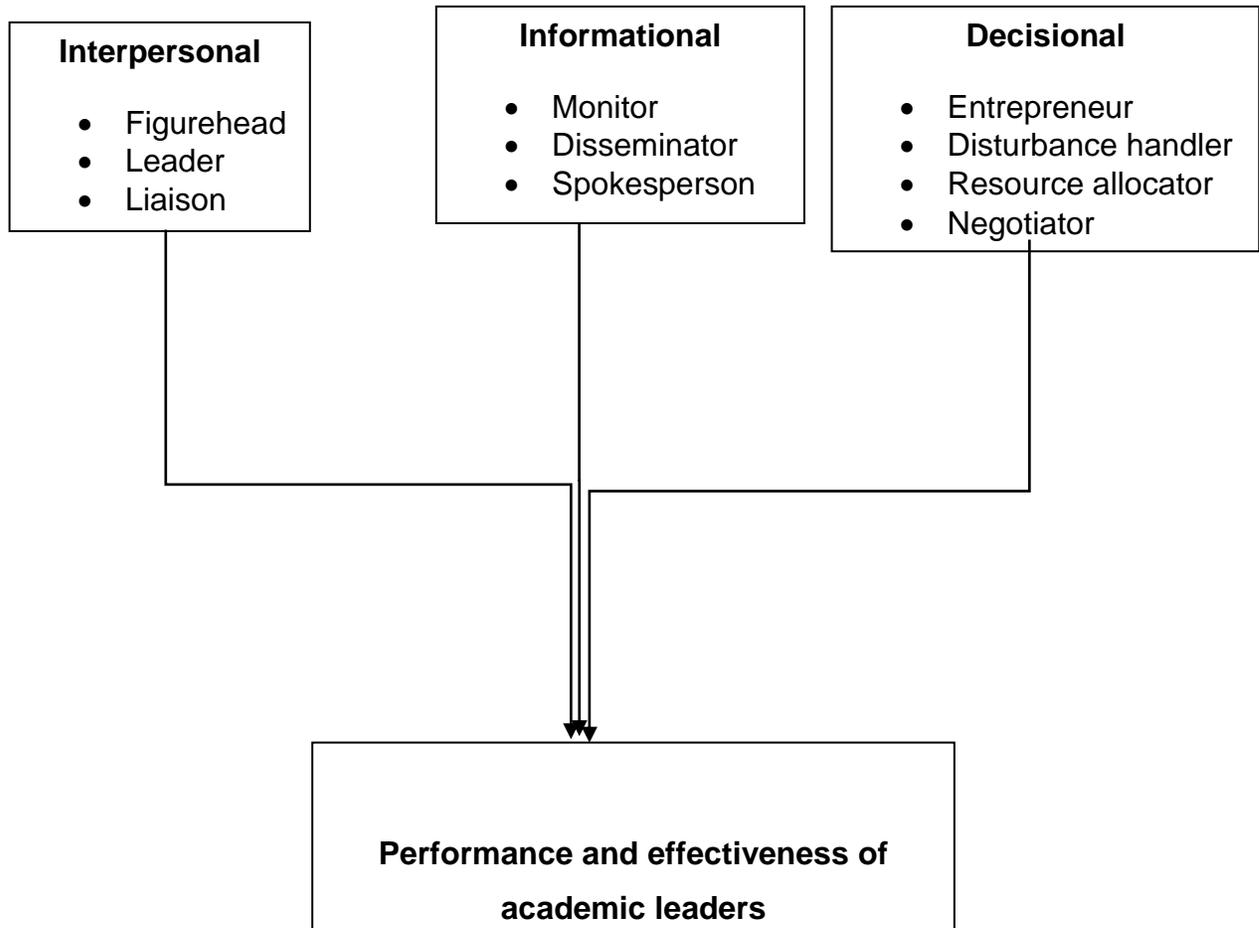


Figure 2.4: A conceptual framework of Mintzberg's managerial roles in academic leaders' performance in HEIs in South Africa

Source: Researcher's conceptualisation

2.10 ENHANCING MINTZBERG'S MANAGERIAL ROLES BY MANAGEMENT

Robbins and Judge (2013) maintain that managers require certain competencies or skills in order to perform their roles adequately and ensure that organisational goals are effectively achieved. Therefore, as managers of HEIs in South Africa, academic leaders also need such competencies. As such, they identify certain competencies and skills that distinguish effective managers from ineffective ones such as technical, human and conceptual skills.

- **Technical skills:** Technical skills have to do with the ability of managers to implement specialised expertise or knowledge in their jobs. Managers learn and develop professional skills through extensive formal education. Nevertheless, technical skills are not only acquired in school through formal learning and training programmes, they can equally be acquired and developed through experience on the job.
- **Human skills:** The human skill of management entails the inherent or natural ability of a person to communicate with people, understand, support and motivate individuals and groups in attaining organisational goals. In order to achieve organisational goals through other people as defined in management, managers are supposed to have inherent good human skills. Some managers have good technical skills acquired through formal education, training and experience, but they are not good listeners, they do not understand the needs of employees and are not good at resolving conflicts among workers.
- **Conceptual skills:** Conceptual skills encompass managers' mental capability of analysing and diagnosing very difficult problems faced by the organisation. This requires managers to make critical decisions of identifying problems, developing alternative means of resolving the problems, evaluating other solutions to the problems and selecting the best possible ways of resolving issues faced by the organisation. As such, contemporary managers require the ability to develop and

interpret new ideas and processes and implement them on their job to facilitate the achievement of organisational goals (Robbins and Judge, 2013).

A good academic leader should be a good manager who possesses the fundamental skills of management as discussed above. However, a manager is not only someone who has and implements these skills, but a better manager is often identified by certain characteristics.

2.11 MINTZBERG'S MANAGEMENT MECHANISMS

Mintzberg defines some managerial mechanisms that best describe the interrelationship between strategies and planning, which is a persistent subject in his work. It is also the most significant contribution to contemporary management thoughts.

The first of Mintzberg's management mechanisms is mutual adjustment which enhances the achievement of coordination through informal communication among workers. Mintzberg's second management mechanism is direct supervision which enables an individual who may be known as a supervisor or manager, to give instructions and orders to many other workers on what has to be done at the workplace. The third management mechanism is the standardisation of work processes that enhance the achievement of coordination by stipulating the specific results of diverse work which outline the scope of a product to be manufactured. The fourth management mechanism by Mintzberg is standardisation of skill and knowledge by which various tasks are coordinated by virtue of the interrelated training and teachings that workers acquire and which enable them to respond quickly to one another's standardisation procedures. The fifth and last of Mintzberg's management mechanism is the standardisation of norms which are the rules guiding the tasks controlled in the whole organisation such that each functions in accordance with the same set of laid down principles (Kumar and Mahavidyalya, 2015).

In as much as academic leaders apply Mintzberg’s managerial roles for their effectiveness and efficiency, they equally require good skills of management in order to realise superior performance. From the beginning of time, management has played a very important role to the success of organisations around the world. The contribution of management to earlier civilisations can better show its importance to humanity. Even in the contemporary era, it is still highly required in HEIs and other organisations for effective performance. Management is thus, very indispensable in human life, an indication that people need management in their daily lives. Therefore, it is important to highlight the importance and contribution of management in an organisation as discussed below.

2.12 IMPORTANCE OF MANAGEMENT IN ORGANISATIONS

Kroon (2000) notes that the importance and contributions of management in organisations from earlier civilisations and humanity in general are substantial as shown in the example in Table 2.2 below.

Table 2.2: Contributions to management by earlier civilisations

Civilisations	Contributions
Egyptians (4500 BC)	Coordination, organisation, planning and mobilisation of both material and human resources for the construction of the famous Egyptian pyramids.
Sumerians (3000 BC)	The art of management facilitated the keeping of records in terms of control of property, herds, taxes and income.
Babylonians (2000 BC)	Code of Hammurabi laying down guiding principles and rules concerning retribution, control, responsibility and wages in respect of families, property, labour and trade.
Hebrews	The application of management principles facilitated the formation of a

	line of organisational structures through the selection of reliable and proficient leaders over tens, fifties, hundreds and thousands by Moses (Exodus 18).
Romans (AD 284)	Management enabled the formation of a sequence of command by entrusting authority to 100 provinces within the 13 dioceses of the Roman Empire.
Roman Catholic Church (AD200)	Management facilitated the formation of a modest chain of command and hierarchy of authority with a classification order of the Pope, the Cardinal and the local priests.
Military organisational structure	Management facilitated the concentration and monopolisation of command and the regionalisation and decentralisation of supportive services, information, specialised advice and military operations.

Source: Kroon (2000)

2.13 IMPORTANCE OF MINTZBERG'S MANAGERIAL ROLES

Henry Mintzberg is, perhaps, the most renowned management scholar in Canada and even beyond. According to Fowke (2009), Fayol's management principles which deal mostly with planning, organising, commanding, coordinating and controlling are too limited. Hence, Mintzberg's managerial roles are very important in management or to managers because they elaborate and throw more light on Fayol's management principles. Mintzberg (1991) conducted a study and found out that there was a gap between management in theory as postulated by former management scholars before him and actual management in practice. He then realised that a manager's duty was characterised by pace, brevity, interruptions and a fragmentation of activities. This is because managers talk a lot to people and spend the bulk of their time attending meetings and networking with other people. Ramezani *et al.* (2011) state that unlike

former management scholars such as Henri Fayol, Fredrick Winslow Taylor and Luther Gulick, who merely outlined management principles, Mintzberg organised his management thoughts as a set of behaviours identified with a particular management position measured by what people do at their workplace on a daily basis. As a result, he developed his three categories of ten managerial roles that are widely recommended for contemporary management practice. Very important about Mintzberg's management roles is the fact that his main idea is to make managers of organisations to understand how to effectively complete various tasks within a working day in spite of what comes up and what problems need to be resolved.

Mintzberg propounded a different approach of defining management. Instead of just designating or describing in theory like other former management scholars (such as Fayol, Taylor and Gulick) what managers are supposed to do, Mintzberg researched the reality and laid more emphasis on what executive managers actually spend most of their time doing at the work place. Unlike these former management scholars, Mintzberg clearly makes a distinction between what managers are expected to do and what they actually do. In this regard, Mintzberg demonstrated on the basis of work activities that the work of managers is characterised by fragmentation of activities, variety, preference for verbal contacts, pace, brevity and interruptions. For instance, the fragmentary nature of managers' tasks or roles is to ensure the effective accomplishment of organisational goals (Ugh and Hickson, 2007). Mintzberg's managerial roles provide a better understanding and description of management function rather than the traditional list of management principles stipulated by former management scholars. Haberg and Rieple (2008) assert that Mintzberg's managerial roles advocate for managers to be responsive and adaptable, not just controlling, spending more time to plan and organise in an orderly manner, making them to live hectic lives in continuously changing business environment. This and his good mastery of management roles has made Mintzberg to stand very tall among management scholars. His managerial roles are more feasible

and realistic than the management principles of former management scholars. This is the main reason why this study focuses on exploring Mintzberg's managerial roles of academic leaders in a selected higher education institution in South Africa and not the application of any of the management principles of former management scholars such as Fayol, Taylor or Gulick.

Giving the importance of Mintzberg's managerial roles, it can be seen from every indication that management and leadership can be considered as two sides of the same coin. This is to say that management needs to complement leadership in order to achieve high performance. It therefore implies that the two work hand in glove to achieve a better performance. In this regard, it is imperative to understand the fundamental functions of leadership that should be complemented by management for effective and efficient running of organisations in general and HEIs in particular.

2.14 PERFORMANCE AND EFFECTIVENESS OF ACADEMIC LEADERS IN HEIs

The roles of academic leaders in HEIs are plagued with some abnormalities. This is because the roles of conventional top executives such as the vice chancellor and campus rectors as well as their deputies, often resonate with executive roles exercised at the level of faculties by deans, school directors and programme managers (Davies *et al.*, 2001). At the level of the faculty, the executive or management role of leadership is combined with teaching, supervision and research, which also have some form of leadership responsibilities. As such, conventional senior executives are putting pressure on the necessity to have effective and efficient leaders who can manage the resources of the higher education system judiciously (Black, 2015). Academic leadership in HEIs is concerned about integrating students' lifestyle, learning, developmental and social provisions to their demands as well as providing students with services such as sport facilities, accommodation and managing their finances. Altach (2011) believes that senior academic leaders encounter some major emerging challenges because inasmuch

as they play the symbolic role of representing their institutions externally, they also need to model the values and principles of the same institutions which they are leading. In order for senior executives or academic leaders in HEIs to perform their duties and achieve their desired objectives, they are required, at some point in time, to navigate the priorities of their teaching staff and academic colleagues.

Robinson and Timperley (2007) outline the five most important indicators and parameters used to assess the effectiveness of the performance of academic leadership. These indicators and parameters are as follows: effective application of first hand initiative; making important progress in the quality of teaching and learning; realising and conveying established tasks in a specified period of time; and creating a conducive working and learning environment for both academic staff and students. However, the successful and sustainable implementation of initiatives is a critical feature for the effectiveness of leadership as it enables a leader to introduce inventive strategies and policies, implemented on time and leading effective team-based projects that improve the academic performance and results of students. Academic leaders have certain roles and competencies that make them effective.

Academic leaders, especially those of HEIs in South Africa, require fresh skills, knowledge and abilities to effectively and efficiently manage continuous organisational changes. Al-Shuaiby (2009) contends that the performance of HEIs depends very much on the effectiveness of academic leadership to create a satisfying learning environment for staff and also to provide good quality education to students. Mapp (2008) maintains that the educational procedures and policies of HEIs contribute immensely to the accomplishment of goals and objectives. Thus, academic leaders at these institutions are charged with the responsibility to effectively implement such procedures and policies. However, Spendlove (2007) notes that for many years now, studies on the effectiveness of academic leadership have shifted more towards the identification of competencies of leaders such as abilities, knowledge, skills and behaviours of people. This is because these are set of behaviours that influence the supply or provision of

expected outcomes. Bartram (2005) is of the view that identifying and defining particular competencies can provide a guide to academic leaders in successful planning and even in recruitment of new staff.

The contingency theory of leadership holds that there is no specific best way to lead because the true effectiveness of leaders depends much on their application of various principles of leadership in diverse circumstances or situations as the case may be. It is held that the effectiveness of team performance is greatly influenced by the connection or relationship between the style of leadership and the extent to which the situation of the team permits the leader to be prominent and influential. Moreover, the effectiveness of team and organisational performance also depends on the relationship between the personality of the leader and the problem at hand to be resolved. Effective leaders gain more control and influence over their subordinates by alternating their behaviours to relationship-oriented instead of task-oriented depending on the circumstances at hand to be dealt with (Shahmandi *et al.*, 2011). Goleman *et al.* (2002) shed more light on this by stating that the most effective leaders are those who react to situations in accordance with one or more of the six different methods of leadership and systematically and skilfully adjusting between the different styles depending on the circumstances.

The 21st century is an era of continuous expansion in education and HEIs need effective academic leadership to better direct and organise educational efforts and resources towards predetermined objectives and mission. While management and leadership are remarkably closely related, leadership is more of a procedure by which a person affects the other members of a team or his subordinates towards the achievement of organisational objectives and missions. To clarify this point, McGoey conducted a survey in 2005 in order to evaluate human performance and detect a set of suitable criteria for assessing or measuring the effectiveness of academic leaders in HEIs (McGoey, 2005). Rosser *et al.* (2003), state that the effectiveness of academic leadership in HEIs is usually the outcome of informal evaluation of their style of leadership, the performance of tasks and personal traits or qualities.

A good number of scholars and researchers have been able to identify that there is a relationship between the effectiveness of leadership and some leadership styles. After such revelation, a curious scholar or researcher could be interested in understanding the determinants of the effectiveness of academic leaders of some HEIs, how they can be projected through a blend of variables, including their roles, competencies and leadership styles.

2.15 SUMMARY OF CHAPTER

This chapter has presented an overview of management and examined the four principal functions of management (planning, organising, leading and controlling). The evolution of management thought was discussed starting with Fayol who is considered as the founder and initiator of management ideas and made the first attempt to develop methods to manage very large organisations. His management thoughts greatly impacted other scholars such as Fredrick Winslow Taylor, who developed scientific management principles. Luther Gulick is another management scholar and a fan of Fayol and was greatly influenced by his ideas to extend his 14 principles by developing the acronym - POSDCORB in 1937 where he defined his seven management principles. Mintzberg, who was also a fan of Gulick, was inspired by Gulick to develop his ten management roles classified into three categories, which is the focus of this study.

According to Mintzberg (1973), managers everywhere at all levels, have similar managerial roles. However, these roles differ somehow in terms of the working environment, the characteristic traits of the manager, the kind of job to be done and the situation that surrounds or characterises the job to be done. Mintzberg's model decodes three categories (interpersonal, informational and decision-making) of ten managerial roles which give an empirical and behavioural description of the content of a manager's functions. Although Mintzberg's framework was developed from observing Chief Executive Officers, this model has been used and could still be used to examine and test

the job of top level, middle level and lower level managers as well as academic leaders in HEIs. This study also explains the importance of management as well as Mintzberg's managerial roles. The next chapter presents the research design and methodology used in conducting this study.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 INTRODUCTION

Research methodology is defined as an orderly approach to solve problems. It is the process of describing, explaining and predicting phenomenon (Rajasekar, Philominathan and Chinnathambi, 2006). According to Scandura and Williams (2000), a research methodology is important since it provides a structure for data collection and analysis thereby, drawing reliable conclusions based on the study.

The purpose of this chapter is to describe the research methodology employed to answer the research questions asked chapter one. The research methodology, the research philosophy, research approach, research design, population, sampling procedures, data collection instruments and procedures, questionnaire development, data validation and analysis, as well as research ethics are presented in this chapter.

3.2 RESEARCH PHILOSOPHY

Saunders *et al.* (2009) define a research philosophy as the development and nature of knowledge. The focus of a research philosophy is on the world view of things (Yin, 2009). A research philosophy informs the research strategy and method to be used as well as practical experiences. It links knowledge and the procedure by which they are known and developed to real-life situations (Saunders *et al.*, 2009). It is important since it helps to give a good research design (Easterby-Smith, Thorpe, & Lowe, 2003). There are four major research philosophies within business studies as follows: pragmatism; positivism; realism; and interpretivism. Pragmatism is an approach that evaluates theories or believes in terms of the success of their practical applications. The pragmatic

method looks at the current meaning or provisional true value of an expression that has to be determined by the practical consequences of the belief (Johnson and Onwuegbuzie, 2004). According to Creswell and Plano Clark (2011); Saunders *et al.* (2009), this philosophy focuses on thinking that has to choose between two different positions whereby, one is unrealistic in practice. In the process of determination, the research questions are used to make a choice between the two positions. Hence, both qualitative and quantitative methods can be used to solve real life problems. Secondly, positivism believes that only factual knowledge acquired through observed measurements is trustworthy (Collins, 2010). The approach depends of quantifiable observed measurements; hence, making use of quantitative methods.

According to Saunders *et al.* (2012) and Novikov and Novikov(2013), there are two types of realist research philosophies. Direct realists believe that the world is unchanging and focus on only one level such as an individual, a group or an organisation. Critical realists, appreciate the importance of a multi-level study. A critical realism research philosophy appreciates the influence and interrelationship between the individual, the group and the organisation. This research philosophy is preferred over direct realism due to its ability to capture the fuller picture when studying a phenomenon. The philosophy uses either the qualitative or quantitative research approach. Lastly, interpretivism requires that the researcher interprets elements of the study by integrating human interest into the study. According to the interpretivist approach, it is important for the researcher as a social actor to appreciate differences between people (Myers, 2008). Moreover, interpretivism studies usually focus on meaning and may employ multiple methods in order to reflect different aspects of the issue (Saunders *et al.* 2012).

3.3 RESEARCH APPROACH

Saunders *et al.* (2012) and Bryman & Bell (2015) propose three research approaches as follows: deductive; inductive; and abductive. To them, the deductive research approach tests the validity of a theory or hypothesis. The inductive adds to the rise of new theories. It starts with research questions, aims and objectives that need to be achieved during the research process, while the adductive starts with dilemmas and proceed with explanations. The inductive research approach was adopted in this study since interpretations were made after data collection.

Hoy (2010) defines a quantitative research approach as a scientific examination that integrates experiments and some systematic methods that reiterate control and quantified measures of performance. Muijs (2004), on his part, believes that a quantitative research approach explains phenomena by collecting numerical data that is analysed using mathematically-based methods. However, what can be deduced from both definitions is the fact that quantitative research investigates phenomena by using numbers and/or statistics to explain it vividly for a better understanding. The choice of a quantitative approach in this study was due to the fact that it is the best and accurate method to explain a numerical change as to whether the achievement of academic leaders in a selected HEI in South Africa with regard to Mintzberg's managerial roles are implemented in most cases. Moreover, a quantitative research approach is also an accurate method to investigate and explain the state of phenomena such as the state at which academic leaders at HEI in South Africa, adhere to Mintzberg's managerial roles. Considering the fact that the main aim of this study was to explore Mintzberg's managerial roles of academic leaders at a selected higher education institution in South Africa, rather than explaining it, a quantitative approach was considered to be the most appropriate for this study.

3.4 RESEARCH DESIGN

A research design is the overall strategy that is implemented in order to incorporate the different elements of the study in a logical and rational manner to ensure that the research problem is dealt with effectively. According to Harrits (2011), a research design are the steps used by researchers in order to complete a study. It is a detailed outline of how an investigation will take place. A research design will typically include how data is to be collected, what instruments will be used, how the instruments will be used and the intended means for analysing data collected. There are different types of research design (descriptive, correlation, causal and exploratory). A descriptive survey research design was used in conducting this study. A descriptive design aims at providing accurate and valid representation of factors relevant to the study.

3.4.1 Population of the study

A research population is commonly a collection of objects or people that have common characteristics constituting the major focus of a scientific inquiry and it is for their benefit that the research is conducted. Cooper and Schindler (2003) consider a population as the total collection object from which the researcher wants to draw a conclusion. However, because of the scarcity of resources such as time and money, it is often very difficult, if not, impossible for a researcher to test every individual due to the large size of the population. For the purpose of this study, a target population of 150 academic leaders were selected at a HEI in South Africa (from three campuses). These academic leaders are heads of every units, programme managers, school directors, deans, human resource managers, registrars, campus rectors and their deputies at a selected HEI in South Africa. Hoy (2010) maintains that because of the difficulty to test every individual and due to the scarcity of resources, it becomes imperative to limit the research population somehow, by using sampling techniques.

3.4.2 Sampling Techniques

Johnson and Christensen (2008), state that sampling is a procedure of selecting a sample out of a population. They further define a sample as “a set of elements taken from a larger population according to certain rules while an element is the basic unit selected from the population”, which can otherwise, be referred to as a subsection of a population. As such, sampling can easily be understood as the selection of a unit of individuals to measure from a bigger population.

According to Cohen *et al.* (2002), the quality of a good research is not only determined by the appropriate instrument and methodology used, but also by the suitable sampling strategy employed in the study. Saunders *et al.* (2000) identify two sampling techniques as follows: probability and non-probability sampling techniques. A probability sampling technique is one where every member of the research population has a known probability of being selected (Whitley, 2002). Saunders *et al.* (2000) maintain that survey and experimental research are associated to probability sampling. On the other hand, a non-probability sampling is when the probability of a sample being chosen is unknown. A probability sampling technique was used to identify academic leaders at the selected HEI in South Africa. There are different types of probability sampling techniques (Burns and Burns, 2008). A systematic sampling technique involves choosing an initial point in a sample structure then picking every ninth item thereafter. With a stratified sampling technique, the population is divided into subgroups and the sample frame reflects each group. With a simple random sampling technique, every element has an equal chance of being selected. A stratified random sampling technique was used in this study whereby, the population was divided into subgroups and a strata selected from the pool. According to Cooper and Schindler (2006), a stratified random sampling technique is applied because it diminishes bias in choosing a sample. It is also free of classification error and makes data interpretation easy and straight forward. A simple stratified random sampling technique was chosen as the best suited technique for this study

because it is more representative than other methods, less costly, address issues of validity, reliability and is consist in the data collection process.

According to Tustin *et al.* (2005), the sample size can be obtained using a statistical calculator called Raosoft sample size calculator. For this study, the population (all the managers) consisted of 400 academic leaders and the researcher used the Raosoft sample size calculator to estimate the sample size. The sample size was calculated at 95% confidence interval alongside a 5% error margin. Thus, the recommended sample was 150.

3.4.3 Data collection instrument and structure

A questionnaire was used in collecting data for the study. A questionnaire provides structure and numerical data by administering it (Wilson and McLean, 1994). Wisker (2009) also contends that a questionnaire is an easy and logical alternative to collect information and data from respondents. In support of Wisker, Walliman (2011) notes that the collection of data by administering a questionnaire to respondents is more preferable to other options such as interviews because a questionnaire is flexible. One of its advantages is that it can be preset and is specific. Confidentiality was enhanced during the completion of the questionnaire and academic leaders were requested not to fill in their names in the questionnaire. The questionnaire was an intrusion into the life and views about the application of Mintzberg's managerial roles by academic leaders.

3.4.3.1 Questionnaire development

According to Grover *et al.* (1993), a questionnaire is highly reliable and valid to obtain accurate and unbiased results on any one of Mintzberg's managerial roles. The questionnaire or survey instrument for this study contained questions regarding the extent to which academic leaders at a selected HEI practically apply Mintzberg's roles. The questionnaire items sought responses about the application of Mintzberg's managerial roles from academic leaders at HEIs in South Africa. The questionnaire was highly structured consisting solely of closed-ended questions for the frequencies of

responses to be statistically treated and analysed. Closed-ended questions with rating scales were used as they are easier and straightforward for respondents to complete, and also quicker and simpler for computers to analyse. Close-ended questions with rating scales were preferred in this study because they reduce the problem of respondents assuming responses to questions, which in most cases, the assumptions are usually wrong. The questionnaire was divided into two sections as follows: Section “A” focused on the demographic characteristics of respondents and section “B” was based on the application of Mintzberg’s managerial roles.

Section A: This section focused on demographic characteristics of respondents needed for this study. The eight variables in this section were: campus; gender; age range; race; educational qualification; job level; years of working experience and number of years in current position.

Section B: This section consisted of 27 questions relating to the three (interpersonal, information and decision) Mintzberg’s managerial roles in order to answer the research questions asked in Chapter 1 of this study. The questions asked in this section were aimed at addressing these roles and measured on a 6-point scale ranging as follows: 1= No extent, 2 = Some extent, 3 = Low extent, 4 = High extent, 5 = Great extent, 6 = All the time. The tables 3.1 below shows the various questions asked and the roles they are related to. As shown in Table 3.1, the roles column represents the following: 1 represents interpersonal roles and relates to objective one (in Chapter 1), 2 is the informational roles and objective two (in Chapter 1) and 3 is the decisional roles and objective three (in Chapter 1).

Table 3.1: Questions relating to the application of Mintzberg's managerial roles

QUESTIONS	Statements	Scale					
	How often do you exhibit the following roles in your academic managerial capacity?						
1	Playing a ceremonial role of representing your institution in every official meeting you attend?	1	2	3	4	5	6
2	Playing a symbolic role on behalf of your establishment in every official meeting you attend?	1	2	3	4	5	6
3	Speaking regularly on behalf of your institution whenever and wherever you represent it?	1	2	3	4	5	6
4	Signing of legal documents on behalf of your institution?	1	2	3	4	5	6
5	Welcoming of guests on behalf your institution?	1	2	3	4	5	6
6	Informing staff about upcoming activities of their departments?	1	2	3	4	5	6
7	Chairing meetings as a representative of your institution?	1	2	3	4	5	6
8	Mentoring and coaching new staff to ensure that they meet up with institutional objectives?	1	2	3	4	5	6
9	Motivating new staff to ensure that they work at their optimum capability to achieve institutional goals?	1	2	3	4	5	6
10	Training, new staff to ensure that they are well-equipped to work for the achievement of institutional objectives?	1	2	3	4	5	6
11	Recruiting new staff to ensure that institutional objectives are achieved?	1	2	3	4	5	6
12	Ensuring that there is effective coordination of staff within your institution?	1	2	3	4	5	6

13	Interrelating with subordinates in order to encourage solidarity among staff?	1	2	3	4	5	6
14	Networking with peers in order to boost teamwork among staff?	1	2	3	4	5	6
15	Initiating and designing necessary changes to improve staff performance within your organisation?	1	2	3	4	5	6
16	Creating contacts and cordial relations with partners and informants of your institution?	1	2	3	4	5	6
17	Dealing with disputes among staff and taking corrective actions to resolve the problem?	1	2	3	4	5	6
18	Attending social gatherings as a representative of your institution in order to create useful work-related contacts?	1	2	3	4	5	6
19	Implementing disciplinary measures to sanction misconduct perpetrated by any staff in your institution?	1	2	3	4	5	6
20	Put in effort to gather up-to-date information for your institution by searching the social media to be current?	1	2	3	4	5	6
21	Allocating equipment and materials to staff to enable their job performance?	1	2	3	4	5	6
22	Creating your own contacts within and outside the institution in order to establish a personal informal information network?	1	2	3	4	5	6
23	Ensuring that equipment and materials are used cautiously by staff to avoid waste of valuable resources?	1	2	3	4	5	6
24	Convening regular meetings where major decisions are made and communicated to subordinates?	1	2	3	4	5	6
25	Bargaining and discussing important matters on behalf of your institution with other partners?	1	2	3	4	5	6

26	Conveying important information received from outside sources to staff so that everyone is abreast with what is happening?	1	2	3	4	5	6
27	Constructing mutually beneficial relationships with and among your staff?	1	2	3	4	5	6

3.4.4 Data analysis

Data from the questionnaire was analysed using statistical procedures and tests in order to give meaning to the data and the research. SPSS 23 software was used for data analysis. Descriptive, factor analysis and cross tabulation analysis were used. Cronbach's alpha test was used to test for reliability of the questionnaire. The section on demographic characteristics of respondents (Section A) are presented in charts and frequencies tables, followed by the application of Mintzberg's managerial roles (Section B) through tables and charts. The Kaiser- Meyer- Olkin test was used to measure the adequacy of the sample, followed by factor analysis. The factor analysis for the application of Mintzberg's managerial roles starts with the Box's test of equality of covariance matrices, followed by the multivariate test of the application of the Mintzberg's managerial roles, Levene's test of equality of variances, test of between-subjects effects of Mintzberg's managerial roles and lastly, the estimated marginal means.

3.4.5 Validity and reliability of data

According to Babbie and Mouton (2001), data validation shows the extent to which empirical measures reflect the real meaning of the concept under investigation. Procedures by means of which the validity of measures are assessed or evaluated are referred to as validation (Ghiselli *et al.*, 1981). There are different types of validity as follows: Face validity which relates to whether the instrument measured what it had to measure (Brink, 2006). Content validity, on the other hand, denotes the degree to which

the items of the instrument represent the theoretical content of the construct to be measured (Struwig and Stead, 2001). It relates to a specific procedure in constructing an instrument rather than performing statistical measurements. Construct validity involves establishing the extent to which an instrument effectively measures the theoretical construct that it intended to measure (Delpont, 2002). The process of establishing construct validity begins by understanding the meaning of the construct and hypothesising its relationship to other variables or constructs. Confirmation of the validity of data collected was through a validity instrument.

Reliability is the degree to which the instrument used for measurement gives results that are consistent. In this study, an internal consistency reliability instrument was used whereby, the same questionnaire was completed by all respondents.

3.4.6 Research ethics

Ethical approval to conduct the study was obtained from the relevant authorities of the institution under investigation. The institution issued two letters authorizing the researcher to conduct the study; the first letter solicits the consent of respondents to participate in the research by completing the questionnaire; while the other letter explained the importance and purpose of the study. The letters are attached as Appendix "A" of this study. All potential respondents were fully informed of the procedures and objectives of the study.

3.5 SUMMARY OF CHAPTER

This chapter has presented the research design and procedures used in conducting this study. The interpretivist research approach as well as a quantitative research method was employed in the study. Academic leaders of the selected higher education institution constituted the population of the study and the sample size chosen using the Raosof sample size calculator. In order to achieve the intended aim of the study, a questionnaire was used an instrument to collect data. The questionnaire consisted

mainly of closed-ended questions divided into three sections (demographic characteristics of respondents, application and importance of Mintzberg's managerial roles). Data was analysed using descriptive statistics, factor analysis and cross tabulations. A validity and reliability test was taken into consideration. Ethical considerations for conducting the study were adhered to. The next chapter is data analysis and interpretation.

CHAPTER FOUR

DATA ANALYSIS AND INTERPRETATION

4.1 INTRODUCTION

This chapter presents the analysis and interpretation of data collected through the questionnaire. The results address the objectives of the study indicated in Chapter 1. The Statistical Package for Social Sciences (SPSS 23) was used to analyse the data. A 5% probability value was chosen for the inferential statistics. The results are presented in tables and charts (figures). This chapter presents the demographic characteristics of respondents and the application of Mintzberg's managerial roles.

4.2 INITIAL RESULTS

This section focuses on the response rate of questionnaires returned and reliability of the instrument.

4.2.1 Response rate

The population of this study consisted of 150 academic leaders at a selected Higher Education Institution in South Africa. However, since many people do not always fill online questionnaires, the researcher used the Raosoft sample size calculator to estimate the sample size. In order to calculate the sample size, a 95% confidence interval was used alongside a 5% error margin. The recommended sample size for this study was 109 respondents. The number of questionnaires sent to academic leaders in management positions at the three campuses of the selected HEI was 109. Out of this number, 91 were fully completed while 18 were partially completed, giving a response rate of 83.49% used in the analysis.

4.3 DEMOGRAPHIC CHARACTERISTICS OF RESPONDENTS

This section of the questionnaire consisted of eight questions. The items requested personal and managerial information of respondents in order to achieve the objectives of the study.

4.3.1 Campus of respondents

The results reveal that out of the 91 respondents, campus 2 has the highest number of academic leaders with 51 leaders, followed by campus 1 with 29 leaders and then campus 3 with only 11 academic leaders. This distribution is proportionate with the student statistics at this institution as published by Petersen (2016). Campus 2 has the highest number of students, followed by Campus 1 and lastly, Campus 3. Hence, the more the number of students, the greater the number of management staff as presented in Table 4.1 below.

Table 4.1: Campus of respondents

Campus	Frequency	Percentage	Valid percentage	Cumulative percentage
CAMPUS 1	29	31.9	31.9	31.9
CAMPUS 2	51	56.0	56.0	87.9
CAMPUS 3	11	12.1	12.1	100.0
TOTAL	91	100.0	100.0	

The reason for testing the campus of respondents was because the higher education institution selected for this study, has three campuses. These campuses have different administrative structures to manage their various daily activities, although they are all under the supervision and management of the

Head Office, otherwise known as the Institutional Office. Therefore, it is imperative to test the campus of respondents in order to know how many academic leaders there are in each of the three campuses and how much of Mintzberg's managerial principles are implemented in the daily management of the campuses. Figure 4.1 shows that majority of respondents were in campus 2 with 56.0%, campus 3 had the lowest percentage (12.1% response rate) while Campus 1 had 31.9% response rate.

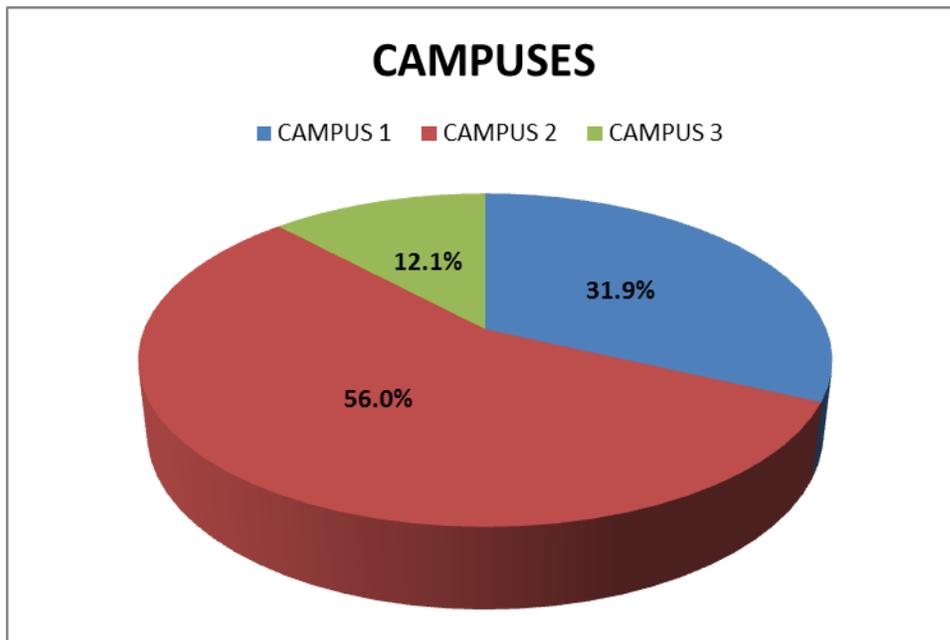


Figure 4.1: Campus of respondents

4.3.2 Gender of respondents

In order to avoid any sensitivity based on gender, respondents were requested to state their gender (male or female). The results reveal that more males completed the questionnaire compared to females as shown in Table 4.2. This may, perhaps, be due to the fact that more men are in administrative positions compared to women at the selected HEI. The results in Table 4.2 show that out of

the 91 respondents who participated in this study, 52 were males while 39 were females.

Table 4.2: Gender of respondents

Gender	Frequency	Percentage	Valid percentage	Cumulative percentage
Male	52	57.1	57.1	57.1
Female	39	42.9	42.9	100.0
Total	91	100.0	100.0	

The purpose of testing the gender of respondents was to find out how many males and how many females occupy administrative positions at this Institution. Figure 4.2 shows that 57.1% of respondents were males while 42.9% were females. Although the number of females is slightly lower compared to males, a response rate of 42.9% was recorded for females. This is an indication that there has been an increase in the number of females in administrative position over the years. This result is in line with that of Bhatti *et al.* (2010), who found that an increasing number of women have been participating in the workforce due to economic incentives and the prioritisation of female employment.

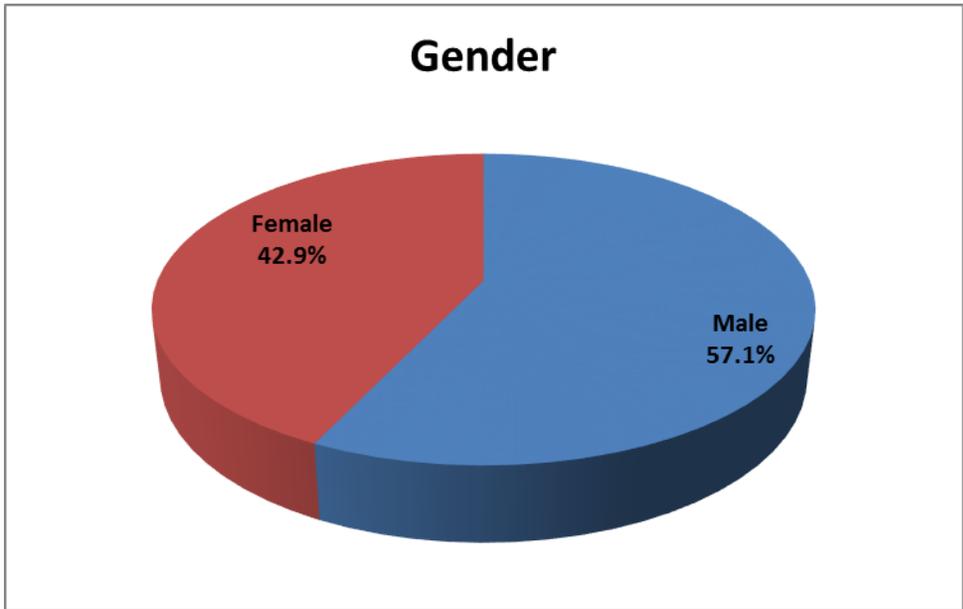


Figure 4.2: Gender of respondents

4.3.3 Age of respondents

Table 4.3 shows that out of the 91 respondents who participated in the study, only 2 are aged between 20 and 29 years, 21 fall within the 30 – 39 age bracket, 22 fall within the 40 – 49 age bracket, 25 are aged between 50 and 59 while 21 are above 60 years old. The results reveal that at this institution, those who occupy management positions are aged between 20 and 60 years, hence, people of all age groups occupy leadership/management positions at this institution.

Table 4.3: Age of respondents

Age	Frequency	Percentage	Valid percentage	Cumulative percentage
20 - 29 years	2	2.2	2.2	2.2
30 - 39 years	21	23.1	23.1	25.3
40 - 49 years	22	24.2	24.2	49.5
50 - 59 years	25	27.5	27.5	76.9
Above 60 years	21	23.1	23.1	100.0
TOTAL	91	100.0	100.0	

The age range of respondents provides an understanding of their ages *vis-à-vis* management positions at this institution. This age range reveals the age of respondents in management positions at this HEI. Figure 4.3 shows that 2.2% of respondents fall within 20 – 29 age group, 23.1% fall within the 30 – 39 age bracket, 24.2% fall within the 40 – 49 age group, 27.5% are between 50 and 59 while 23.1% are above 60 years. The results show that on average, majority (27.5%) of respondents in management positions at this HEI in South Africa, fall within the 50 to 59 age bracket while the lowest category (2.2%) falls within the 20 to 29 age group. The lowest percentage (2.2%) of people between the ages of 20 and 29 could be due to the fact that at this age, many people are still attending school.

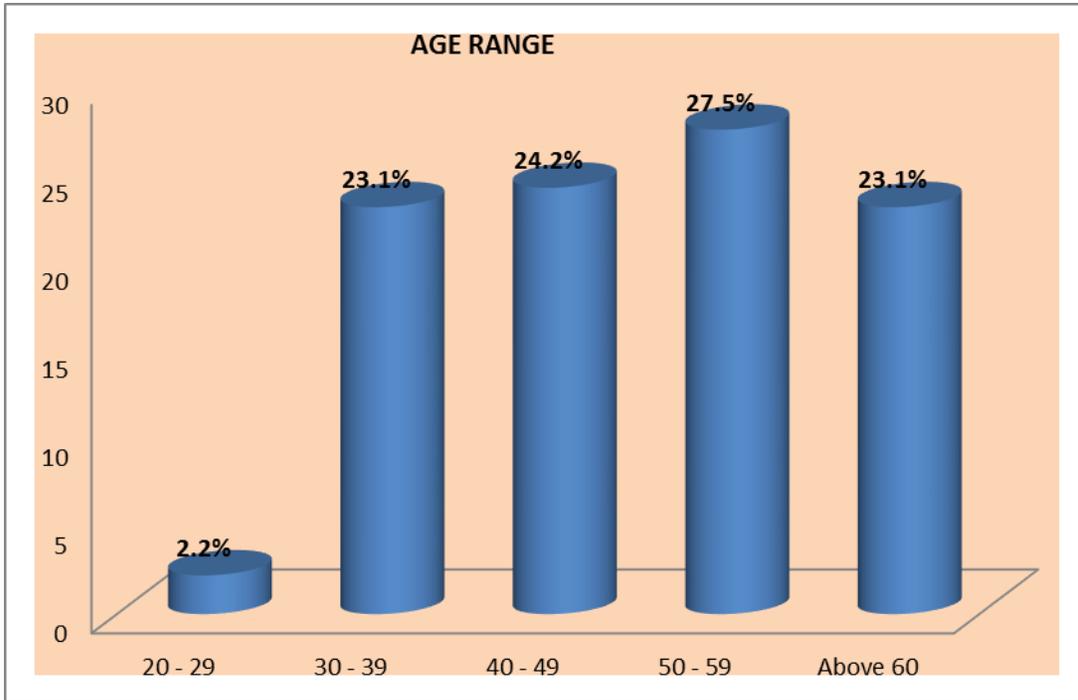


Figure 4.3: Age of respondents

4.3.4 Race of respondents

Table 4.4 shows that out of the 91 academic leaders who participated in the study, 34 were Africans while 57 were whites. It is important to know the race in management positions at this HEI in South Africa. The results reveal that majority of respondents were whites (62.6%) while 37.4% were Africans. This is an indication that more than half of the number of respondents who participated in the study were whites. This could be due to the fact that the majority of the population at the selected HEI are whites, hence most of them occupy management positions.

Table 4.4: Respondent's Race

RACE	Frequency	Percentage	Valid percentage	Cumulative percentage
African	34	37.4	37.4	37.4
White	57	62.6	62.6	100.0
Total	91	100.0	100.0	

The motive for testing the race of respondents is because South Africa is a multi-racial country (Blacks, whites, coloureds and Indians). This item of the questionnaire enabled the researcher to establish if the race of respondents influences their application of Mintzberg's managerial roles. Therefore, it is imperative to test the race of respondents in order to know how many respondents from the different races occupy leadership positions at this Institution. Figure 4.4 shows a 62.6% response rate for whites and a 37.4% response rate for Africans; an indication that there are more whites in leadership positions at this institution than Africans.

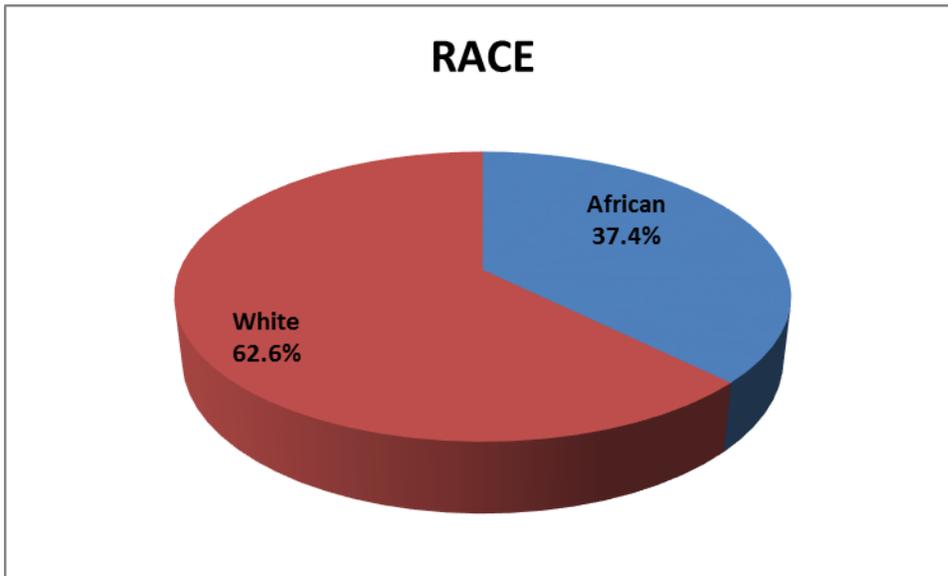


Figure 4.4: Race of respondents

4.3.5 Respondents' Highest educational level

The results in Table 4.5 shows that out of the 91 respondents who participated in the survey, 9 have a Bachelor's degree, 14 are holders of an Honours degree, 21 have a Master's degree while 47 have a PhD.

Table 4.5: Respondents' Highest educational level

Qualification	Frequency	Percentage	Valid percentage	Cumulative percentage
Bachelor's degree	9	9.9	9.9	9.9
Honours degree	14	15.4	15.4	25.3
Master's degree	21	23.1	23.1	48.4
PhD	47	51.6	51.6	100.0
Total	91	100.0	100.0	

The purpose of testing the highest level of education of respondents is because managerial positions often require a certain level of qualification in higher education institutions. The purpose of this item was to find out the level of education of managers/academic leaders at this institution. Level of education has a direct bearing on the number of academic leaders at that level of management. The results show that, the higher the educational level of respondents, the higher level or category of academics in management positions at this institution. Figure 4.5 shows that 51.6% of respondents have a PhD while 23.1% have a Master's degrees, 15.4% have Honours degrees and 9.9% have Bachelor degrees.

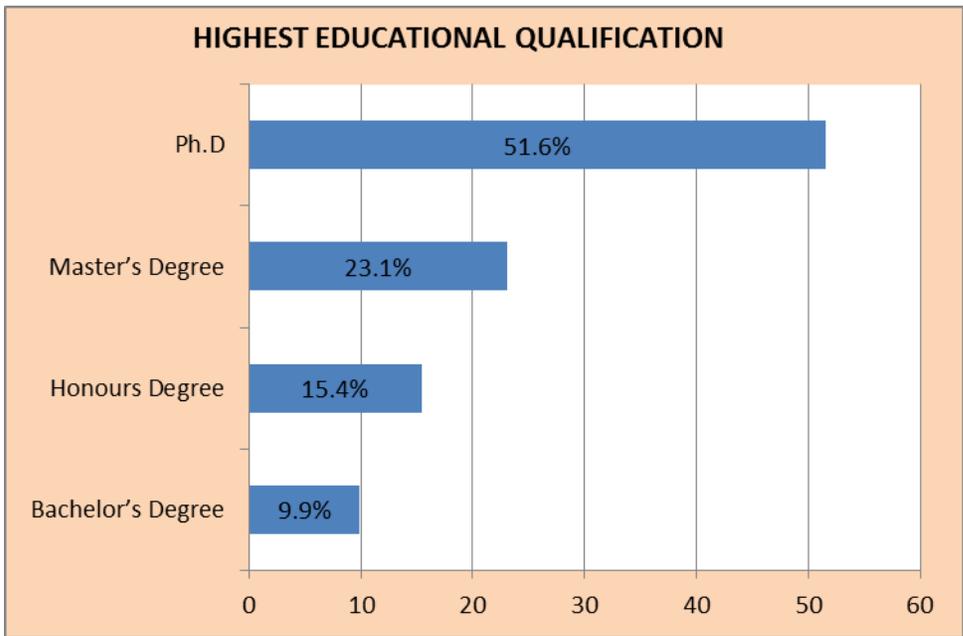


Figure 4.5: Respondents' Highest educational level

4.3.6 Current job level of respondents

Table 4.6 below shows that out of the 91 respondents who participated in the study, 24 are academic programme managers, 18 are academic school directors, 2 are deans of study and 47 fall within the category of 'others' (that is, heads or managers of units such as Human Resources, Finance, IT, Research and Protection), none of the rectors of the three campuses responded to the questionnaire.

Table 4.6: Current job level of respondents

Current job level	Frequency	Percentage	Valid percentage	Cumulative percentage
Academic programme manager	24	26.4	26.4	26.4
Academic school director	18	19.8	19.8	46.2
Deans	2	2.2	2.2	48.4
Others	47	51.6	51.6	100.0
Total	91	100.0	100.0	

The purpose of testing the current job level of respondents was to determine the impact of current job level to management effectiveness of academic leaders at this institution. Figure 4.6 show that none of the campus rectors completed the questionnaire. 26.4% of academic programme managers, 19.8% of academic school directors, 2.2% of deans and 51.6% representing 'others' completed the survey.

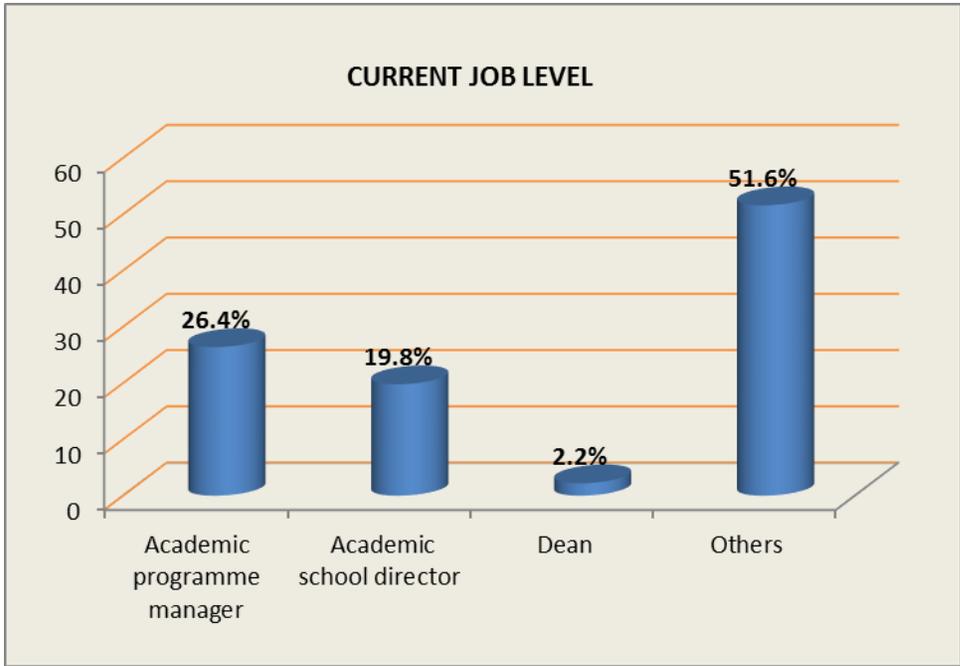


Figure 4.6: Current job level of respondents

4.3.7 Years of work experience of respondents

Table 4.7 below shows that out of the 91 respondents who participated in the study, 18 have been working for 0 – 5 years, 15 have 6 – 10 years of work experience, 15 have 11 – 15 years of work experience while 43 have more than 15 years of work experience.

Table 4.7: Years of work experience of respondents

Years of work experience	Frequency	Percentage	Valid percentage	Cumulative percentage
0 - 5 years	18	19.8	19.8	19.8
6 - 10 years	15	16.5	16.5	36.3
11 - 15 years	15	16.5	16.5	52.7
15+ years	43	47.3	47.3	100.0
Total	91	100.0	100.0	

The purpose of this item was to find out how long respondents have been in their current positions. Responses enabled the researcher to establish if their experience had an influence on their application of management principles such as Mintzberg's managerial roles in the execution of their duties as academic leaders. Figure 4.7 below shows that 19.8% of respondents have been in their positions for 0 – 5 years, 16.5% have 6 – 10 years, 16.5 have 11 – 15 years while 47.3% have above 15 years of work experience. On average, 50% of respondents have more than sixteen years of work experience and 16.03% have less than 5 years of work experience.

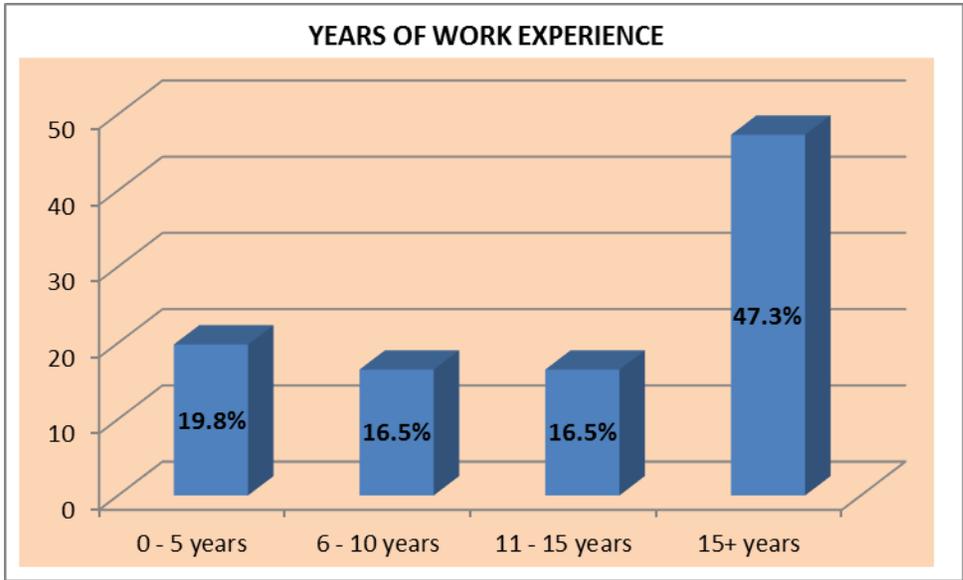


Figure 4.7: Years of work experience of respondents

4.3.8 Number of years in current position

Table 4.8 below shows that out of the 91 respondents who participated in the study, 51 have been in their current positions for 0 – 5 years, 16 for 6 – 10 years, 12 have been in their current positions for 11 – 15 years while 12 have been in their current positions for more than 16 years.

Table 4.8: Number of years in current position

Current job level	Frequency	Percentage	Valid percentage	Cumulative percentage
0 - 5 years	51	56.0	56.0	56.0
6 - 10 years	16	17.6	17.6	73.6
11 - 15 years	12	13.2	13.2	86.8
16+ years	12	13.2	13.2	100.0
Total	91	100.0	100.0	

The purpose of this question was to find out the number of years respondents have been in their current positions. This item enabled the researcher to establish if the number of years in their current positions could influence their application of Minzberg's managerial roles. The results revealed that 56.0% of respondents have been in their current positions for less than five years. This may be due to the fact that in many institutions or organizations, most often, middle level and top level managers have fixed terms of office (three or five years as the case may be, depending on the constitution of the organization), beyond which the managers are not expected to occupy the office. 17.6% of respondents have been in their current positions for 6 - 10 years, 13.69% have been in their current positions for 11 -15 years, while 13.69% have been in their current positions for more than 16 years.

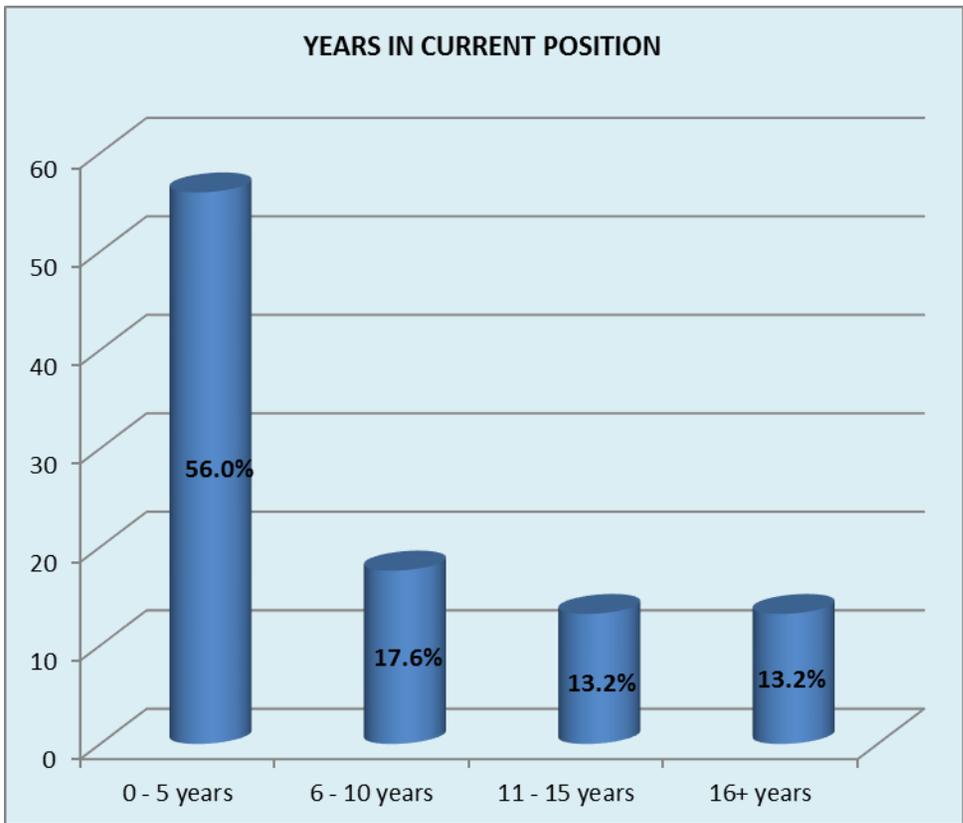


Figure 4.8: Number of years work in current position

4.4 FACTOR AND RELIABILITY ANALYSIS

In this section, an exploration of the application of the Mintzberg’s managerial roles is done. It begins with the Sampling Adequacy and Factorability of the correlation Matrix, followed by the determination of the number of factors to extract, descriptive statistics and correlation of Mintzberg’s managerial roles and lastly, the Multivariate test of the application of Mintzberg’s managerial roles.

4.4.1 Sampling adequacy and factorability of the correlation Matrix

The Kaiser-Meyer-Olkin Measure (KMO) and Bartlett's Test were used to test the adequacy of the sample and the factorability of the correlation matrix of the data. The results are presented in Table 4.9.

Table 4.9: Determination of sampling adequacy and factorability of the Correlation Matrix

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin measure of sampling adequacy		0.91
Bartlett's test of sphericity	Approx. Chi-Square	2593.32
	df	351
	Sig.	0.00

Note that df = degree of freedom and sig. = level of significance

Table 4.9 above show that the results and the KMO of 0.91 are greater than the benchmark of 0.7; indicating sufficient items for each factor. A significant p-value of the Bartlett's test of sphericity implies that the correlation matrix is factorable (not an identity matrix).

4.4.2 Determination of the number of factors to extract

It is important to determine the number of factors even though there are three factors. This test determines factors to extract from the 27 items on the application of Mintzberg's managerial roles. The items are summarised in Tables 4.10 to 4.12 below.

Table 4.10: Questions on Mintzberg's interpersonal roles

QUESTIONS	Label
Questions on interpersonal roles	
Playing a ceremonial role of representing your institution in every official meeting you attend?	Ceremonial
Playing a symbolic role on behalf of your establishment in every official meeting you attend?	Symbolic
Signing of legal documents on behalf of your institution?	Signing
Welcoming of guests on behalf your institution?	Welcoming
Motivating new staff to ensure that they work at their optimum capability to achieve institutional goals?	Motivating
Training, new staff to ensure that they are well-equipped to work for the achievement of institutional objectives?	Training
Recruiting new staff to ensure that institutional objectives are achieved?	Recruiting
Creating contacts and cordial relations with partners and informants of your institution?	Creating
Attending social gatherings as a representative of your institution in order to create useful work-related contacts?	Attending

Table 4.11: Questions on Mintzberg’s informational roles

QUESTIONS	Label
Questions on informational roles	
Speaking regularly on behalf of your institution whenever and wherever you represent it?	Communicating
Informing staff about upcoming activities of their departments?	Informing
Chairing meetings as a representative of your institution?	Chairing
Networking with peers in order to boost teamwork among staff?	Networking
Put in effort to gather up-to-date information for your institution by searching the social media to be current?	Gathering
Creating your own contacts within and outside the institution in order to establish a personal informal information network?	Contacting
Convening regular meetings where major decisions are made and communicated to subordinates?	Convening
Conveying important information received from outside sources to staff so that everyone is abreast with what is happening?	Conveying

Table 4.12: Questions on Mintzberg’s decisional roles

Questions on decisional roles	Label
Mentoring and coaching new staff to ensure that they meet up with institutional objectives?	Mentoring
Ensuring that there is effective coordination of staff within your institution?	Coordinating
Interrelating with subordinates in order to encourage solidarity among staff?	Interrelating
Initiating and designing necessary changes to improve staff performance within your organisation?	Initiating
Dealing with disputes among staff and taking corrective actions to resolve the problem?	Dealing
Implementing disciplinary measures to sanction misconduct perpetrated by any staff in your institution?	Implementing
Allocating equipment and materials to staff to enable their job performance?	Allocating
Ensuring that equipment and materials are used cautiously by staff to avoid waste of valuable resources?	Ensuring
Bargaining and discussing important matters on behalf of your institution with other partners?	Bargaining
Constructing mutually beneficial relationships with and among your staff?	Constructing

In order to determine the number of factors to be extracted, the Kaiser’s rule of eigenvalues was used. The results are presented in Table 4.13. The Kaiser’s rule of eigenvalues greater than 1, suggests that three factors should be extracted which account for 75.69% of the total variance. The variance explained by the three factors is acceptable because it is more than 50%. The results are presented in Table 4.13.

Table 4.13: Determination of the number of factors to extract

Total variance explained			
Component	Initial eigenvalues		
	Total	% of variance	Cumulative %
1	17.50	64.82	64.82
2	1.92	7.12	71.94
3	1.01	3.75	75.69

Three factors were extracted and the results presented in Table 4.14. Based on the results, the values under the different columns show the value that respondents would have scored had they responded to the factor questions. When the value is greater than 0.3 and in a sequential row, it is an indication that the variables form a set of factors. It is also an indication that questions under interpersonal roles pertain to one set of correlated variables since the values are greater than 0.3. Also, questions under the decisional roles clearly relate to another factor and hence, depict a set of correlated variables. The questions on informational roles relate to the third set of factors.

An exploratory factor analysis was done in order to determine the number of factors extracted. The results are presented in Table 4.14. In this study, three major factors were extracted (interpersonal, information and decisional roles based on Mintzberg's management model).

Based on the results presented in Table 4.14, the values under the different columns show the value that respondents would have scored had they responded to the factor questions. When the value is greater than 0.3 and in a sequential row, it is an indication that the variables form a set of factors.

Table 4.14: Equamax rotated factor solution of the application of Mintzberg's managerial roles

ROLES	COMPONENT		
	1 Informational	2 Interpersonal	3 Decisional
Ceremonial	0.11	0.86	0.16
Symbolic	0.16	0.90	0.20
Speaking	0.26	0.80	0.32
Chairing	0.43	0.68	0.32
Attending	0.39	0.57	0.45
Welcoming	0.42	0.75	0.24
Signing	0.19	0.48	0.55
Recruiting	0.54	0.37	0.54
Dealing	0.50	0.26	0.71
Implementing	0.24	0.29	0.78
Gathering	0.13	0.41	0.70
Allocating	0.46	0.10	0.76
Bargaining	0.30	0.46	0.57
Convening	0.68	0.28	0.45
Informing	0.65	0.40	0.28
Mentoring	0.73	0.29	0.38
Motivating	0.75	0.26	0.42
Training	0.78	0.36	0.35
Coordinating	0.72	0.48	0.42
Interrelating	0.75	0.37	0.38
Networking	0.73	0.48	0.32
Initiating	0.67	0.38	0.51
Creating	0.70	0.42	0.42
Contacting	0.64	0.27	0.28
Ensuring	0.64	0.21	0.53
Convening	0.62	0.32	0.52
Constructing	0.72	0.31	0.44

Table 4.14 above, show that items under interpersonal roles pertain to one set of correlated variables since the values are greater than 0.3. Also, items under decisional roles clearly relate to another factor and hence, depict a set of correlated variables. Questions on the informational roles related to the third set of factors.

The regression factor scores for interpersonal, decisional and information roles were saved through SPSS and used as input in subsequent analysis.

4.4.3 Descriptive statistics of Mintzberg managerial roles

The descriptive statistics of Mintzberg's managerial roles in this section begins with descriptive statistics of the three factors, followed by correlation of the three factors and lastly, by item descriptive statistics of interpersonal, informational and decisional roles.

4.4.3.1 Descriptive statistics of the three factors

Descriptive statistics were done for the three factors and the results are presented in Table 4.15. The descriptive statistics present results of the mean, standard deviation, skewness, kurtosis and alpha.

The mean value of interpersonal roles is 3.11 (sd =1.23), showing a low to high extent of the application of this role. Also, skewness value is -0.13, and the value is close to zero; hence, the distribution is symmetric for the interpersonal role. Furthermore, the kurtosis of -0.63 shows that the shape of the data matches with the Gaussian distribution hence, the distribution is normally distributed. Lastly, the alpha value of 0.93 indicates that the reliability test is good, since it is above the 75% lower reliability limit.

The mean value of informational roles is 3.50 (sd = 1.29), this shows as well that application of this role is between low to high extent. Also, skewness value is -0.45, and the value is close to zero; hence, the distribution of informational role is symmetric. Furthermore, the kurtosis of -0.57 shows that data for the informational role is normally distributed while the alpha value of 0.92 shows that the test is reliable.

The mean value of decisional roles is 3.50 (sd = 1.29), this shows as well that application of this role is between low to high extent. Also, skewness value is -0.45, this value is close to zero; hence, distribution of informational roles is symmetric. Furthermore, the kurtosis of -0.57 shows that data for the informational role is normally distributed. The results of the alpha show 95.7%; an indication that the reliability test is good, above the 75% lower reliability limit.

The alpha of the interpersonal (0.93), informational (0.92) and decisional (0.96) roles are all greater than 0.75, hence, it could be concluded that there is a high level of consistency in this data set.

Table 4.15: Descriptive statistics of Mintzberg’s managerial roles

	Mean	Std. deviation	Skewness	Kurtosis	α
Interpersonal	3,1133	1,23433	-,133	-,627	,925
Informational	3,4994	1,28697	-,454	-,568	,920
Decisional	3,4757	1,41405	-,429	-,821	,957
Valid N (list wise)					

4.4.3.2 Results of the correlation test of the three factors

The Pearson correlation test was used to test the correlation between the application of interpersonal, informational and decisional roles. If the probability value is less than 5%, then the coefficients are significant. The results are presented in Table 4.16.

Table 4.16 below presents the relationship with Mintzberg’s managerial roles. The results reveal that there is a high significant and positive correlation ($r=0.92$, $p<0.00$) between informational and interpersonal roles. Also, decisional and interpersonal roles are significant and highly and positively correlated ($r=0.89$, $p<0.00$). Lastly, informational and decisional roles are significant and highly and positively correlated ($r=0.92$, $p<0.00$).

The significant positive correlation between these roles, imply that the more the application of one of these roles, the higher the application of the other. They both increase or decrease together.

Table 4.16: Correlation Test Results of the Mintzberg’s Managerial Roles

		Interpersonal	Informational	Decisional
Interpersonal	Pearson correlation	1		
	Sig. (2-tailed)			
	N	91		
Informational	Pearson correlation	.918**	1	
	Sig. (2-tailed)	,000		
	N	91	91	
Decisional	Pearson correlation	.885**	.916**	1
	Sig. (2-tailed)	,000	,000	
	N	91	91	91

After the correlation test, the next items are the descriptive statistics of interpersonal, informational and decisional roles.

4.4.3.3 Descriptive statistics on interpersonal, informational and decisional roles

Descriptive statistics was done for the item on interpersonal, informational and decisional roles.

4.4.3.3.1 Descriptive statistics on interpersonal roles

Muma *et al.* (2006) state that figurehead; leadership and liaison roles are the interpersonal roles of Mintzberg’s managerial roles. Table 4.17 presents the views of respondents regarding the questions on interpersonal roles.

Table 4.17: Descriptive statistics on interpersonal roles

Item	Mean	No extent	Some extent	Low extent	High extent	Great extent	All the time
Ceremonial	2,6484	24	27	12	17	7	4
Symbolic	2,7912	22	26	10	19	10	4
Signing	2,4286	34	19	17	12	4	5
Welcoming	3,0330	18	20	15	21	13	4
Motivating	3,7473	17	6	8	25	22	13
Training	3,4066	17	12	13	26	12	11
Recruiting	3,2088	25	11	12	17	15	11
Creating	3,5604	16	7	14	26	20	8
Attending	3,2088	14	17	17	26	13	4

The results reveal that out of the 91 respondents, 24 academic leaders at the selected HEI do not play ceremonial roles at all, 27 perform ceremonial roles to some extent, 12 to a low extent, 17 to a high extent, 7 to a great extent and 4 respondents perform ceremonial roles all the time.

22 academic leaders at this institution do not perform symbolic roles on behalf of their establishment during every official meeting, 26 perform this role to some extent, 10 do so to a low extent, 19 respondents perform this role to a high extent, 10 do so to a great extent, while 4 respondents perform this role all the time.

The signing of legal documents on behalf of the institution is not done by 34 academic leaders, 19 respondents carry out this role to some extent, 17 do so to a low extent, 12 perform this function to a high extent, 4 to a great extent and 5 respondents perform this function all the time.

18 respondents welcome guests on behalf of the institution, 20 perform this role to some extent, 15 to a low extent, 21 to a high extent, 13 to a great extent and 4 of them do so all the time.

17 academic leaders at this institution motivate new staff members to ensure that they work at their optimum capability in order to achieve institutional goals, 6 do so to some extent, 8 perform this function to a low extent, 25 to a high extent, 22 to a great extent and 13 do so all the time.

The results reveal that 17 academic leaders do not take part in the training of new staff members to ensure that they are well-equipped to work for the achievement of institutional objectives, 12 respondents perform this role to some extent, 13 to a low extent, 26 to a high extent, 12 to a great extent and 11 respondents do so all the time.

At this institution, 25 out of the 91 academic leaders do not take part in the recruitment of staff, 11 are involved in the recruitment process to some extent, 12 to a low extent, 17 to a high extent, 15 to a great extent and 11 of the perform this role all the time.

16 academic leaders at this institution are not involved in creating contacts and cordial relations with partners and informants on behalf of the institution, 7 do so to some extent, 14 to a low extent, 26 to a high extent, 20 to a great extent and 8 of them perform this role all the time.

From the results obtained, only 14 academic leaders at this institution do not attend social gatherings as representatives of the institution in order to create useful work related contacts, 17 of the respondents perform this role to some extent, 17 to a low extent, 26 to a high extent, 13 to a great extent and 4 do so all the time.

From the mean values, the signing (2.43) of legal documents is done to some extent and to a low extent, the mean is close to 2 while ceremonial (2.65) and symbolic (2.79) roles are performed to a low extent. The welcoming (3.03), motivating (3.75), training (3.41), recruiting (3.21), creating (3.56) and attending (3.21) is done to a low and high extent.

It is, therefore, concluded that interpersonal roles are performed at the selected HEI by academic leaders even though the extent of its application differs. On average, 21

academic leaders do not perform interpersonal roles while 70 respondents apply interpersonal roles to a varied extent.

4.4.3.3.2 Descriptive statistics on informational roles

According to Muma *et al.* (2006), monitoring, disseminating and acting as a spokesperson are roles that make up the informational role of Mintzberg's managerial roles. The descriptive statistics on informational roles is presented in Table 4.18.

Table 4.18: Descriptive statistics on informational roles

Item	Mean	No extent	Some extent	Low extent	High extent	Great extent	All the time
Communicating	3,0220	23	16	14	19	12	7
Informing	3,7473	11	17	8	22	14	19
Chairing	3,3187	15	17	16	20	13	10
Networking	3,9121	10	10	9	24	25	13
Gathering	2,7582	23	21	16	20	8	3
Contacting	3,7473	12	10	16	15	27	11
Convening	3,7582	13	11	11	21	20	15
Conveying	3,7363	14	10	14	16	22	15

The result reveal that out of the 91 respondents, 23 academic leaders at this institution do not convene regular meetings where major decisions are made and communicated to

subordinates, 16 perform this role to some extent, 14 to a low extent, 19 to a high extent, 12 to a great extent and 7 of them perform this role all the time.

The results also reveal that 11 academic leaders at this institution do not inform staff about upcoming activities of their departments, 12 to some extent, 8 to a low extent, 22 to a high extent, 14 to a great extent and 19 perform this role all the time.

At this institution, 15 academic leaders do not chair meetings, 17 perform this role to some extent, 16 to a low extent, 20 to a high extent, 13 to a great extent and 10 perform this function all the time.

10 academic leaders at this institution do not perform the informational role of networking with peers in order to boost teamwork among staff, 10 perform this role to some extent, 9 to a low extent, 24 to a high extent, 25 to a great extent and 13 do so all the time.

23 academic leaders are not involved in gathering up-to-date information for the institution, 21 perform this role to some extent, 16 to a low extent, 15 to a high extent, 27 to a great extent and only 3 do so all the time.

12 academic leaders are not involved in creating contacts within and outside the institution in order to establish a personal informal information network, 10 do this to some extent, 16 to a low extent, 15 to a high extent, 27 to a great extent and 11 perform this role all the time.

At this institution, 13 academic leaders are not involved in convening regular meetings where major decisions are made and communicated to subordinates, 11 perform this role to some extent, 11 to a low extent, 21 to a high extent, 20 to a great extent and 15 do this all the time.

14 academic leaders at this institution are not involved in conveying important information received from outside sources to staff so that everyone is abreast with what is happening in the institution, 10 perform this role to some extent, 14 to a low extent, 16 to a high extent, 22 to a great extent and 15 do this all the time.

Based on the mean values, apart from the gathering (2.76) role that is performed to some extent and low extent, all the other informational roles are performed between low extent and high extent since their mean is greater than 3.

Therefore, it is concluded that informational roles are implemented at this institution by academic leaders even though the extent of implementation differs. The overall results reveal that on average, only 16 respondents do not perform informational roles while 75 respondents perform informational roles even though to varying extents.

4.4.3.3 Descriptive statistics on decisional roles

Muma *et al.* (2006) note that entrepreneur; disturbance handlers, resource allocator and negotiator constitute the decisional roles of Mintzberg's Managerial roles. Table 4.19 shows the questions and views of respondents on decisional roles.

Table 4.19: Descriptive statistics on decisional roles

Item	Mean	No extent	Some extent	Low extent	High extent	Great extent	All the time
Mentoring	3,6703	17	9	10	20	21	14
Coordinating	3,7473	15	4	19	18	21	14
Interrelating	3,9121	12	10	10	19	22	18
Initiating	3,5714	14	11	13	23	22	8
Dealing	3,3077	18	11	18	21	15	8
Implementing	2,7253	28	18	14	19	6	6
Allocating	3,2198	22	14	15	10	22	8
Ensuring	3,5275	21	8	12	16	20	14
Bargaining	3,1319	23	12	17	15	17	7
Constructing	3,9451	14	7	10	19	21	20

The results reveal that out of the 91 academic leaders at the selected HEI who participated in the study, 17 do not perform the role of mentoring and coaching new staff to ensure that they meet up with institutional objectives, 9 perform this role to some extent, 10 to a low extent, 20 to a high extent, 21 to a great extent and 14 do this all the time.

15 academic leaders are not involved in the coordination of staff, 4 perform this role to some extent, 19 to a low extent, 18 to a high extent, 21 to a great extent and 14 perform this role all the time.

12 academic leaders are not involved in interrelating with subordinates in order to encourage solidarity among staff, 10 perform this role to some extent, 10 to a low extent, 19 to a high extent, 22 to a great extent and 18 perform this role all the time.

14 academic leaders do not perform the decisional role of initiating and designing necessary changes to improve staff performance within the institution, 11 perform this role to some extent, 13 to a low extent, 23 to a high extent, 22 to a great extent and only 8 perform this role all the time.

18 academic leaders at this institution are not involved in dealing with disputes among members of staff and taking corrective actions to resolve problems, 11 perform this role to some extent, 18 to a low extent, 21 to a high extent, 15 to a great extent and only 8 perform this role all the time.

The results reveal that the implementation of disciplinary measures to sanction misconduct perpetrated by staff at this institution is not performed by 28 academic leaders, 18 perform this role to some extent, 14 to a low extent, 19 to a high extent, 6 to a great extent and 6 perform this role all the time.

At this institution, the role of allocating equipment and materials to staff for the performance of their job is not performed by 22 academic leaders, 4 of them perform this role to some extent, 15 to a low extent, 10 to a high extent, 22 to a great extent and 8 perform this roles all the time.

The decisional role of ensuring that equipment and materials are used cautiously by staff to avoid waste of valuable resources is not performed by 21 academic leaders at this institution, 8 perform this role to some extent, 12 to a low extent, 16 to a high extent, 20 to a great extent and 14 perform this role all the time.

The role of bargaining and discussing important matters on behalf of the institution with other partners is not performed by 23 academic leaders, 12 perform this role to some extent, 17 to a low extent, 15 to a high extent, 17 to a great extent and 7 perform this role all the time.

The results reveal that 14 academic leaders at this institution do not perform the role of constructing mutually beneficial relationships with and among their staff, 7 perform this role to some extent, 10 to a low extent, 19 to a high extent, 21 to a great extent and 20 perform this role all the time.

Based on the mean values, apart from the implementation role (2.73) that is performed to some extent and low extent, all the other decisional roles are performed between low extent and high extent since their mean is greater than 3.

It is, therefore, concluded that decisional roles are performed at this institution by academic leaders, even though the extent of their application differs. The overall results reveal that on average, only 19 of academic leaders at this institution do not perform decisional roles while 72 perform these roles even though to varying extents.

4.4.4 Multivariate analysis of variance on the application of Mintzberg's managerial roles

The multivariate analysis of variance (MANOVA) is used to test two or more vectors of means. MANOVA was conducted for the demographic characteristics and the application of Mintzberg's managerial roles. The demographic variables (campus, gender, age range, race, educational qualification, job level, years of work experience and years in current position) were the fixed factors while the interpersonal, informational and decisional roles were the dependent variables. The following tests

were conducted: the multivariate test of application of Mintzberg’s managerial roles and the test of between-subjects effects of Mintzberg’s managerial roles.

4.4.4.1 The multivariate test on the application of Mintzberg’s managerial roles

Here, there is a need to see if demographic characteristics do have differences in the application of Mintzberg’s managerial roles. The null hypothesis states that there is no difference in the application of Mintzberg’s managerial roles across the campus, gender, age range, race, educational qualification, job level, years of work experience and years in current position. When the probability value is less than 5%, the null hypothesis is rejected and it is concluded that there is a significant difference. The results are shown in Table 4.20 and a significant value less than 5% reveals that the coefficient is significant.

Table 4.20: MANOVA test of difference in the application of Mintzberg’s managerial roles (Wilks’ Lambda)

Item	Value	F	Hypothesis df	Error df	Sig.	Partial Eta Squared
Campus	,831	2.788 ^b	6,000	172,000	,013*	,089
Age	,821	1,434	12,000	222,535	,152	,064
Gender	,978	.651 ^b	3,000	87,000	,584	,022
Job level	,863	1,434	9,000	207,018	,175	,048
Qualification	,924	,757	9,000	207,018	,656	,026
Job level	,924	2.382 ^b	3,000	87,000	,075	,076
Years of work experience	,760	2,750	9,000	207,018	,005*	,088
Years in current position	,893	1,093	9,000	207,018	,369	,037

Table 4.20 shows that there is a statistically significant difference (p-value<0.05) in the application of Mintzberg’s managerial roles across the campuses. Also, there is a

statistical difference in the number of years of work experience. There is no statistically significant difference in the application of Mintzberg's managerial roles across gender, age range, race, educational qualification, and years in current position. Since there is a significant difference across the campuses and years of work experience, there is need to check the factors that presented these significant differences. This is obtained with the help of the Between-Subjects Effects test. This test is important to know which of the roles is performed differently on the campuses as well as which of the roles is performed differently due to the number of years of work experience.

4.4.4.2 Posthoc for campus

Results for MANOVA test revealed that there is a statistically significant difference in the application of Mintzberg's managerial roles across the campuses. There is a need to further find out the particular factor and the campuses where there was a difference.

The results in Table 4.21 below show that there is a significant difference in terms of interpersonal roles across the campuses. A significant difference is revealed in the application of interpersonal roles across campus 1 and 2 as well as campus 2 and 1. There was no significant difference across campus 1 and campus 3, campus 2 and campus 3, campus 3 and campus 1 and campus 3 and 2 in the application of interpersonal roles. Also, there was no significant difference between decisional and information roles across the three campuses.

Table 4.21: Posthoc results of Mintzberg's managerial roles across the campuses

						95% Confidence interval	
Dependent variable			Mean difference (I-J)	Std. Error	Sig.	Lower bound	Upper bound
Interpersonal	Campus 1	Campus 2	.8178*	,28336	,016	,1214	1,5142
		Campus 3	,8570	,38116	,099	-,1242	1,8382
	Campus 2	Campus 1	-.8178*	,28336	,016	-1,5142	-,1214
		Campus 3	,0392	,34719	,999	-,8774	,9558
	Campus 3	Campus 1	-,8570	,38116	,099	-1,8382	,1242
		Campus 2	-,0392	,34719	,999	-,9558	,8774
Informational	Campus 1	Campus 2	,5443	,30411	,217	-,2042	1,2927
		Campus 3	,8892	,43656	,151	-,2411	2,0194
	Campus 2	Campus 1	-,5443	,30411	,217	-1,2927	,2042
		Campus 3	,3449	,39683	,769	-,7141	1,4039
	Campus 3	Campus 1	-,8892	,43656	,151	-2,0194	,2411
		Campus 2	-,3449	,39683	,769	-1,4039	,7141
Decisional	Campus 1	Campus 2	,5955	,31891	,185	-,1864	1,3773
		Campus 3	1,0345	,46076	,104	-,1679	2,2369
	Campus 2	Campus 1	-,5955	,31891	,185	-1,3773	,1864
		Campus 3	,4390	,43729	,685	-,7211	1,5992
	Campus 3	Campus 1	-1,0345	,46076	,104	-2,2369	,1679
		Campus 2	-,4390	,43729	,685	-1,5992	,7211

4.4.4.2 Posthoc for years of work experience

Results for the MANOVA test show that there is a statistically significant difference in the application of Mintzberg's managerial roles in the number of years of work experience. There was need to further find out the particular factor and the range of years of work experience where there was a difference. Even though there is a significant difference in the number of years of work experience, the results in Table 4.22 show no significant difference in interpersonal, decisional and interpersonal roles across the years of work experience. There were no significant differences in the campuses and in decisional and informational roles and across the number of years as well.

Table 4.22: Posthoc result of Mintzberg's managerial roles for the number of years of work experience

Dependent variable			Mean difference (I-J)	Std. Error	Sig.	95% Confidence interval	
						Lower bound	Upper bound
Interpersonal	0 - 5 years	6 - 10 years	,0090	,53082	1,000	-1,4838	1,5019
		11 - 5 years	-,1890	,42456	,998	-1,3800	1,0020
		15+ years	-,5183	,37749	,676	-1,5904	,5537
	6 - 10 years	0 - 5 years	-,0090	,53082	1,000	-1,5019	1,4838
		11 - 5 years	-,1980	,47985	,999	-1,5686	1,1725
		15+ years	-,5274	,43876	,786	-1,8074	,7526
	11 - 15 years	0 - 5 years	,1890	,42456	,998	-1,0020	1,3800
		6 - 10 years	,1980	,47985	,999	-1,1725	1,5686
		15+ years	-,3293	,30165	,849	-1,1827	,5241

	15+ years	0 - 5 years	,5183	,37749	,676	-,5537	1,5904
		6 - 10 years	,5274	,43876	,786	-,7526	1,8074
		11 -15 years	,3293	,30165	,849	-,5241	1,1827
Informational	0 - 5 years	6 - 10 years	,0703	,54040	1,000	-1,4446	1,5852
		11 - 5 years	-,6417	,44375	,624	-1,8908	,6075
		15+ years	-,8576	,40438	,227	-2,0116	,2965
	6 - 10 years	0 - 5 years	-,0703	,54040	1,000	-1,5852	1,4446
		11 - 5 years	-,7120	,46241	,561	-2,0330	,6091
		15+ years	-,9279	,42477	,211	-2,1655	,3098
	11 - 15 years	0 - 5 years	,6417	,44375	,624	-,6075	1,8908
		6 - 10 years	,7120	,46241	,561	-,6091	2,0330
		15+ years	-,2159	,29210	,972	-1,0407	,6089
	15+ years	0 - 5 years	,8576	,40438	,227	-,2965	2,0116
		6 - 10 years	,9279	,42477	,211	-,3098	2,1655
		11 -15 years	,2159	,29210	,972	-,6089	1,0407
Decisional	0 - 5 years	6 - 10 years	-,2667	,58809	,998	-1,9198	1,3864
		11 -15 years	-,7327	,48519	,579	-2,0923	,6269
		15+ years	-,7992	,42481	,341	-2,0034	,4049
	6 - 10 years	0 - 5 years	,2667	,58809	,998	-1,3864	1,9198
		11 -15 years	-,4660	,54023	,943	-2,0035	1,0715
		15+	-,5326	,48672	,846	-1,9484	,8833

		years					
	11 - 15 years	0 - 5 years	,7327	,48519	,579	-,6269	2,0923
		6 - 10 years	,4660	,54023	,943	-1,0715	2,0035
		15+ years	-,0665	,35561	1,000	-1,0743	,9413
	15+ years	0 - 5 years	,7992	,42481	,341	-,4049	2,0034
		6 - 10 years	,5326	,48672	,846	-,8833	1,9484
		11 - 5 years	,0665	,35561	1,000	-,9413	1,0743

4.6 SUMMARY OF CHAPTER

This chapter has presented and interpreted the empirical findings that address the application and importance of Mintzberg's managerial roles. The results revealed that academic leaders at the selected higher education institution apply all the three managerial roles as proposed by Mintzberg. There was a positive significant correlation between informational and interpersonal roles, decisional and interpersonal roles and informational and decisional roles. Results for MANOVA revealed a statistical difference in the application of these interpersonal roles across the campuses. Campuses 1 and 2 had significant differences between them in terms of these roles. Even though there was a significant difference in the application of Mintzberg's managerial roles across the years of work experience, the posthoc results revealed that there was no statistical difference in the years of work experience and the three major roles. The next chapter will be summary of findings, recommendations and concluding remarks.

CHAPTER FIVE

SUMMARY OF FINDINGS, RECOMMENDATIONS AND CONCLUDING REMARKS

5.1. INTRODUCTION

This chapter provides a summary of findings of this study regarding the application of Mintzberg's managerial roles by academic leaders at a selected higher education institution in South Africa. Understanding the managerial nature of academic leaders in higher education institutions and the manner in which they conduct themselves as managers and how they apply management principles, especially Mintzberg's managerial roles (which is highly recommended in contemporary management) may be very important when assisting new generation managers and leaders in comprehending their position and functions. Even though Mintzberg's managerial roles have earlier been used to describe corporate management, this study, however, serves as a framework for understanding the functions or duties of academic leaders at a selected higher education institution in South Africa. This chapter, therefore, provides a summary of study, recommendations, significance of the study, limitations of the study, areas for future research and a conclusion.

5.2. OVERVIEW OF CHAPTERS

The main aim of this study was to explore the application of Mintzberg's managerial roles by academic leaders at a selected higher education institution in South Africa. This was done in order to understand the extent to which academic leaders apply Mintzberg's managerial roles in their day-to-day management within their institution. There is limited information on the application of Mintzberg's managerial roles among academic leaders at higher education institutions in South Africa. Nevertheless, there is an insignificant

amount of information and literature on Mintzberg's managerial roles in corporate management for corporate managers. The literature provided a summary of the historical evolution of management thoughts and clearly defined who academic leaders at higher education institutions really are. The literature did not provide information on standard empirical methods used for this study on the application of Mintzberg's managerial roles by academic leaders. The conceptual framework used in this study was Mintzberg's management model established in 1973 based on his ten managerial roles, classified in three categories of interpersonal, informational and decisional roles.

Since the introduction of democracy in South Africa, in 1994, the higher education system has been undergoing transformation, which is a broader plan of the government to correct the imbalances of the past. Thus, government endeavour is to ensure effective management and leadership in order to curb mismanagement and wastage of resources in higher educational institutions by incompetent and immoral academic leaders.

Mintzberg's managerial roles are very important in management because they elaborate on management principles of former management scholars such as Fayol, Taylor and Gulick. Unlike these former management scholars, who merely stated their management principles, Mintzberg organised his management thoughts as a set of behaviours identified with a particular management position measured by what people do at their workplace on a daily basis. This justifies why this study focuses on exploring Mintzberg's managerial roles of academic leaders at a selected higher education institution in South Africa and not the application of any of the management principles of Foyol, Taylor or Gulick.

This study is of great importance because scholars and researchers in the field of Human Resource Management, will be able to make use of the literature and findings in future research. Vital facts and information for this study were obtained mostly from secondary sources such as books, journal articles and the internet, while primary data was obtained from primary sources such as the administration of questionnaires to a

cross-section of academic managers/leaders at the selected higher education institution in South Africa.

The empirical literature for this study focused on an overview of management and Mintzberg's ten different interrelated managerial roles, which were further classified into three categories of interpersonal, informational and decisional roles. As already mentioned, Mintzberg (1973) maintains that managers (in the case of this study, academic leaders at higher educational institutions) perform ten roles or functions that enable them to discharge their duties more effectively and efficiently to their utmost abilities.

Haberg and Reiple (2008) assert that Mintzberg's managerial roles provide a better understanding and description of management functions rather than the traditional list of management principles stipulated by former management scholars such as Fayol, Taylor and Gulick. This is because his managerial roles are more feasible and realistic than those of former management specialists.

In order to accomplish the objectives of this study, three important questions relating to the application of Mintzberg's managerial roles were asked as follows:

1. As the official head of the organisations / departments, how do academic leaders effectively manage interpersonal relationships within their institutions?
2. To what extent do academic leaders perform their managerial duty of searching for information and making it available for staff and students? and
3. What guides the choices of managerial decision-making by academic leaders in HEI?

The results of the empirical findings that address the application of Mintzberg's managerial roles revealed that academic leaders at the selected higher education institution apply all the three Mintzberg's managerial roles. The average number of academic leaders (out of the 91 respondents) who perform the roles are as follows: 75 perform interpersonal roles, 72 perform informational roles and 70 perform decisional

roles. With regard to interpersonal roles, the signing of legal documents on behalf of the institution was not performed by 34 respondents and the motivation of new staff to ensure that they work at their optimum capability to achieve institutional goals was performed all the time by 13 respondents.

19 respondents performed informational roles all the time in order to inform staff about upcoming activities of their departments and 23 respondents do not communicate and gather information. 28 respondents do not perform decisional roles and do not apply disciplinary measures to sanction misconduct perpetrated by staff at the institution. Also, 18 respondents construct mutually beneficial relationships with and among staff all the time.

There was a statistical difference in the application of these roles across the three campuses. A significant difference was observed in the application of interpersonal roles across campuses 1 and 2 as well as campuses 2 and 1. Even though there is a significant difference in years of work experience, there is no significant difference in interpersonal, informational and decisional roles across years of work experience.

5.3 RECOMMENDATIONS

The following recommendations are advanced in this study:

- Majority of academic leaders at the selected higher education institution apply Mintzberg's interpersonal roles. However, the signing of legal documents on behalf of the institution is not performed by many respondents, hence, it is recommended that those who are charged with the responsibility of signing legal documents should endeavour to do so as much as possible. Also, the motivation of new staff to ensure that they work at their optimum capability to achieve institutional goals should be encouraged as only 13 academic leaders at this institution perform this task all the time. Academic leaders should check their attitude towards staff and students and improve on the amount and level of motivation towards them in order to boost their productivity and performance. This is because effective leadership starts with the right mind-set. A correct mind-set is founded upon a leaders' enthusiasm to motivate and boost the morale of subordinates.
- Informational roles performed by academic leaders at the selected higher education institution are not high enough. Only 19 of the 91 respondents do inform staff about upcoming activities of their departments all the time. It is recommended that academic leaders should inform staff about upcoming activities of their departments and units. Also, 23 academic leaders do not gather and communicate information to staff. It is recommended that academic leaders at this institution should engage in gathering and communicating information to subordinates as much as possible.
- Decisional roles were performed by 72 academic leaders at this institution. However, 28 respondents do not apply disciplinary measures to sanction misconduct perpetrated by recalcitrant staff members at the institution. Also, 18

respondents maintained that they construct mutually beneficial relationships with and among their staff all the time. It is recommended that those responsible for implementing disciplinary measures should do so as much as they can and also engage in beneficial relationships with their staff.

- Lastly, even though academic leaders at this institution do apply the three Mintzberg's managerial roles, there was a statistical difference in the application of decisional roles across campuses 1 and 2 as well as campuses 2 and 1. Hence, it is recommended that top management should reinforce the application of interpersonal roles in these campuses by acting as a symbolic leader on behalf of the organisation, among other duties.

5.4 SIGNIFICANCE OF THE STUDY

This study has endeavoured to close the gap in the literature regarding the application of Mintzberg's managerial roles at a selected Higher Education Institution in South Africa. The study would be useful to academic staff and any other person in academia who aspires to become an academic leader in future, to know how to prepare him or herself for such position.

The study will also be beneficial to current academic leaders in higher education institutions as it would enable them to reflect more about their positions and the roles and duties required of them in such positions of authority.

The study would also be beneficial to recruitment committees or anybody in charge of electing or appointing academic leaders in higher education institutions to know how to formulate criteria, procedures and policies in selecting effective academic leaders to fill these positions.

Very important about this study is the fact that it has or will further promote the effective application and use of Mintzberg's managerial roles by academic leaders in their various

institutions of higher learning and to ensure the achievement of their institutional goals and mission.

5.5 LIMITATIONS OF THE STUDY

The major weakness of this study is that it was restricted to a selected higher education institution in South Africa. Therefore, the results may not be a true reflection of what obtains in other higher education institutions in and around the Republic of South Africa. As a result, future research should be conducted that explore Mintzberg's managerial roles of academic leaders in all higher education institutions in South Africa in greater detail and to compare results with those of the current study.

Another limitation of this study was the use of a sample size and not a census. A sample size is not the population; as such, there could be errors in measurements.

Furthermore, due to time and budget constraints, the study was limited solely to academic leaders of the three campuses of the selected higher education institution in South Africa.

5.6 AREAS FOR FUTURE RESEARCH

This study is intended to contribute significantly to the body of knowledge in the field of Human Resource Management and also to create an impact in academic leadership in higher education institutions in South Africa (even though the study was carried out in one institution). Therefore, to promote the further use of Mintzberg's managerial model in higher education institutions and even in corporate organisations, it is recommended that further and future studies should be conducted in the following areas:

- Similar studies could be carry out on a similar topic, making use of the same research method and results compared in order to bring out the similarities and

differences of leadership and management models used in different higher education institutions in South Africa.

- A comparative study could also be conducted in order to compare the managerial roles or models applied by managers in corporate organisations and managerial roles applied by academic leaders at higher education institutions to see which model is more effective in achieving organisational goals.
- The same study could be conducted after five or ten years as the case may be, and results compared with those of this study to find out changes in variables that influence Mintzberg's managerial roles at higher education institutions in South Africa.
- A study could also be conducted to sample the opinions of academic leaders, staff and students at higher education institutions on their perceptions of effective implementation of Mintzberg's managerial roles within their institutions.
- A qualitative analysis of Mintzberg's managerial roles at a selected higher education institution in South Africa could be conducted and results compared with those of this study (quantitatively).

5.7 CONCLUSION

Responses obtained with regard to the three research questions asked in this study on Mintzberg's managerial roles of academic leaders at a selected higher education institution in South Africa, the implications thereof and recommendations, should be given serious consideration due to the magnitude of the study. This is because a response rate of 83.49% was obtained from a sample population of 109 academic leaders at the selected higher education institution in South Africa, thus the specification of a single institution in the country and the higher reliability on Mintzberg's managerial roles in the contemporary era.

Understanding Mintzberg's managerial roles of academic leaders at a selected higher education institution in South Africa and the roles that these leaders tend to apply the most compared to others, is very important. Academic leaders believe that their jobs and the roles they perform may have direct implications to their institutions. From the results of this study, newly elected or appointed academic leaders should not see their new positions as high profile jobs but understand the responsibilities and duties of such positions such as performing interpersonal, informational and decision-making duties for their institutions. An improvement in the effectiveness of academic leaders in higher education institutions can result to a better functioning of such institutions, and further strengthen institutions by increasing staff morale and other vital factors associated with leaders and institutions. It is apparent that some academic leaders at higher education institutions are resigning from their positions because of job dissatisfaction. This leads to high rate of turnover and consequently, high cost of recruitment and training. Lack of job satisfaction is not yet considered as a serious problem in most higher education institutions in South Africa, such as the institution considered for this study.

Although most higher education institutions appear to have measures for job satisfaction, there is still a need for improvement. The results and findings of this study could be used to transform practices and policies at higher education institutions to suit leaders and staff as well as students and to avoid chaos among stakeholders. In this regard, academic leaders may need to always upgrade their knowledge on leadership by constantly taking refresher courses and attending seminars, workshops and conferences on leadership. To achieve this, higher education institutions are required to provide adequate funds to constantly organise such seminars, workshops and conferences on leadership education.

The results of this study are a benchmark for Mintzberg's managerial roles of academic leaders in higher education institutions in South Africa because these institutions can be able to compare their different managerial roles with one another. In this way, they will

know if the managerial roles implemented at various institutions are similar or different from others. This would also enable institutions to know which of the management roles are more effective in achieving organisational objectives and missions. Perhaps, the outcome of such comparison could go a long way in persuading or dissuading aspiring academic leaders to assume leadership positions because they obtained the right reflection on the position.

Based on the results of this study, it is evident that the three managerial roles mostly implemented by academic leaders are: leadership, liaison; and disseminating roles. With this revelation, aspiring academic and current academic leaders at higher education institutions who wish to be more effective in their leadership functions, could research more on these areas of leadership. Aspiring leaders should, therefore, develop more skills in leadership as academic leaders in higher education institutions in South Africa.

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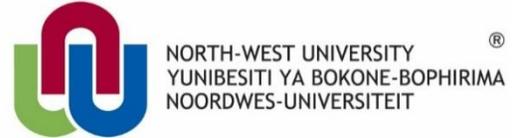
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APPENDICES

APPENDIX A



Faculty of Commerce & Administration

School of Business and Governance
Mafikeng site of delivery

EXPLORING MINTZBERG'S MANAGERIAL ROLES OF ACADEMIC LEADERS AT A SELECTED HIGHER EDUCATION INSTITUTION IN SOUTH AFRICA

Research conducted by:

Mr P. SAAH (24426954)

Email: saahpaulo@yahoo.co.uk

Cell: 071 969 3489

Dear participant

You are invited to participate in an academic research study conducted by Paul Saah, a Master's in Business Administration (MBA) student from the North-West University School of Business and Governance at the Mafikeng site of delivery.

The purpose of the study is to explore Mintzberg's managerial roles of academic leaders at a selected higher education institution. You are requested to please complete the attached questionnaire divided into three sections (A, B and C).

Please note the following:

- This is an anonymous study survey as your name will not appear on the questionnaire. The answers you provide will be treated as strictly confidential as you cannot be identified in person based on the responses provided. .
- Your participation in this study is very important to us. You may, however, choose not to participate and you may also stop participating at any time without any negative consequences.
- Please answer the questions in the attached questionnaire as completely and honestly as possible. This should not take more than 30 minutes of your time.

- The results of the study will be used solely for academic purposes and may be published in an academic journal. We will provide you with a summary of our findings on request.
- Please contact my study leader, Professor N. Schutte at cell no. 0183892839 or by email: nico.schutte@nwu.ac.za if you have any questions or comments regarding the study.

Please indicate that:

- You have read and understand the information provided above.
- You give your consent to participate in the study on a voluntary basis. (Please tick)

YES

QUESTIONNAIRE ON MINTZBERG'S MANAGERIAL ROLES QUESTIONNAIRE

Section A

Biographical information

Please answer the questions in this section by marking with a cross in the box that corresponds to your answer.

1. On which campus are you working?

Campus 1	Campus 2	Campus 3
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2. Gender

Male	Female
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3. Age range

20 - 29	30 - 39	40 - 49	50 - 59	60 and above
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4. Race

African	Coloured	Indian	White	Others
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5. Highest educational qualification

Bachelor's degree	Postgraduate diploma	Honours degree	Master's degree	PhD
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6. What is your current job level?

Academic programme manager	Academic school director	Dean	Rector	Others
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7. What range in years of work experience do you have in HEI?

0 – 5 years	6 – 10 years	11 – 15 years	Above 15 years
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8. For how long have you been in your current position?

0 – 5 years	6 – 10 years	11 – 15 years	Above 15 years
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Section B

Usage (Application) of Mintzberg’s managerial roles

The following statements are a description of Mintzberg’s managerial roles which represent the functions or duties of managers and leaders in their various managerial positions. Please read each of these statements keenly and use the four category rating scale to indicate the extent to which you as an academic leader/manager at institution is using or implementing these roles. Place a cross over one appropriate response from the scale for each item that corresponds to your opinion with regard to the statement.

Response scale

- 1= No extent
- 2 = Some extent
- 3 = Low extent
- 4 = High extent
- 5 = Great extent
- 6 = All the time

Please indicate your response for each question by placing a cross over the most applicable answer as shown in the example below.

	Statement	Scale					
0	Do you apply Mintzberg’s model in your management function?	1	2	3	4	5	6
	Statements	Scale					
	How often do you exhibit the following roles in your academic managerial capacity?						
1	Playing a ceremonial role of representing your institution in every official meeting you attend?	1	2	3	4	5	6
2	Playing a symbolic role on behalf of your establishment in every official meeting you attend?	1	2	3	4	5	6
3	Speaking regularly on behalf of your institution whenever and wherever	1	2	3	4	5	6

	you represent it?						
4	Signing of legal documents on behalf of your institution?	1	2	3	4	5	6
5	Welcoming of guests on behalf your institution?	1	2	3	4	5	6
6	Informing staff about upcoming activities of their departments?	1	2	3	4	5	6
7	Chairing meetings as a representative of your institution?	1	2	3	4	5	6
8	Mentoring and coaching new staff to ensure that they meet up with institutional objectives?	1	2	3	4	5	6
9	Motivating new staff to ensure that they work at their optimum capability to achieve institutional goals?	1	2	3	4	5	6
10	Training, new staff to ensure that they are well equipped to work for the achievement of institutional objectives?	1	2	3	4	5	6
11	Recruiting new staff to ensure that institutional objectives are achieved?	1	2	3	4	5	6
12	Ensuring that there is effective coordination of staff within your institution?	1	2	3	4	5	6
13	Interrelating with subordinates in order to encourage solidarity among staff?	1	2	3	4	5	6
14	Networking with peers in order to boost teamwork among staff?	1	2	3	4	5	6
15	Initiating and designing necessary changes to improve staff performance within your organisation?	1	2	3	4	5	6
16	Creating contacts and cordial relations with partners and informants of your institution?	1	2	3	4	5	6
17	Dealing with disputes among staff and taking corrective actions to resolve the problem?	1	2	3	4	5	6
18	Attending social gatherings as a representative of your institution in order to create useful work related contacts?	1	2	3	4	5	6
19	Implementing disciplinary measures to sanction misconduct perpetrated by any staff in your institution?	1	2	3	4	5	6
20	Put in effort to gather up-to-date information for your institution by	1	2	3	4	5	6

	searching the social media to be current?						
21	Allocating equipment and materials to staff to enable their job performance?	1	2	3	4	5	6
22	Creating your own contacts within and outside the institution in order to establish a personal informal information network?	1	2	3	4	5	6
23	Ensuring that equipment and materials are used cautiously by staff to avoid waste of valuable resources?	1	2	3	4	5	6
24	Convening regular meetings where major decisions are made and communicated to subordinates?	1	2	3	4	5	6
25	Bargaining and discussing important matters on behalf of your institution with other partners?	1	2	3	4	5	6
26	Conveying important information received from outside sources to staffs so that everyone is abreast with what is happening?	1	2	3	4	5	6
27	Constructing mutually beneficial relationships with and among your staff?	1	2	3	4	5	6

Thank you for participating in this study.

Appendix B

Initial factor solution of the usage (application) of Mintzberg's managerial roles

	1	2	3
Playing a ceremonial role of representing your institution in every official meeting you attend?	0.598	0.636	0.1
Playing a symbolic role on behalf of your establishment in every official meeting you attend?	0.677	0.63	0.104
Speaking regularly on behalf of your institution whenever and wherever you represent it?	0.724	0.513	0.01
Signing of legal documents on behalf of your institution?	0.67	0.221	0.258
Welcoming of guests on behalf your institution?	0.8	0.363	0.183
Informing staff about upcoming activities of their departments?	0.789	0.053	0.195
Chairing meetings as a representative of your institution?	0.811	0.289	0.104
Mentoring and coaching new staff to ensure that they meet up with institutional objectives?	0.835	0.201	0.13
Motivating new staffs to ensure that they work at their optimum capability to achieve institutional goals?	0.877	0.214	0.116
Training, new staffs to ensure that they are well equipped to work for the achievement of institutional objectives?	0.842	0.255	0.176
Recruiting new staffs to ensure that institutional objectives are achieved?	0.837	0.057	0.085
Ensuring that there is effective coordination of staff within your institution?	0.884	0.153	0.102
Interrelating with subordinates in order to encourage solidarity among staff?	0.885	0.159	0.16
Networking with peers in order to boost teamwork among staffs?	0.899	0.034	0.221
Initiating and designing necessary changes to improve staff performance within your organization?	0.915	0.121	0.011
Creating contacts and cordial relations with partners and informants of your institution?	0.906	0.075	0.111
Dealing with disputes among staffs and taking corrective actions to resolve the problem?	0.847	0.148	0.265
Attending social gatherings as a representative of your institution in order to create useful work related contacts?	0.796	0.2	0.046
Implementing disciplinary measures to sanction misconduct perpetrated by any staff in your institution?	0.74	0.001	0.457
Put in effort to gather up to date information for your institution by searching the social media to be current?	0.678	0.18	0.423
Allocating equipment and materials to staff to enable their job performance?	0.772	0.27	0.359
Creating your own contacts within and outside the institution in order to establish a personal informal information network?	0.71	0.162	0.166
Ensuring that equipment and materials are used cautiously by staff to avoid waste of valuable resources?	0.819	0.234	0.054
Convening regular meetings where major decisions are made and communicated to subordinates?	0.855	0.14	0.034
Bargaining and discussing important matters on behalf of your institution with other partners?	0.745	0.143	0.217
Conveying important information received from outside sources to staffs so that everyone is abreast with what is happening?	0.839	0.199	0.041
Constructing mutually beneficial relationships with and among your staff?	0.877	0.191	0.08

Appendix C

Equamax rotated factor solution of the usage (application) of Mintzberg's managerial roles

	1	2	3
Playing a ceremonial role of representing your institution in every official meeting you attend?	0.105	0.858	0.157
Playing a symbolic role on behalf of your establishment in every official meeting you attend?	0.162	0.895	0.198
Speaking regularly on behalf of your institution whenever and wherever you represent it?	0.206	0.803	0.318
Signing of legal documents on behalf of your institution?	0.185	0.477	0.55
Welcoming of guests on behalf your institution?	0.428	0.752	0.238
Informing staff about upcoming activities of their departments?	0.65	0.402	0.28
Chairing meetings as a representative of your institution?	0.433	0.68	0.32
Mentoring and coaching new staff to ensure that they meet up with institutional objectives?	0.725	0.29	0.381
Motivating new staffs to ensure that they work at their optimum capability to achieve institutional goals?	0.752	0.298	0.416
Training, new staffs to ensure that they are well equipped to work for the achievement of institutional objectives?	0.783	0.257	0.353
Recruiting new staffs to ensure that institutional objectives are achieved?	0.535	0.367	0.538
Ensuring that there is effective coordination of staff within your institution?	0.717	0.349	0.423
Interrelating with subordinates in order to encourage solidarity among staff?	0.752	0.356	0.377
Networking with peers in order to boost teamwork among staffs?	0.726	0.48	0.316
Initiating and designing necessary changes to improve staff performance within your organization?	0.672	0.373	0.511
Creating contacts and cordial relations with partners and informants of your institution?	0.694	0.428	0.417
Dealing with disputes among staffs and taking corrective actions to resolve the problem?	0.496	0.26	0.705
Attending social gatherings as a representative of your institution in order to create useful work related contacts?	0.391	0.568	0.447
Implementing disciplinary measures to sanction misconduct perpetrated by any staff in your institution?	0.244	0.29	0.783
Put in effort to gather up to date information for your institution by searching the social media to be current?	0.125	0.414	0.695
Allocating equipment and materials to staff to enable their job performance?	0.461	0.101	0.758
Creating your own contacts within and outside the institution in order to establish a personal informal information network?	0.642	0.265	0.276
Ensuring that equipment and materials are used cautiously by staff to avoid waste of valuable resources?	0.635	0.217	0.527
Convening regular meetings where major decisions are made and communicated to subordinates?	0.618	0.318	0.518
Bargaining and discussing important matters on behalf of your institution with other partners?	0.298	0.46	0.568
Conveying important information received from outside sources to staffs so that everyone is abreast with what is happening?	0.68	0.276	0.455
Constructing mutually beneficial relationships with and among your staff?	0.721	0.31	0.443

