# University of KwaZulu-Natal

Efficiency and Effectiveness of Fraud Risk Management in the Department of Health, eThekwini District - KwaZulu-Natal Province

by

# Mzamo Mkhwanazi 213569498

A dissertation submitted in partial fulfilment of the requirements for the degree of Master of Business Administration

College of Law and Management Studies Graduate School of Business & Leadership

Supervisor: Dr Abdulla Kader

2016

#### **DECLARATION**

# I, Mzamo Mkhwanazi, student number 213569498, declare that:

- (i) The research reported in the dissertation, except where otherwise indicated, is my original research.
- (ii) This dissertation has not been submitted for any degree or examination at any other university.
- (iii) This dissertation does not contain other person's data, pictures, graphs or other information, unless specifically acknowledged as being sourced from other persons.
- (iv) This dissertation does not contain other person's writing, unless specifically acknowledged as being sources from other researchers. Where other written sources have been quoted, then:
  - a) Their words have been re-written but the general information attributed to them has been referenced; and
  - b) Where their exact words have been used, their writing has been placed inside quotation marks, and referenced.
- (v) This dissertation does not contain text, graphics or tables copied or pasted from an internet, unless specifically acknowledged, and the source being detailed in the dissertation and in the References section.

Signature:			

#### **ACKNOWLEDGEMENTS**

No undertaking of such a project as this study is possible without the support and contribution of people. It is not possible to single out all those who offered encouragement during times when the task felt overwhelming and impossible. However, there are important people that need to be acknowledged for their contribution, without which this project would not have been finished.

I therefore wish to express my sincere appreciation and gratitude to:

- My wife Ms Phumelele Mkhwanazi and kids Simo, Sinakhokuhle and Ntandwenhle Lusanda who I denied quality time working on this study. Thank you for your support and understanding.
- My mother Mrs Cecelia Mkhwanazi and my siblings, Thulile, Tshitsho, Sthembiso and Zaba thanks for your support and encouragement.
- My Supervisor, Dr Abdulla Kader, for his support and assistance.
- Mr Vukani Dlamini and the staff at KwaZulu Natal Department of Health for his assistance and understanding;
- KwaZulu Natal Department of Health officials for granting me permission to conduct a study in their Department.
- All respondents for taking time to complete the survey which has been valuable in completing this research.

#### **ABSTRACT**

Fraud, corruption and maladministration in South Africa has not only led to the looting of state funds, but has denied the poor access to basic services. The South African government has measures in place including legislation, codes of conducts, laws, and rules in its efforts to combat fraud. Over and above these measures, the government has established Chapter 9 institutions to play an oversight role as it tries to promote good governance and restore trust in public service. The aim of this study was informed by whether the fraud fighting (Fraud Prevention Plan) measures, policies, plans and strategies of the KwaZulu Natal Department of Health are efficient, effective and if they are yielding any benefits.

The study was conducted in the eThekwini Region of KwaZulu Natal; a sample of 120 employees from the Department was randomly drawn and 91 responses were received (76% response rate). The sample was not based on their gender, position held or the level of education. Responses were collected using self-administered questionnaires. Findings revealed that more than 80% of the respondents agreed that the Department is crippled by fraud and more than 82% have never attended a fraud awareness training, while more than 72% did not even know the Department's Tip-Offs Anonymous (whistle-blowers hotline) number. An overwhelming majority agreed that the Department is a victim of fraud committed by greedy and unethical staff members. Over 83% of the respondents believed that stronger internal controls can prevent the occurrence of fraud, while 81% felt that it was management's responsibility to prevent fraud in the Department.

The researcher recommended that the Department embark on a fraud awareness campaign that will give training to staff regarding its existing fraud prevention plan. It was also recommended that new employees be trained on this plan. Communicating the findings and decisions taken on the perpetrators of fraud was seen as one way of sending a strong message to the employees that fraudsters will not be tolerated in the Department. The study achieved it objectives, although there were limitations such as the limited literature in general on the efficiency and effectiveness of fraud risk management.

# TABLE OF CONTENTS

TITLE PAGE	I
DECLARATION	II
ACKNOWLEDGEMENTS	III
ABSTRACT	IV
TABLE OF CONTENTS	V
LIST OF FIGURES	VI
LIST OF TABLES	IX
CHAPTER ONE - INTRODUCTION  1.1. MOTIVATION FOR STUDY  1.2. PROBLEM STATEMENT  1.3. RESEARCH QUESTIONS  1.4. RESEARCH OBJECTIVES  1.5. LIMITATIONS OF THE STUDY  1.6. OUTLINE OF THE STUDY	
CHAPTER TWO -	5
LITERATURE REVIEW  2.1. INTRODUCTION  2.2. FRAUD STATISTICS  2.3. DETECTION OF FRAUD  2.4. FRAUD THEORIES	5 8 9
2.4.1. Fraud triangle 2.4.2. The fraud diamond concept. 2.5. THE TWO MAIN FRAUD THEORIES. 2.5.1. Occupational Fraud 2.5.2. Corporate fraud	11 12 13
2.6. FRAUD RISK MANAGEMENT	
2.7. FRAUD SMART ORGANISATION  2.7.1. Understanding the threat  2.7.2. Appreciating respective roles	19 20
2.7.3. Embracing sound organisational codes of ethics	22

2.8. PUBLIC SERVICE FRAUD RISK MANAGEMENT	23
2.8.1. National government frameworks	24
2.8.2. Kwa-Zulu Natal Department of Health	25
2.9. MEASURING EFFICIENCY AND EFFECTIVENESS OF FRM AT THE UNIVERSITY	
	26
2.10. IMPLEMENTATION	28
2.11. SUMMARY	28
CHAPTER THREE	30
RESEARCH METHODOLOGY	30
3.1. Introduction	30
3.2. AIM AND OBJECTIVES OF THE STUDY	30
3.3. SAMPLING TECHNIQUES	31
3.4. PARTICIPANTS AND LOCATION OF THE STUDY	32
3.5. DATA COLLECTION METHODS	32
3.6. RESEARCH DESIGN AND METHODS	34
3.7. OBTAINING DEPARTMENT'S CO-OPERATION	34
3.8. RELIABILITY OF THE STUDY	35
3.9. VALIDITY OF THE STUDY	35
3.10. Data Analysis	36
3.11. SUMMARY	37
CHAPTER FOUR:	38
PRESENTATION OF RESULTS	38
4.1. Introduction	38
4.2. SURVEY RESPONSE RATE EVALUATION	38
4.3. DEMOGRAPHICS OF THE RESPONDENTS	38
4.3.1. Gender	39
4.3.2. Age	39
4.3.3. Educational level	40
4.3.4. Respondent's Divisions	40
4.3.5. Work experience	41
4.3.6. Job role	
4.4. Fraud Risk Management at KZNDOH	43
4.4.1. Fraud Risk Management concept	43
4.4.2. Knowledge of Forensic Investigations Unit	44
4.4.3. Concern with the level of fraud	45
4.4.4. Problem with fraud	46
4.4.5. Participation in the fraud awareness training	47
4.4.6. Tip-Offs anonymous number	
4.5. OPINION ON THE CAUSES OF FRAUD COMMITTED BY EMPLOYEES	48
4.5.1. Department has been a victim of fraud committed by staff	49
4.5.2. Greedy employees commit fraud	
4.5.3. Non ethical staff commits fraud	
4.5.4. Inadequate internal controls led to employees committing fraud	522

4.5.5. Poor ethical culture led to employees committing fraud	53
4.6. CURRENT FRM INTERVENTIONS	54
4.6.1. Fraud risk training attended	54
4.6.2. Fraud awareness campaigns	55
4.6.3. Fraud risk on the intranet	56
4.6.4. Types of fraud that might occur	57
4.6.5. Awareness of the investigation findings	57
4.6.6. Fraud hotline	59
4.7. INVOLVEMENT OF EMPLOYEES IN COMBATTING FRAUD	60
4.7.1. Allegations to be investigated by internal staff	60
4.7.2. Allegations of fraud to be investigated by consultants	61
4.7.3. Strong internal controls prevent the occurrence of fraud	61
4.7.4. Management is responsible for preventing fraud	63
4.7.5. Auditors are responsible for preventing fraud	64
4.7.6. Code of ethics of staff	65
4.7.7. Department should provide a whistle blowing hotline for staff and other stakeholders	s to report
suspicions of fraud	65
4.7.8. Conduct regular surprise fraud audits	66
4.8. SUMMARY	67
CHAPTER FIVE - DISCUSSION	69
5.1. Introduction	
5.2. Discussion	
5.2.1. Demographics of the sample	
5.2.2. Objective One: To investigate whether the current fraud risk management strategies	
yielding any results in the fight against fraud.	
5.2.3. Objective Two: To investigate employee's knowledge of fraud risk management	
5.2.4. Objective Three: To establish employee involvement in the fight to combat fraud	
5.2.5. Objective Four: To investigate the effectiveness and efficiency of the Department's	
fraud risk management.	
5.2.6. Objective Five: Help the Department in identifying areas that are susceptible to frau	d (risk
areas), where more efforts can be concentrated in the fight against fraud	
5.3. SUMMARY	
CHAPTER SIX:	74
RECOMMENDATIONS AND CONCLUSION	74
6.1. Introduction	
6.2. Recommendations	
6.3. LIMITATIONS OF THE STUDY	
6.4. RECOMMENDATIONS FOR FURTHER RESEARCH	
6.5. CONCLUSION	
REFERENCES	/88
APPENDICES 1 ETHICAL CLEARANCE	01
I DITHICAL CLEARAINCE	01

# LIST OF FIGURES

Number	Description	Page
2.1 ACFE Report on occupational fra	aud and abuse	9
2.2 Elements of fraud triangle		10
2.3 The fraud diamond		12
2.4 Occupational frauds by categorie	·s	15
2.5 The fraud smart cycle		20
2.6 Implementing business ethics		21
4.1 Gender of Respondents		39
4.2 Age of Respondents		39
4.3 Respondent's highest level of edu	ucation	40
4.4 Respondent's division		41
4.5 Respondent's number of years w	ith the Department	42
4.6 Respondent's job role		42
4.7 Fraud risk management concepts		43
4.8 Forensic Investigations Unit awa	reness	44
4.9 Concerns with level of fraud		45
4.10 Problem with fraud		46
4.11 Fraud awareness training		47
4.12 Tip-offs anonymous number		48
4.13 Victim of fraud committed by s	taff	49
4.14 Greedy employees commit frau	d	50

4.15 Non ethical employees commit fraud	51
4.16 Inadequate internal controls	52
4.17 Poor ethical culture	53
4.18 Fraud risk training attended	54
4.19 Fraud awareness campaigns	55
4.20 Fraud risk on intranet	56
4.21 Types of fraud that might occur	57
4.22 Awareness of the investigation findings	58
4.23 Fraud hotline	59
4.24 Investigation to be investigated by the internal staff	60
4.25 Investigations to be conducted by a consultant (external entity)	61
4.26 Strong internal controls prevent the occurrence of fraud	62
4.27 Management is responsible for preventing fraud	63
4.28 Internal Auditors are responsible for preventing fraud	64
4.29 codes of ethics staff	65
4.30 Whistle blowing hotline for staff and other stakeholders	66
4.31 Conduct surprise fraud audits often	67

# LIST OF TABLES

Number	Description	Page
2.1 The elements of fraud triangle		11

## CHAPTER ONE - INTRODUCTION

# 1.1. Motivation for Study

Power (2013) notes that, most organisations are susceptible and vulnerable to fraud. The rise in fraudulent activities and corruption within the public service does not only cost government money, but it hinders the economic development of a country. Fraud also diminishes public trust and the credibility of the government (Pillay, 2004). The Association of Certified Fraud Examiners (ACFE) presumed that globally fraud losses were estimated to be US\$400 billion in 2001. To date, it is estimated that fraud costs organisations more than \$3 trillion per annum, which means fraud is on an increase compared to previous years (Epsley, 2008).

Although fraud affects all sectors, growing public sector fraud is worrying and taxpayer's funds are channelled towards funding fraud. The 2013 Global Corruption Index, published by the non-governmental organisation Transparency International (TI), revealed that SA has dropped down 34 places since 2001 in the rankings and out of 175 countries, South Africa is ranked at 17. A study conducted by The Human Sciences Research Council (HSRC), suggests that between 2006 and 2011 the number of South Africans that think tackling fraud and corruption should be made a national priority doubled from 14% to 26% (Newham, 2014).

Although fraud, corruption and maladministration are a national problem, this is largely evident at the provincial level as the KwaZulu Natal Department of Health (KZNDOH) is also confronted by an increase in fraud and corruption. Its Risk Management/Governance Unit has developed a comprehensive Fraud Prevention Plan (FPP) also known as Fraud Risk Management (FRM) program as part of interventions and strategies efforts to eradicate fraud. A pressing challenge however is measuring the efficiency and effectiveness of the program. This study aims to investigate the challenges faced by KZNDOH with regards to fraud and measuring the efficiency and effectiveness of their FRM. The study will also determine whether the Department's existing interventions are yielding the required and desired results. Essentially, it is envisaged that the findings from this study will contribute to efforts by the Governance Unit in identifying a wide range of appropriate methods to reduce fraudulent activities in the KZNDOH.

#### 1.2. Problem Statement

The Republic of South Africa (RSA) has a three-tier system of government with each level, namely national, provincial and local government/municipalities, acting as autonomous entities. Provincial governments belong to the second level of government and were established by Chapter 6 of the Constitution. South Africa has nine provinces; KwaZulu Natal (KZN) has the largest population with over 10 million citizens, accounting for 19.8% of the national population (STATSA, 2015). It has 16 provincial Departments with the KZNDOH receiving about 32% (R30.9 billion) of the total 2014/2015 provincial budget (Scott, 2015). KZNDOH like many other government Departments is facing challenges in its fight against growing fraudulent activities, corruption and maladministration (Zungu, 2014b).

KZNDOH's 2013/2014 Annual Report revealed that the Department has investigated about 40 cases on fraud during 2013/2014 financial year. The report further states that a total of 169 misconduct and disciplinary hearings were held and finalised, this included 64 dismissals; 31 suspensions without pay; 57 final written warnings; five demotions, and four written warnings. The Department has an in-house investigating team and it also appoints external investigators when necessary, particularly in cases where allegations of fraud have been reported. In response to fraudulent acts the Department has developed fraud risk policies and strategies such as its Fraud Prevention Plan (FPP), Risk Management Strategy (RMS) and Risk Management Policy (RMP) (Zungu, 2014b).

While these various fraud risk policies and strategies exist, an area of contention is how to measure the effectiveness of the FRM. The degree of fraud, corruption and maladministration in the Department suggests that there are gaps in their attempt to combat fraud. The high incidence of fraud, in spite of sound policies and strategies to combat it, speaks to these gaps. While the FRM policies and strategies are available and approved by the management, no study has been conducted to assess and determine their efficiency and effectiveness. This study addresses the broad question of how efficient and effective the fraud risk management strategies of the KZNDOH are.

### 1.3. Research Questions

This study will address the following key questions:

- a. Are the current interventions in the existing FRM strategies helping the Department in combating fraud?
- b. Do employees understand the FRM and understand their role in the fight against fraud within the Department?
- c. How can the Department involve all the employees and other stakeholders (community) to understand their role in combating fraud?

# 1.4. Research objectives

In responding to the questions and gaps outlined in previous sections (Sections 1.2 and 1.3), the objectives of this study are as follows:

- a. To investigate whether the current fraud risk management strategies are yielding any results in the fight against fraud.
- b. To investigate employee's knowledge of fraud risk management.
- c. To establish employee involvement in the fight to combat fraud.
- d. To investigate the effectiveness and efficiency of the Department's current fraud risk management interventions, by the responses from the employees of the department, whom the intervention is aimed for; and
- e. To identify areas susceptible to fraud (risk areas), and how more efforts and resources can be used to constructively combat fraud.

### 1.5. Limitations of the Study

A few limitations emerged in the process of conducting the study, these include:

- a. The limited time (less than four months) to conduct the study due to delays in the ethical clearance process.
- b. The focus of the study on one region (eThekwini Region) out of the four in KZN and the participation of some, not all, of the officials in the Department. Thus the findings of the study do not reflect the views of all employees of the KZNDOH.
- c. The unwillingness, by respondents, to complete an online (questionpro.com) survey which led to the manual distribution and capture of their responses, resulting in a time- consuming data collection process.
- d. A limited availability of literature on the efficiency and effectiveness of fraud risk management.

### 1.6. Outline of the Study

This dissertation is divided into six chapters. This chapter provides an overview of the topic, and presents the rationale for the study. It also presents the problem statement, the objectives and research questions that underpin the study. It also discusses the limitations of the study. Chapter Two carries out a literature review exercise which examines the effects of fraud on the various levels of government and other entities. The chapter also examines relevant theories to fraud risk management, fraud, corruption and maladministration. In Chapter Three, the various research methods and the criteria for their selection for this study are discussed. Chapter Four briefly presents the findings of the study with a focus on responding to its objectives. Chapter Five continues from Chapter Four by engaging in a comprehensive discussion and analysis of the study's findings. Chapter Six concludes the study with relevant recommendations that might enhance the efficiency and effectiveness of fraud risk management at KZNDOH. It also presents limitations and areas for further research.

#### **CHAPTER TWO - LITERATURE REVIEW**

### 2.1. Introduction

This chapter discusses key concepts like fraud within the context of various spheres of government and other organisations. Due to limited literature on the efficiency and effectiveness of FRM, this section will review and discuss general literature on FRM, FPP and anti-fraud. In addition, it will review relevant literature in connection with efficiency and effectiveness in fraud risk management across various sectors (national and international). The following then will be examined:

- a. Fraud statistics and detection
- b. Fraud theories
- c. Public Service fraud risk management
- d. Fraud smart organisation
- e. Various theories on effective and efficient fraud risk management in the private sector and public sectors.

Fraud is a disruptive force in any organisation no matter the size, industry, country or location. On the other hand, fraud risk can and must be regulated by an organisation. The actual fraud and fraud risk are opposite concepts; one is the deed (actual fraud) and the other is a possibility or vulnerability to risk (Mock and Turner, 2005). Fraudulent activities and fraudsters have been in existence for thousands of years. Organisations have focused and spent billions on fraud investigations. Corporate fraud is a threat not only to public trust but to the corporate sector (Forensic, 2006). Organisations are trying their best to formulate proactive strategies to prevent fraud, by developing appropriate interventions including business codes of ethics, rules, procedures, internal controls in preventing fraud. These interventions are also known as fraud risk management or anti-fraud strategies. No organisation is safe, insusceptible, immune or invulnerable to fraud (Power, 2013).

Fraud is a global phenomenon that affects private, public and not for profit organisations. It is committed by people (within or outside an organisation) that know the weaknesses or vulnerability in its internal controls. Stronger internal controls and regulations do not guarantee a fraud free organisation (Epsley, 2008). In South Africa, there is an impression that only the public sector is

vulnerable to fraud. Governments are deemed to be more vulnerable to fraud because they are expected to be accountable and open to public scrutiny. Private entities do not disclose fraudulent activities in order to safeguard their reputation and the interests of stakeholders. (Marias, 2013).

Hedley (2012) stated that there are three objectives when designing an effective business focused fraud and misconduct risk management, they are:

- a. **Prevention:** the primary objective is to prevent fraud, corruption or maladministration from occurring from the onset;
- b. **Detection:** Processes, reviews and internal controls designed to proactively realize fraud, corrupt activities and misconduct when it occurs; and
- c. **Response:** Reactive actions designed to take corrective decisions when fraud has occurred (e.g. disciplinary processes or investigations).

Hopwood et al. (2012) define fraud as an intentional misrepresentation (dishonesty) made by an entity or individual; knowing that the deception's final result could result in him receiving undue benefit at the expense of the other (person or entity). Undetected fraudulent activities make it difficult to measure or calculate actual losses from fraud in the public health care sector. In South Africa the Department of Public Health remain the most targeted sector by fraudsters (Talane, 2013).

The fraud concept is often linked and misinterpreted with concepts like factual error, carelessness, abuse, misconduct and corruption. Manipulation and fraud are terms that are also closely related. Facts (the intent by the person) presented must be taken into consideration to distinguish whether it an abuse/manipulation or fraud. The term "abuse" may not necessarily be unlawful or mean that fraud has taken place. Elements of fraud must be present, for an act to qualify as being fraudulent (Power, 2013).

Despite the government prioritizing fraud by putting forward various legislation, creating Chapter 9 institutions, intervening politically and combating fraud at the National Department of Health (DOH), these all remain an important and very expensive exercise (Nxumalo, 2010). The limited resources to fight fraud and the ability of fraudsters to always remain one step ahead has made combating fraud a very difficult and tasking process that requires continuous improvement and

training. While traditional fraud investigations remain the most widely used method of combating fraud, they are costly, reactive and also time consuming (Barnes, 2014).

DOH and its vulnerability to fraud continues to make headlines on various media outlets. Former DOH Minister Dr. Mantombazane Shabalala launched the National Department of Health Fraud Prevention Plan in 2003 (Barnes, 2014). It appears that such intervention had little effect to stop the spread of fraud within the Department. In 2013, a R1.4 billion fraud was revealed in Eastern Cape (Rooyen, 2013). Gauteng Health Department fired more than eight employees pertaining to fraudulent qualifications (SAPA, 2015). KZNDOH is also inundated with allegations and newspaper reports on alleged internal fraud and corruption. The interventions by the Department have been predominantly reactional. It then focuses most of it's energy and resources in conducting fraud investigations (Talane, 2013).

### 2.2. Fraud Statistics

According to the 2012 ACFE report on Occupational Fraud and Abuse, organisations have lost approximately 5% of their revenue due to fraud. Fraud investigations costs organisations approximately \$140,000 per case. The average time of investigation was 18 months. Small businesses are the most affected by fraud. It has been found that most high profile fraud cases were committed by individuals in senior management positions. Approximately 81% of fraudsters showed one or more red flags like living beyond their current means, experiencing financial difficulties and struggling to make ends meet, having suspiciously close relationships with suppliers, customers and monopolising specific duties (Bell and Jhang, 2013).

According to Corruption Watch there are no accurate stats for corruption in South Africa (Tamukamoyo, 2014). The South African Police Services (SAPS) does not distinguish between different types of commercial crime. Therefore, the results are all recorded in a broad category called commercial crime which covers white collar crime, credit card fraud, public sector procurement fraud, and corruption among others). Commercial crime has been on the increase since statistics were published in 2011/2012. In the same period, the cases reported to SAPS increased by 63.8%, resulting in an additional 35 700 cases. In 2012/2013, cases reported increased by 4% (67.8%) from the previous period, with a total number of 91 569 cases. For 2013/2014, cases reported decreased drastically by more than 13%, with 12 460 less cases than the previous year, bringing the total number of cases to 79 109 (Tamukamoyo, 2014).

According to statistics released by the Public Service Commission (PSC) on public sector fraud, the government lost approximately R1 billion in 2011/2012 and R130.6 million in 2006/2007 to fraud. The Special Investigation Unit (SIU) estimates that in 2011 the real fraud value was sitting at R30 billion annually. The Institute for Accountability estimated that South Africa has lost R675 billion as result of fraud and corruption since 1994 (Tamukamoyo, 2014). These figures attest to the fact that funds are being looted and public funds are being depleted through fraud. Fraud affects progress, government services and communities (StatSA, 2014).

A press release dated 25 November 2015 by the office of the Auditor General of South Africa (AGSA) highlights the challenge faced by the government. It stated that the findings of the 2014/2015 national and provincial Department audit report revealed an irregular expenditure of R25.7 billion. Although this was a slight decrease (of about 27%) from the amount of R35.28 billion listed in the 2013/2014 audit report, it still an unacceptable figure (Makwetu, 2015 and Areff, 2015). Eight out of the 16 Departments in KZN received clean audits, an increase from only six Departments in 2013/2014. The Auditor General also found that there was a 5% improvement (compared to 19% for 2013/2014) in compliance efforts. Compliance was found not to be moving at a desired pace in preventing unauthorised, irregular and wasteful expenditure. There was a slight increase in unauthorised expenditure by over 79%. This amounted to R143 million for 2014/2015 with the Department of Health responsible for 90% (Makwetu, 2015)

### 2.3. Detection of fraud

Most organisations only form of detection is through routine oversight activities such as their annual auditing processes. Auditing and monitoring plays a crucial role in ensuring that an organisation has effective risk management and good governance processes. Auditing has always been perceived as a formal process which gives assurance that sampled functions comply with various organisational rules, regulations, policies, procedures, controls and a country's laws and statutes (Richard et al., 2011). The scale and the norm of audits is usually at a large scale and impossible to look at all the functions at a 100%, so they use sampling models which are not always accurate. The primary goal of auditing is to identify weaknesses, other organisational problems and propose or recommend solutions to management. Auditors have a direct communication and account to the Audit Committee and Board of Directors (Richard et al., 2011).

According to the ACFE Survey of 2012 (as shown on Figure 2.1 below) both internal and external auditing was not an effective tool to timely detect fraud. Organisations relying exclusively on auditing to detect fraud were most likely to experience fraudulent activities. The ACFE survey 2012 also found that more than 43% of fraud was detected through Tip Offs (Whistle-blowers). Tip -Offs Anonymous was the most effective system of detecting fraud (Bell and Jhang, 2013). Not all (especially medium size organisation) organisations have a hotline therefore there are chances that they are more vulnerable to fraud (Richard et al., 2011).

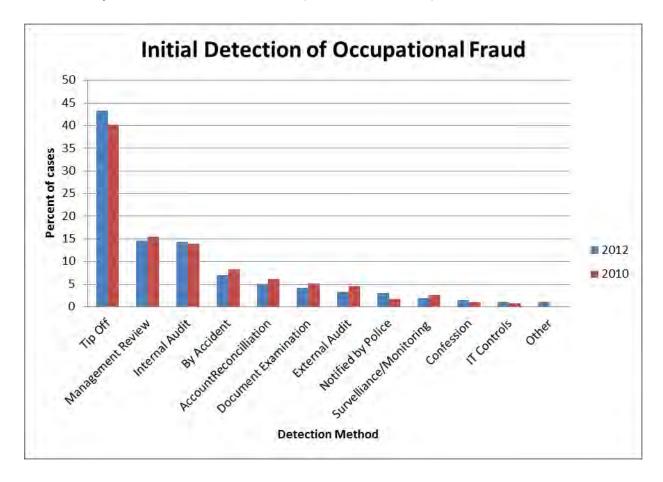


Figure 2.1: ACFE Report on Occupational Fraud & Abuse (ACFE, 2012)

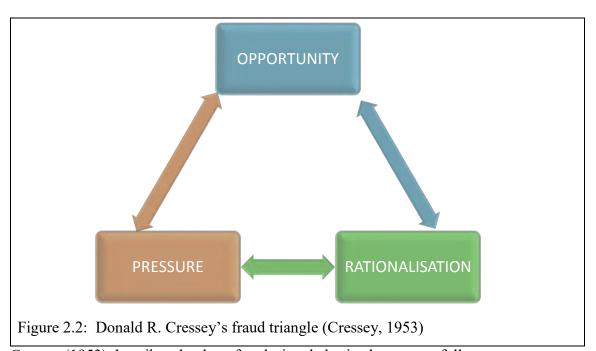
### 2.4. Fraud theories

Wells (2011) states that research on occupational fraud dated back to the early 1930s by Edwin H. Sutherland, but his study was limited by its focus on fraud committed by senior-level executives.

# 2.4.1. Fraud triangle

The most cited literature when researching the topic of fraud is Donald R Cressey in his book "Other People's Money" published in 1953. He conducted studies seeking to answer the one question of "why people commit fraud". His study, which disagreed slightly with that of Sutherland's, concluded that embezzlement by employees was not necessarily illegal (Cressey, 1953). His research provided evidence that was contradictory to that of Sutherland (Slezak, 2013). Cressey referred to embezzlers as "trust violators" because they solved their financial problems by violating their position of trust and stealing funds from their employer. Cressey (1953) concluded that there are three fundamental factors that lead to the "violation of trust".

Figure 2.2 below shows the fraud triangle which shows the reasons for why people commit fraud (Cressey, 1953).



Cressey (1953) describes the three fraud triangle basic elements as follows:

No.	Element	Meaning
1	Opportunity	Ability to assess the situation and opportunity to commit fraud without being caught.
2	Pressure/Motive	Extreme financial need (whether for the good or bad) pushing one towards committing fraud.
3	Rationalization	When the fraudster justifies his or her actions of deception and dishonesty, there is sense of entitlement. Others will view their fraudulent action as borrowing for a time being, meanwhile violating the trust

Table 2.1: The elements of the fraud triangle (Cressey, 1953) and (Wells, 2011).

# 2.4.2. The fraud diamond concept

Over and above Cressey's fraud triangle concept, a new concept Fraud Diamond was born. The Fraud Diamond Model was introduced by Wolfe and Hermanson in 2004, as shown in Figure 2.3 below, where they extended the fraud triangle by one concept "The Fraudster's capabilities" (Kassem and Higson, 2012).

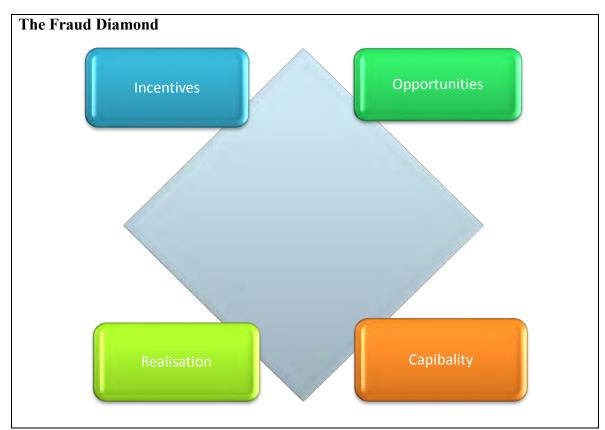


Figure 2.3: The Fraud Diamond

Kassem and Higson (2012) concurs with Wolfe and Hermanson (2004) who posited that certain fraudulent activities could be avoided by organisations. To achieve this, they would need staff with knowledge on how to identify the traits of those who commit fraud. There are four noticeable traits of those who commit fraud:

- They are persons in the position of power in an organisation;
- They are well-informed and capable to exploit the system and by-pass weak internal controls;
- They are always confident that they can cover their trails and cannot be caught; and
- They have the capacity to deal with the stress that comes when committing fraudulent acts

### 2.5. The two main fraud theories

There are two main fraud theories: occupational and corporate fraud, both of which are discussed below:

# 2.5.1. Occupational Fraud

The Founder and Chairperson of the internationally acclaimed body, ACFE, Mr Joseph Wells defines occupational fraud and abuse as enriching yourself, by knowingly misusing your employers resources for personal gain (Wells, 2011). Occupational fraud is not committed by certain employees at a specific level, but it means by employees at all levels (from operational to executive levels). Fraud does not mean that large sums of money must be lost or embezzled to qualify as fraud. It also ranges from petty theft to sophisticated, well planned and executed fraudulent acts. Wells (2011) further states that there are general elements that must be present for a fraud to exist:

- a. There must be a false statement and the person making this false statement must have full knowledge that it is false but he/she continues to utter it;
- b. The company or the person (victim) being defrauded must rely on the false statement (deception); and
- c. The false statement must cause damages (financially or otherwise) to the victim.

Should an employee violate his or her fiduciary duties, that violation may be regarded as fraud. Wells (2011) believes that with proper prevention and detention measures, fraudulent activities such as skimming, cash larceny, cheque fraud, misappropriation of company assets, among other forms of fraud, can be reduced or minimized significantly.

The employees involved in corporate fraud are sometime referred to as "rogue employees". These employees will always stray from their core duties regardless of the level they occupy and they violate the company from within. In addition, their own interests are not aligned to that of a company. They contribute significantly to any financial and reputational damages to the company, because their goal is to steal, defraud and fill their pockets to the detriment of the organisation (Beigelman and Bartow, 2012).

Fraud can lead to the collapse of highly successful and stable companies. In the recent past we have witnessed the collapse of big corporations like Enron, Tyco, Worldcom and Aldelphia. In most of these companies, the Chief Executive Officer (CEO) and other top executives were held accountable for the fraudulent acts committed in their organisation. The collapse of such empires

have put a strain on the economy because thousands lose their jobs (Beigelman and Bartow, 2012). Fraud was so prevalent in the United States of America (USA) in early 2002, such that former President George W. Bush, on realising that fraud was a problem, made corporate responsibility the core element of his administration, along with the war on terror (Beigelman and Bartow, 2012).

Beigelman and Bartow (2012) highlights President Bush's agenda to fight against fraud which included:

- a. Uncovering and taking action against acts of fraud;
- b. Holding executive and business owners accountable;
- c. Protecting the working class and pension holders;
- d. Ensuring the transparency of financial statements;
- e. Developing proactive and solid corporate governance; and
- f. Being open and making information available to investors.

## 2.5.2. Corporate fraud

In previous sections, we defined both general and occupational fraud. Occupational fraud looks at an individual employee, whereas corporate fraud focuses on organisational fraud. Corporate fraud can be defined as the misrepresentation of financial information to manipulate interested parties e.g. the Receiver of Revenue and other regulatory bodies; taking bribes by officials for certain information; overstating the assets value and any other activity that might obstruct justice. (Beigelman and Bartow, 2012).

It an established fact that fraudulent acts will always be committed. Fraud will therefore occur, whenever an opportunity presents itself. This phenomenon will never stop until organisations, act and embrace fraud prevention. Fraud prevention needs to be implemented at all levels of an organisation, including at the level of senior management (Beigelman and Bartow, 2012).

A study conducted by the ACFE in 2012 found that when ranked by categories (as shown on Figure 2.4 below), 87% of fraud in organisations are a result of asset misappropriation followed by corruption (33.4%). Financial statement fraud stands at the bottom of the list of the causes of fraud at 7.6% (Bell and Jhang, 2013).

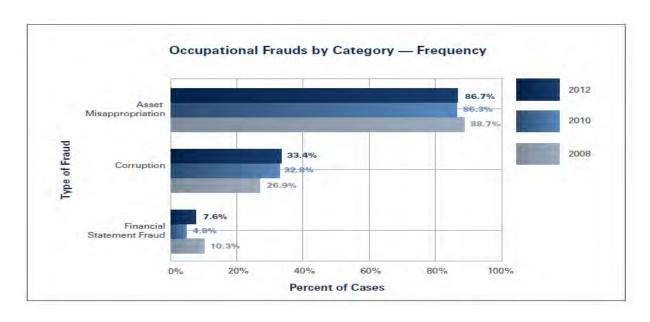


Figure 2.4: Occupational frauds by categories (Wells, 2011)

# 2.6. Fraud Risk Management

Iyer (2010) defines fraud risk as the chance that committing fraud will negatively impact an organisation and that there are three elements of fraud risk:

- a. The method of fraud that an employee will use,
- b. The effectiveness of an organisation's internal controls; and
- c. The degree of deceitfulness, the skills and ability of the fraudster.

#### 2.6.1. Fraud Prevention

The ultimate goal for any organisation is to have a zero percent fraud rate. Companies are unfortunately operating in an uncertain environment, where fraud can occur when they least expect it. Fraud prevention becomes a necessity for the survival of an organisation (Hedley and Cohen, 2010). A 2010 ACFE report stated that on average, organisations were likely to lose 6% of their turnover to fraud and corruption (Wells, 2011). With such losses organisations should be seeking to implement strong fraud prevention strategies and policies (Beigelman and Bartow, 2012). In Section 2.4.1, the discussion on the fraud triangle and its three elements (opportunity, motive and rationalization) shows that organisations have a good change of combating fraud if they remove opportunities that will lead employees to engage in fraud. This can be achieved by improving corporate governance (internal controls and accountability) (Beigelman and Bartow, 2012). The ACFE manual states that effective fraud prevention should have rules and guidelines that greatly

reduce the chances of fraud occurring, while increasing the likelihood of detecting fraud before it happens. The potential fraudster must be aware that these measures exist and the possibilities of being caught are high, which essentially should discourage them from committing fraud. (Beigelman and Bartow, 2012).

Fraud prevention is a pro-active (fraud detection) approach rather than the traditional reactive (fraud investigations) approach, therefore it is needed by all organisations across the globe. Fraud prevention is not only necessary for preventing loss or theft in an organisation, it also secures companies from financial risks emanating from lawsuits, federal prosecution, fines/penalties and convictions in the court of law for fraud (Beigelman and Bartow, 2012).

Beigelman and Bartow (2012) outline eight key elements of fraud prevention that must be in place:

# a. Tone at the top

The messages and actions at the management level of the organisation must be exemplary; they must obey the rules, codes of conducts and regulations of the company. If they fail to adhere to the rules they must not expect employees to follow them (Hedley and Cohen, 2010).

### b. The Role of the Board of Directors and the Audit Committee

The Sarbanes-Oxley Act of 2002, requires that Board of Directors are caretakers of good corporate governance and take general oversight of the organisation's management (Hopwood et al., 2012). Members of the Audit Committee have an important role to play in enforcing compliance with rules and policies of an organisation, while also enforcing the laws that govern the country and standard regulations that guide the industry. Directors of companies who do not abide by these laws, policies and regulations may be held responsible either civilly and criminally or both (Beigelman and Bartow, 2012).

### c. The Internal Audit

As much as internal audits only detect a very low percentage of fraudulent activities, internal audit units face the challenge of ensuring that controls are followed (Hartley,

2014). An ideal situation is when internal audit processes are able to detect fraud before it takes place. The role of FRM becomes crucial in the work of internal audit units, because employees become aware as to what constitutes fraud and they report any wrong doing in a timely manner (Epsley, 2008).

### d. The important role of managers on fraud prevention

Hopwood et al. (2012) state for the fraud prevention to be possible, management needs to exercise their oversight role with diligence. Wrong doers need to be held accountable, and be reported accordingly to the relevant parties/stakeholders. Epsley (2008) supports their view by stating that managers need to possess an ability to detect and see the red-flags (warning signs) of fraud. Strong and committed leaders are integral to the success of fraud prevention and internal control programs.

### e. Integrity and honesty

Majority of organisations have values that their staff must abide by such as integrity and honesty. Fraud prevention strategies should be able to educate their employees on these values regardless of the positions they hold (Beigelman and Bartow, 2012).

### f. An effective communication plan

Most of the reported fraud cases came through the Anonymous Tip off or Hotline, which makes it one of the most effective fraud prevention mechanisms (Marias, 2013). No matter the size or the industry the organisation belongs to, it important that it has an effective and reliable reporting system. This system gives employees and other outside parties an opportunity to report suspicious activities that could be fraudulent. Whistle-blowers also need to be protected at all costs, so that they will have confidence in the system (Asare and Wright, 2004).

# g. Cross-Group Collaboration

Multi-disciplinary intervention is required across all divisions of an organisation, so that all employees speak in one voice and work together in the fight against fraud. This ensures that they are a unified front in their efforts to combat fraud (Beigelman and Bartow, 2012).

## h. Embracing a Culture of Compliance

Organisations that have a strong culture of fraud prevention programs and sound internal controls are bound to enjoy better and superior competitive advantage. The culture of compliance must be embraced by all the stakeholders in an organisation (Goldman and Kaufman, 2010).

## 2.6.2 Fraud Risk Assessment (FRA)

Fraud Risk Assessment (FRA) is a crucial program when an organisation is proactively against fraud and is committed to combating it. This means it forms an organisational broader risk assessment process. A fraud risk assessment looks into an organisation to identify vulnerable areas and the ways that fraud and misconduct can occur (Richard et al., 2011). According to (Bell and Jhang, 2013), the benefits of having a sound and comprehensive fraud risk assessment are as follows:

- a. It measures an organisation's susceptibility to fraud;
- b. It provides structure in efforts to proactively tackle the potential of fraud
- c. It increases the potential of reducing exposure from fraud risk;
- d. It supports and supplements risk management and internal auditing units in identifying and helping to prevent, detect and prevent fraud (Bell and Jhang, 2013); and
- e. It helps to address areas of exposure in an organisation where internal controls may have limitations like sampling

### 2.7. Fraud Smart organisation

In his book Fraud Smart, KH Spencer Pickett, 2011 highlights that as much as fraud risk management is important as a form of combating fraud; organisations need to be Fraud Smart as well. Unlike in the past, when an employee would act in a dishonest way or commit acts of fraud, organisations would find a way to part with an employee privately. For these organisations, a successful way of dealing with the matter was to pay the culprit and send him packing secretly. The downside of these old-style solutions meant that other employees were not made aware of the potential for fraud or the fraud-management process (Pickett, 2011). A Fraud Smart organisation is one that is pro-active in their fight against fraud and corruption, where all employees understand their roles in the fight against fraud, and the organisation does not conceal its its fight against fraud and adopts a zero tolerance policy to it (Pickett, 2011). The only way to combat fraud in an

organisation is to ensure that employees support the fraud risk management and are part of a robust anti-fraud strategy. Failure to involve employees might result in an organisation being subjected to continuous fraud and abuse (Pickett, 2011).

Pickett (2011) divides the workforce of an organisation in three main groups namely:

- a. The minority (small group) that will make an attempt and commit fraud against the organisation;
- A fairly large group of individuals who are specialists, like Accountants, Auditors, Senior Management) and other professionals who are looking for ways of combating fraud or fighting against it; and
- c. Those that are on the fence who have no interest in fraud in the workplace as it has no impact or relevance to their jobs.

The first group above already pose a problem as they are always looking for new ways of committing fraud. The second group is knowledgeable on fraud-related concepts and aware of the expectations from the executive of the organisation. The last group are those that can help the company in the fight against fraud and can learn more on the impact of fraud in an organisation (Pickett, 2011). Still it is important to generate a Fraud Smart workforce that understands and safe guards the organisation against dishonesty (Pickett, 2011). Figure 2.5 speaks of five stages on the fraud smart cycle:

### 2.7.1. Understanding the threat

Unlike other risks, fraud represents a direct threat to an organisation rather than potential opportunity. An organisation must therefore have knowledge of the internal and external threats facing them, through their comprehensive fraud risk management strategies. All organisations, whether in the private, government (public) or not-for-profit sectors, are vulnerable to threats of fraud (Pickett, 2011).



Figure 2.5: The Fraud Smart Cycle (Pickett, 2011)

Smaller organisations are crippled by occupational fraud in most instances as most of them do not have enough funds to protect themselves against possible fraud, unlike the larger companies that have sufficient resources to obtain sound anti-fraud strategies and controls. This makes them more vulnerable to fraud threats (Wells, 2011).

### 2.7.2. Appreciating respective roles

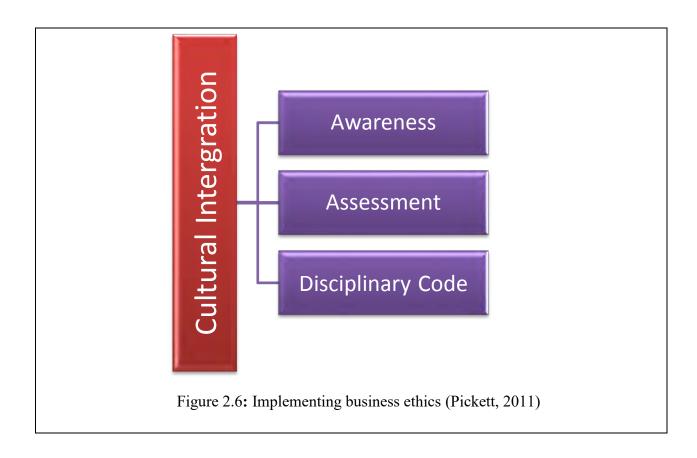
A dishonest employee can harm an organisation. Fraud happens when controls fail and an opportunist take advantage of the gaps in the controls and commit acts of fraud (Pickett, 2011). While most organisations tend to rely more on an audit, both internal and external auditing were found not to be an effective tool in detecting fraud. As much as audits play a significant role in preventing fraudulent behaviour, it should not be the sole form of fraud detection (Wells, 2011).

Stakeholders expect a zero tolerance policy to fraud. Board of directors, citizens in the public sector and other oversight bodies like the Audit Committee) must ensure high ethical behaviour in

an organisation, whether it is in from the public, private or non-profit sectors (Pickett, 2011). An organisation must consider the roles of its employees and be informed on how they can work together to minimize the fraud threats. It is management's duty to ensure that everyone understands and is knowledgeable about fraud and they have the right skill and capacity to cope prevent it (Pickett, 2011).

## 2.7.3. Embracing sound organisational codes of ethics

An organisation should be clear on how it deals with conflicting priorities. Management and employees must disclose potential and actual conflicts of interest. These declarations must be documented by legal counsel. They must also cultivate a culture of embracing sound ethics and promote honesty within an organisation. Zero tolerance to fraud starts with employees possessing and understanding the organisation ethical culture (Pickett, 2011). Figure 2.6 illustrates how the cultural integration process should unfold. Management should implement the organisational code of ethics, which sets the standards and expectations in terms of behaviour and speaks to integrity, accountability and transparency.



# 2.7.3.1. Cultural Integration

Ethics should be cultivated in such a way that employees behave as expected because it is the right thing to do not because they have been instructed or forced. It should form part of the performance management process for employees (Pickett, 2011). The cultural integration process is usually divided into three broad categories namely, awareness, assessment and disciplinary code (Pickett, 2011), namely::

**Awareness:** All employees should be aware of the existing code of ethics, once implemented. To achieve this, organisations must carry out awareness campaigns using a wide range of materials like posters, screensavers and newsletters (Pickett, 2011). More importantly, its content must also be understandable.

- a. **Disciplinary Code**: Any infringement of the code of ethics must be investigated and dealt with immediately (Pickett, 2011).
- b. **Assessment**: After implementing an organisation's code of ethics, management must keep assessing to measure whether the efforts made are successful. This can be done in the form of interviews, staff surveys (preferably conducted by an independent organisation) or an internal audit review process (Pickett, 2011).

### 2.7.4. Recognizing red flags

Most of the fraud happens when warning signs (red flags) are ignored. When an organisation is Fraud Smart every employee know how to report or respond to suspicious behaviour. Red flags bring attention to possible areas where fraud might occur and these must be pro-actively dealt with as early as possible to avoid future losses (Pickett, 2011). The ACFE report (2010) states that there are warning signs that trained auditors and staff can easily detect, for example, if someone is living above their means. Red flags should never be ignored, as they might be the key to detecting or deterring fraud (Wells, 2011).

## 2.7.5. Mastering suitable controls

The risk of fraud should be properly managed with other business risks that all organisations face. Management and all employees must be actively involved and well-versed in safeguarding the organisation against fraud (Pickett, 2011).

# 2.8. Public service fraud risk management

Various government Departments refer to Fraud Risk Management as an Anti-Fraud Strategy/Policy or Fraud Prevention Plan. They all serve a similar purpose which is to pro-actively combat fraud (Conradie, 2010, Dlamini, 2014). In the fight against fraud and corruption the national government has developed many laws and policies. Some of these legislative frameworks are aimed at both the public and private sector. The key legislative acts addressing fraud, corruption and other misconducts (Moran, 2009) include:

- a. The Prevention and Combating of Corrupt Activities Act No. 12 of 2004;
- b. The Public Funds Management Act No. 1 of 1999 (PFMA);
- c. Promotion of Access to Information Act No. 2 of 2000;
- d. Public Service Act Proclamation 103 (Published in Government Gazette 15791 of 3 June 1994);
- e. Whistle Blowing Protection Act 2011; and
- f. Companies Act 2008

In addition to these legislative acts, the South African government also developed independent Chapter 9 institutions such as the Public Protector and the Auditor General. Both these institutions form part of the attempts by government to eradicate fraud, corruption and maladministration (Moran, 2009). A National Government Department Public Service Commission (PSC) conducted a study with the aim of obtaining data on the state of fraud prevention activities within government. The Public Service Anti-Corruption Strategy of South Africa defined fraud as a public official that abuses their authority for an undue indulgence (Sangweni, 2007)

### The study recommended that Departments must:

- a. Improve the process of reviewing fraud prevention plans and increase its efforts in involving staff and management through the use of awareness campaigns;
- b. Appoint proper resources, such as specialist fraud prevention and risk management and internal audit units, and clarify their roles and duties;

- c. Develop effective ways of promoting awareness and educating employees about fraud prevention; and
- d. Tighten internal controls, such as conflicts of interest and procurement policies. (Sangweni, 2007)

The study concluded that there is a considerable improvement on the implementation and development of fraud risk strategies. The hard copies of fraud prevention plans were verified and they existed. It was found that the contents of these plans and risk management strategies were of a high standard (Sangweni, 2007).

# 2.8.1. National government frameworks

South African National Treasury has a comprehensive draft fraud prevention framework that government Departments should adopt and use in their various Departments as a guideline. In addition, they also came up with a fraud risk management policy aimed at National and Provincial Departments, Constitutional Institutions, Public Entities, Provincial Entities, Municipalities (Metropolitan, Local and District). The framework addresses the need for a robust orientation and induction of new employees on the risk of fraud. It further suggests that current and newly appointed staff members are trained and that their attendance and understanding of the state's risk management policy is confirmed by signing forms that attest to this. When an employee contravenes the policy, then decisive action can be taken against him or her (Nxumalo, 2010).

As mentioned in the introductory chapter, the challenge facing public and even private entities is measuring the efficiency and effectiveness of their Fraud Risk Management initiatives. While it is good and helpful to have frameworks and policies, the inability to measure their effectiveness makes them worthless. Organisations need to create positions for Fraud Risk Managers who can solely act as regulators of these policies (Asare and Wright, 2004).

Nkondo (2015) reiterates the lack of full methodology and full study on effective anti-corruption practices. He further states that fraud and corruption are highly complex and continuous research in this field is necessary. He states that interviews, questionnaires, and normal statistical analysis (standard social research) into this phenomenon will yield no results. While the ACFE survey (2012) found that more than 43% of fraud is detected through Tip Offs (Whistle-blowers), Nkondo

(2015) argues that "whistle-blowing accounts do not reveal as much as there is to be revealed". The few studies that have been conducted in South Africa on corruption have no comprehensive and detailed watch on the phenomenon. He states that these studies will remain incomplete unless they focus on certain factors like the nature, causes, functions, financial costs, human costs of fraud and corruption and the role played by media, South Africa's historical context and the never ending struggle against corruption.

## 2.8.2. Kwa-Zulu Natal Department of Health

The primary goal of the Governance Unit within the KZNDOH is to ensure that the highest standard of governance is maintained and that governance structures within the Department are in place to effectively, efficiently and economically use government resources (Zungu, 2014a). In achieving this goal, the Department has an in-house Forensic Unit and has developed a comprehensive Fraud Prevention Strategy which includes an action plan. A Risk Management Committee is in charge of monitoring the activities by governance unit. To reach management and staff, intranet networks and awareness campaigns are used. The Department also has a Tip-Offs Anonymous (Whistle-blowers) line for employees to report fraud, corruption or maladministration and remain anonymous. Only management has access to the hotline. Should an employee wish to send an anonymous email, there is also an e-mail fraud hotline (Dlamini, 2014). In addition to these internal methods of reporting tip-offs, external sources of information include the Presidential Hotline, PSC Hotline, Office of the Premier and allegations from KZN Treasury (Conradie, 2010, Dlamini, 2014).

The primary objectives of developing the Fraud Prevention Plan (Fraud Risk Management/Anti-Fraud Strategy) was to provide guidelines in preventing, detecting and reporting fraud and corruption. It was also to create an ethical culture; encourage staff and external parties to be part of the culture of preventing and detecting fraud; encourage the reporting of suspicious fraud without fear; and to create a culture of accountability and authority (Dlamini, 2014).

The main components of the plan are as follows (Dlamini, 2014):

- a. A code of conduct and business ethics for staff to adhere to;
- b. Strong and comprehensive systems, policies, procedures, rules and regulations;
- c. Clear and unambiguous Disciplinary Codes and Procedures;

- d. Sound internal controls that can prevent and detect possible fraud;
- e. Security Management;
- f. Forensic investigation functions to oversee actual investigations and help to recover lost funds;
- g. Auditor General to provide independent assurance;
- h. Continuous risk assessment (looking on Departmental vulnerability to fraud);
- i. Establish Fraud policy and response plan for staff and management;
- j. A trust worthy Tip-Offs Anonymous (Whistle Blowing) system that is compliant to Protected Disclosures Act;
- k. Robust and inclusive awareness amongst employees and other stake holders; and
- 1. Ongoing maintenance plan and Departmental ownership of the plan.

# 2.9. Measuring Efficiency and Effectiveness of FRM at the University of KwaZulu Natal

The University takes fraud very seriously and has an adopted a zero tolerance policy to it. In addition, it is committed to ensuring good governance. In fighting fraud, the University has a full functional Corporate Governance Unit (Sivnarain, 2013), which comprises of, Internal Audit; Forensic Services Unit (Forensic Unit); and Enterprise Risk Management. This unit was established to safe guard the UKZN interests and reduce its vulnerability to fraud, corruption and maladministration. Having an in-house investigative wing, meant less use of consulting firms and guaranteed continuity (Sivnarain, 2013). In order to proactively deal with the issue of fraud, Forensic Services came up with a Fraud Prevention Policy, which sets the tone and approach in dealing with fraud risk at the university. This policy is in line with the revised 2012 Strategic Plan for the University (2007-2016).

The Forensic Services Department conducted a comprehensive fraud risk assessment, where data was collected in the forensic investigation register and a fraud risk survey was developed. A fraud prevention plan was also developed to effectively manage the risk of fraud to which UKZN is exposed (Sivnarain, 2013). Sivnarain (2013) believes that to keep abreast with local and international best practices, the fraud prevention plan needs to be reviewed on an ongoing basis to determine its effectiveness and sustainability. In 2008 the highest policy making body for UKZN, the Council, approved the following two policies:

- a. Fraud Policy and Response Plan to strengthen existing systems, policies, procedures, rules and regulations of UKZN.
- b. Whistle Blowing Policy which gives it's employees and other interested parties, the ability to anonymously report suspicious fraudulent activities.

In addition to these policies, several interventions have been made to maintain sound governance, which include:

- a. Policy on disclosure of interests;
- b. Policy on gifts;
- c. Conflict of interest of Council Members;
- d. Ethics statement for all staff and students;
- e. UKZN procurement policy;
- f. King III principles; and
- g. Code of conduct for Council and Executive Management.

## a) Training and Awareness Campaigns

Fraud awareness training programs, to inform employees on the risk of fraud in UKZN, is conducted on a regular basis. These training programs help employees recognise fraud in its infancy and highlights why they need to become actively involved in the fight against fraud.

### b) Workshops within areas vulnerable to fraud

Review of the past cases undertaken in to facilitate the learning process, thereby addressing past weaknesses to prevent repeats of such offences. All major fraud cases are assessed by the Forensics Department. The success of this intervention is measured by the feedback from the employees and management. More employees and management are willing to report act of suspicious fraud.

### c) Tip-Offs Anonymous

The reporting of suspicions of fraud is made to an independent line called Tip-offs Anonymous. Through this reporting facility, employees or any party can report matters of fraud anonymously. This Hotline is marketed continuously at the University (Sivnarain, 2013).

#### d) Proactive Fraud Detection

Proactive fraud detection is undertaken in order to seek evidence of fraudulent transactions, to identify environments that are vulnerable to fraud and to address the underlying causes of fraud. This process acts as a major deterrent to would-be fraudsters (Sivnarain, 2013). On that basis, specific forensic data analytic tests are conducted on the University databases (e.g. employee vs supplier master files) in order to identify suspicious transactions. Where exceptions are identified among the data these will be analysed in order to determine whether a full scale investigation is necessary (Sivnarain, 2013). In addition to these, all University divisions are subjected to fraud risk assessments.

## e) Forensic Investigation

Forensic investigations are inherently reactive in nature, where the objective is to establish the facts based on evidence that is collated during the investigation (Sivnarain, 2013).

### 2.10. Implementation

The efficiency and effectiveness of the interventions discussed above has been determined by the UKZN forensic unit, through the number and quality of reports received on the Tip-Offs line compared to pre-implementation of fraud risk management. Individuals are also more aware of their duties to report and employees understand their vulnerability to fraud within their respective duties. They report any suspicious activities and enquire before taking drastic decisions that might be interpreted as fraud. The FRM program has reached all the management and employees around 5 campuses (Sivnarain, 2013).

#### **2.11. Summary**

There is a consensus from the literature that fraud is a serious threat that hinders progress in South Africa. It also has a negative impact on the economy and reputation of the country (Nkondo, 2015). Organisations and governments are actively combating fraud through various avenues. The South African government has come up with laws and institutions to fight against fraud (Pillay, 2004). Internal audits prove that while they are useful in accessing controls, they are not sufficient in detecting fraud (Goldman and Kaufman, 2010). Organisations are embracing and adopting FRM also called Anti-Fraud strategies as a vital tool in fighting and combating fraud, but have not been able to measure their effectiveness in both the private and public sectors. Nkondo (2015), further

states that a lack of literature on the efficiency or effectiveness of FRM makes it difficult to rely on it as the best method to combat fraud.

We can conclude that culprits commit fraud because organisations relax their controls which allows them to do so. Employees and customers are a significant threat to organisations because of their role in committing fraudulent acts. If the organisation has strong and effective measures in place and harsher punishments are meted out to fraudsters, there is a likelihood that fraudulent acts will reduce significantly. In achieving this, comprehensive controls which aim to prevent or combat fraud must be established (Epsley, 2008). The next chapter examines and discusses the research methodology used in this study.

### CHAPTER THREE - RESEARCH METHODOLOGY

#### 3.1. Introduction

Making a decision requires that one finds solutions to their problems. In finding solutions, individuals refer to past experiences or seek information from others who have experienced similar problems. Research is used to find solutions to problems by studying and analysing various factors (Sekaran and Bougie, 2013). Sekaran and Bougie (2013) define research as as an ordered, methodical, information-based, important, inquiry into a specific problem executed to find solutions to the problem. Research therefore contains a series of steps, guided by one or more objectives, with the aim of finding a solution to a problem. Render et al. (2012) state that the most important step in undertaking research is to thoroughly define the problem.

This chapter discusses and outlines the research methodology used in this study as well as its objectives and data collection methods. Questionnaires were used to obtain data (See Appendix two). The research strategy is outlined in the following sections.

## 3.2. Aim and Objectives of the Study

KZNDOH like many other national and provincial Departments in South Africa are faced with increasing fraudulent (occupational fraud) activities. In an attempt to reduce the incidence of fraud, the Department has drafted various policies (fraud risk management intervention) as preventative measures for its employees. Despite such policies, fraud continues to be a major problem facing the Department. This study therefore aims to measure the efficiency and effectiveness of the fraud risk management interventions within KZNDOH.

The objectives of the study are as follows:

- a. To investigate whether the current fraud risk management strategies are yielding any results in the fight against fraud.
- b. To investigate employee's knowledge of fraud risk management.
- c. To establish employee involvement in the fight to combat fraud.

- d. To investigate the effectiveness and efficiency of the Department's current fraud risk management interventions.
- e. To identify areas susceptible to fraud (risk areas), and how more efforts and resources can be used to constructively combat fraud.

# 3.3. Sampling techniques

While it was practically possible to collect data from, or to examine the entire population, the researcher decided not to take this route because it was unreasonable in terms of time, cost and human resources. Sekaran and Bougie (2010) believe that the study of a sample is likely to produce more reliable results than the study of an entire population. Page and Meyer (2000) observe that the study of a sample produces more reliable results because fatigue is reduced and fewer errors are made in data collection, especially when a large number of elements are involved.

According to Sekaran and Bougie (2013) a population is "the entire pool from which a statistical sample is drawn." Kothari (2004) states that "it is very costly and not practical to involve the entire population pool in a study for this purposes of this study, the research was restricted to employees within the department at the Durban regional office. The regional head called a meeting of managers and supervisors into a meeting. The researcher was given an opportunity to explain the purpose of the research. Management present at the meeting took 5 questionnaires each to distribute in their respective units. The sampling frame obtained was obtained from management with a total population of 120 registered employees. Given the size of the regional office and a large staff complement, time needed the sample chosen was the whole 120. The table of sample size for a given population was employed, which states that for a population size of 155, a sample of 110 should be use at a confidence level of 95 percent and a 5 percent margin of error (Sakarana and Bougie, 2010).

Sekaran and Bougie (2013) defined simple random sampling as an unrestricted probability sampling design. Everyone within the population has an equal chance of being selected to participate in a study. This study used a simple random sampling design, because it is less biased, easy to generalize and offers more efficient results. Respondents were not selected based on any

criteria like their position, number of years with the Department or level of education, but were selected randomly. There were not given prior notice of their involvement as respondents in the study.

The questionnaires were sent to all 120 employees from the region to avoid biasness. The researcher availed himself for any queries by the participants. The employees to respondents were not selected in any specific criteria, such as position, number of years with the department or level of education. They were selected randomly when surveys were handed out in their respective units. No prior warning that they were going to participate in the research. A total of 91 responses were received which represents a response rate of 76 percent.

Lohmann and Schmucher (2008) noted that the quality of a survey is dependent on the response rate during data collection. The higher response rates improves the probability that the sample results represent the population. The 76 percent response rate was recorded as a good response and therefore was used to represent the population of interest.

## 3.4. Participants and location of the study

The current employees of the Department in the Durban Region were all eligible to participate in the study. Their eligibility was not based on their position or their level in the Department but on the basis that they all understood the fraud risk management interventions that the Department conducted throughout the province. The study was also conducted in the Durban region because of its close proximity to the researcher. The study excluded employees from the other three regions and those who were absent from work.

#### 3.5. Data collection methods

Sekaran and Bougie (2013) state that questionnaires are the most efficient, cost effective, and time consuming methods of data collection instrument in comparison to other forms of data collection like interviews and participant observation. In this study, an informed consent document/form, declaration form and a six-page questionnaire were used to collect data. The questionnaire was in English, considering that all employees of the Department are appointed on the basis that they can understand and can communicate in the English language.

Quantitative research method was used for the study with questionnaires as the method for data collection. An attempt to use an electronic questionnaire (QuestionPro) was not successful as only

two out of 120 expected responses were received in a 20-day period. The researcher had to personally administered the questionnaires, resulting in an increased response rate and the quick resolution of queries. The responses were anonymously captured on QuestionPro by the researcher, after which the questionnaires were filed in a lockable steel cabinet, in a locked office which only the researcher has access to. The captured information was downloaded from QuestionPro to Statistical Package for Social Science (SPSS) to be analysed.

In addition to the confidentiality clause, instructions and purpose of the study on the cover page, the Questionnaire consisted of six pages of 31 multiple choice questions, divided across five sections follows:

**Section A:** Question 1 to 6: Profile of respondents such as gender, age, level of education and role at work.

**Section B: Question 7 to 12:** Testing of employees' knowledge, with regards to the concept; employees' concerns and opinions of fraud within the Department.

**Section C: Question 13 to 17:** Respondent's opinion on the causes of fraud committed by employees (occupational fraud) in the Department.

**Section D: Question 18 to 23:** Respondent's knowledge on the existence of fraud risk management and other strategies used to fight fraud.

Section E: Question 24 to 31: Employees' involvement in fighting and combating fraud.

Question 32, is a non-compulsory comment section, where respondents provide any additional comments on the research and any other related topics.

The respondents were requested to mark their selected option. They could only choose one option per question.

In order to get information relevant to the objectives of the research, different types of scales (Creswell, 2002) were used throughout the questionnaire. The Nominal (Neuman, 2005) measurement scale was used where YES or NO answers were required. A Likert measurement scale method was also used in four sections, giving respondents the opportunity to respond from a neutral stance (Saunders et al., 2011). The measurement scale ranges were as follows:

- a. Not at all familiar, slightly familiar, somewhat familiar, moderately familiar and extremely familiar;
- b. Not at all aware, slightly aware, somewhat aware, moderately aware and extremely aware
- c. Not at all concerned, slightly concerned, somewhat concerned, moderately concerned and extremely concerned
- d. Strongly disagree, disagree, neither agree nor disagree, agree and strongly agree

#### 3.6. Research Design and Methods

The direction, quality and the success of a study depends on the chosen research design. Research design is the road map on what data needs to be collected; the type of measurements required and the final analysis of the research. Research design involves extracting accurate data that can be easily analysed to find solutions (Sekaran and Bougie, 2013). The study was conducted using exploratory study design (Sekaran and Bougie, 2013).

#### 3.7. Obtaining Department's co-operation

The researcher contacted the Department's Head of Risk Management, in February 2015, in order to gain access to the Department. The researcher was granted permission pending approval from Dr. Sibongile Zungu in his capacity then as Head of Department (HOD). A gate keeper's request letter was emailed to the office of the HOD on 6 March 2015 with the researcher proof of student registration at UKZN and a draft copy of the questionnaire. A provisional gate keeper's letter, which requested permission to conduct a study, was granted on 15 May 2015 by Dr. Elizabeth Lutge – Manager: Epidemiology, Research and Knowledge Management. The University of KwaZulu Natal granted the ethical clearance on 04 September 2015. The questionnaires were distributed on 7 October 2015 and on 20 November 2015.

The Department granted permission to the researcher with the knowledge that:

- a. Participation was entirely voluntary and information received will be used for research purposes only;
- b. Responses will be presented anonymously, and neither the names nor identities of the respondents would be disclosed in any form; and

c. Records and responses would be kept secure in a lockable steel cabinet and electronic information held in a password-protected file accessible only by researcher and dissertation supervisor.

### 3.8. Reliability of the study

Sekaran and Bougie (2010) define reliability as a test of how consistently a measuring instrument measures whatever concept it is measuring. They further state that the reliability of a measure indicates the extent to which it is without bias while it ensures consistent and accurate measurement across time. Golafshani (2003) stated that an extent to which results are consistent over time and an accurate representation of the total population under study is referred to as reliability and if the results of a study can be reproduced under a similar methodology, then the research instrument is considered to be reliable.

Sekaran and Bougie (2010) observed that although it is not possible to exactly calculate the reliability or consistency of every study, this can be tested in various ways. This study only observes three ways:

- a. Stability measure: a measure is stable over a period and has minimal or no variation in results.
- b. Test-retest reliability: If a similar study is given to a group of people at two different times, a comparison of the results from both times will consistently produce similar outcomes
- c. Internal reliability: consistent indicators make up the scale, resulting in the respondent's scores being relative.

The questionnaire was designed to capture accurate information that can be tested across the Department. The questions used to collect data are not biased and will also ensure consistent measurement.

#### 3.9. Validity of the study

Validity determines whether the research accurately measures that which it was intended to measure or how truthful the research results are. In other words, does the research instrument allow you to accurately conclude on your research object? Researchers generally determine validity by asking a series of questions on a questionnaire, and will often make reference to the already existing knowledge or reference in the research of others Golafshani (2003).

Sekaran and Bougie (2013:insert page number) note that validity is mainly concerned with whether we measure the right concept and they define validity as "a test of how well an instrument that is designed and developed by the researcher measures the particular concept it is intended to measure. According to Sekaran and Bougie (2013), validity can be determined in the following ways:

- a. Face validity: Researchers simply look at the items on the research instrument and give their opinion if the items appear to accurately measure what they are trying to measure. This is the least scientific of all measures of validity;
- b. Criterion rated validity: When the results from the instrument accurately relates or predicts some of the internal variables;
- c. Content validity: Ensures that the measure accurately covers the range of meanings included within a concept that is being measured.
- d. Predictive validity: Use of future criterion measures. It indicates the ability of the questionnaire to differentiate among individuals with reference to a future criterion.

Prior to data collection, the researcher conducted the pilot test by asking 12 random Departmental employees (including some in management) to complete the questionnaire and provide feedback. The feedback was based on the structure, questions, time taken and whether the questionnaire was understandable. The questionnaire was also distributed and discussed amongst the researcher's peers and other fellow researchers to identify gaps and potential contradictions. Necessary amendments were made based on the feedback received. The final questionnaire was produced and used for the study. The above process was conducted by the researcher to establish the validity of the instrument and the results were positive.

### 3.10. Data Analysis

Data Analysis is important in giving sense to the study and the data gathered with the aim of answering the research questions and meeting the research objectives. Sekaran and Bougie (2013) state that data collected must be statistically analysed to check if generated hypotheses can be supported. The SPSS was used to analyse data collected. Frequency distribution was a useful descriptive tool to compare feedback patterns for groups of people (Sekaran and Bougie, 2013). The reaction of respondents to the questionnaire was measured using the central tendency and dispersion of variables - mode, median/mean and standard deviation (Render et al., 2012). Findings and data were presented in the forms of bar graphs for ease of understanding. The data

helped in concluding on the measurement of efficiency and effectiveness of the fraud risk management interventions by the Department.

# 3.11. Summary

This chapter discussed the research methodology used for the study, the methods of data collection, the sampling process, measurement scale ranges, research design and pertinent information on the respondents. It also highlighted some of the challenges with the initial data collection method of online surveys. The chapter also discussed the content of the questionnaire. Having discussed these the next chapter presents and discusses the respondent's results gathered during the survey.

### **CHAPTER FOUR - PRESENTATION OF RESULTS**

#### 4.1. Introduction

To achieve the objectives of this study and respond to its research objectives, data was collected using questionnaires. The findings were presented in graphs. The results were sorted following sub-sections as they appear on the questionnaire:

- a. The profiles of respondents;
- b. Familiarity with fraud risk management;
- c. Opinions on the causes of fraud committed;
- d. Understanding of the existing interventions of fraud risk management; and
- e. Their involvement in fighting fraud.

## 4.2. Survey Response Rate Evaluation

The response rate was approximately 76% with ninety-one questionnaires completed out of the 120 that were distributed across the Department. The questionnaires were randomly distributed to the employees of the Department.

The results from the questionnaires are presented as follows:

### 4.3. Demographics of the respondents

Personal details or demographics included information such as age, educational level, current position, number of years with the Department and the current role. Sekaran and Bougie (2013) stated that, names of respondents, identity numbers and residential addresses should not form part of the questionnaire if they are not required.

#### 4.3.1. Gender of Respondents

More than 50% of respondents were female while males represented 45% as shown of Figure 4.1 below:

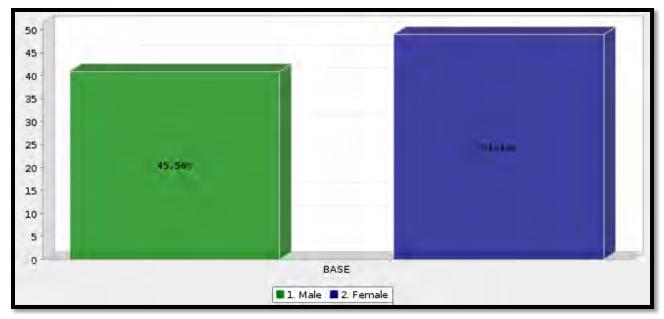


Figure 4.1: Gender of Respondents

# 4.3.2. Age of Respondents

Age forms an integral part of this study, Figure 4.2 below illustrates the ages of respondents.

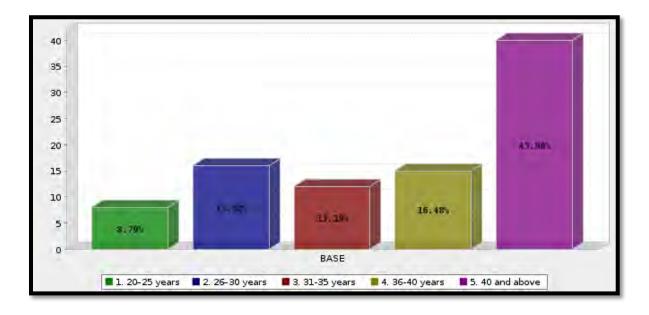


Figure 4.2: Age of Respondents

The graph shows that 8% of the total respondents were between the ages of 20 and 25 years. More than 17% of respondents were between the ages of 26 and 30 years, while 12 respondents, 13% of

the total sample, fell between the ages of 31 and 35. Respondents aged between 36 and 40 made up 16% of the total sample. There were 40 respondents from 40 years and above, the largest portion of the sample at 44%.

### 4.3.3. Educational level

The respondent's level of education was important as identified in the literature review. The results are presented on figure 4.3 below:

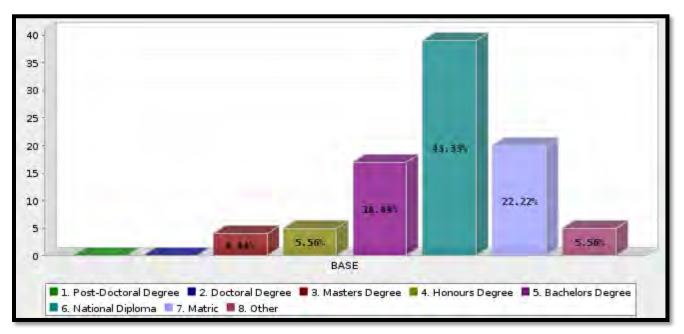


Figure 4.3: Respondent's highest level of education

The results show that none of the respondents possessed Post-Doctoral and Doctoral Degrees, 10% completed Masters and Honours degrees. Seventeen (more than 18% of the sample) respondents possess Bachelor's degree, with more than 39 respondents (more than 43% of the sample) holding national diplomas. The remainder of the 25 respondents possess Matric (20 respondents) and other (5 respondents).

### 4.3.4. Respondent's Divisions

It was stated in the literature review that different divisions within the Department are exposed to different types of fraud and corruption. Figure 4.4 below represents Departments or divisions that respondents work in.

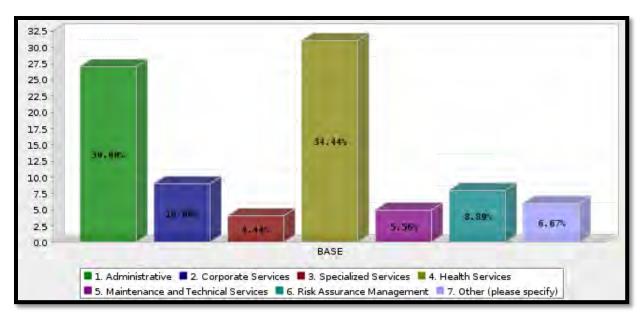


Figure 4.4: Respondent's Division

The results show that the majority of respondents (31) who made up more than 34% of the total sample) were from Health Services, while 27 respondents (30%) were administrative staff. Eight (9%) and four (4%) employees belonged to Corporate Services and specialized services respectively. Maintenance, Technical Services, Risk Assurance Management and other divisions only had five, eight and six respondents respectively.

# 4.3.5. Work experience

Work experience has been directly linked to the fraud committed in organisations as examined in the literature review. Figure 4.5 illustrates the number of years that respondents have worked with the KZNDOH.

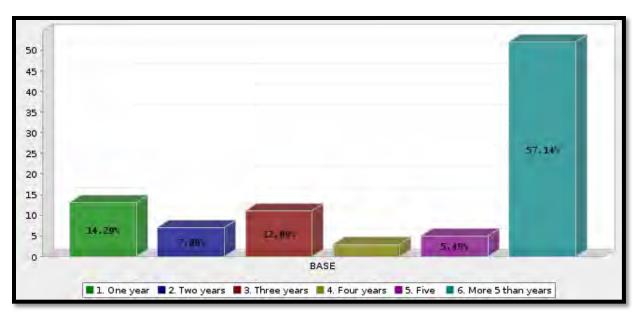


Figure 4.5: Respondent's number of years with the Department

More than 57% of the total sample (52 respondents) have over 5 years work experience with the Department, while the rest have less than five years.

### 4.3.6. Job role

Previous research has shown that there is a relationship between the role of an employee and fraud. The ACFE report (2010) states that most fraudulent acts are committed by individuals at the management level (Wells, 2011). Figure 4.6 below illustrate the roles that respondents play.

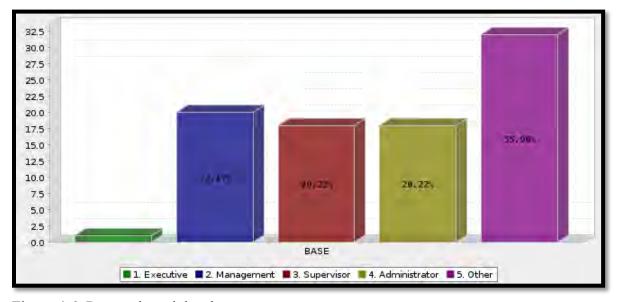


Figure 4.6: Respondents job role

Only one respondent (1%) filled an executive position. Twenty respondents (more than 22% of the sample) occupy managerial positions, while 18 respondents (20% of total sample) were supervisors and another 18 respondents worked as administrators (20%). Thirty-two respondents (more than 35% of the sample) have other roles within the Department.

# 4.4. Fraud Risk Management at KZNDOH

The Department has a very comprehensive Fraud Prevention Plan (FPP) and other relevant frameworks. This section tests the respondent's knowledge of these policies, their overall knowledge of fraud and the nature of the Department's intervention in fighting fraud.

#### 4.4.1. Fraud Risk Management concept

The literature revealed that both the PSC and the KZNDOH's fraud risk management emphasize that staff members must know the concept. Respondents were asked whether they are familiar with the concept of FRM. Figure 4.7 presents the knowledge of respondents below:

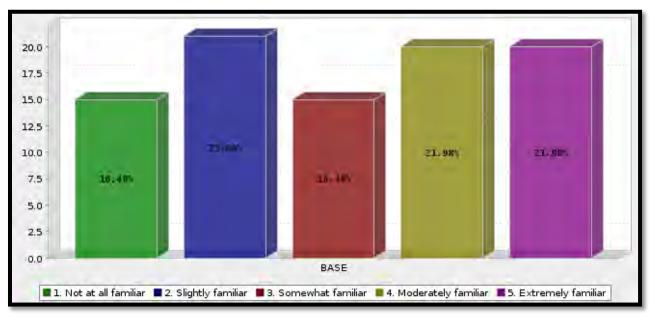


Figure 4.7: Fraud Risk Management Concepts

The figure shows that 15 respondents (more than 16% of the sample) said they were not familiar with the concept while another 15 respondents were slightly familiar with the concept. While twenty-one respondents (more than 23% of the sample) were slightly familiar with the concept, 20 respondents were moderately familiar and another 20 respondents were extremely familiar with

the concept, altogether representing more than 43% of the sample). Statistical results of the data were: mean at 3.10, standard deviation at 1.4 and variance of 2.00.

# 4.4.2. Knowledge of Forensic Investigations Unit

The literature highlighted the importance of the forensic investigation unit within the KZNDOH. With regard to staff awareness of the Department's forensic investigations unit, the following results were illustrated in Figure 4.8 below:

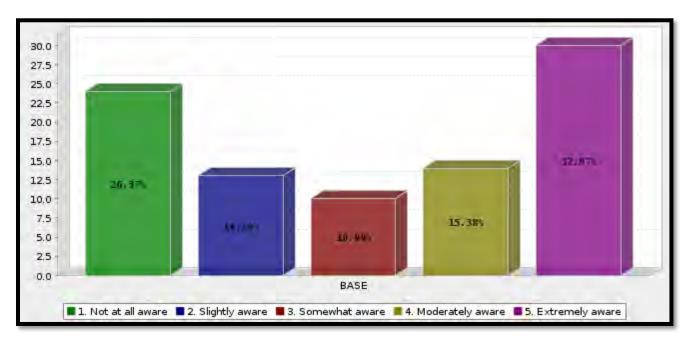


Figure 4.8: Forensic Investigations Unit awareness

Over 32% of the sample (30 respondents) were fully aware of the unit's existence, while more than 26% (24 respondents) were not at all familiar. The other 13, 10 and 14 respondents were slightly, somewhat and moderately aware respectively. The statistical values were as follows: mean 3.14, standard deviation 1.64 and variance 2.68.

#### 4.4.3. Concern with the level of fraud

The literature stated that employees must be part of fraud risk interventions. Figure 4.9 below shows the concern respondents have regarding fraud in the Department.

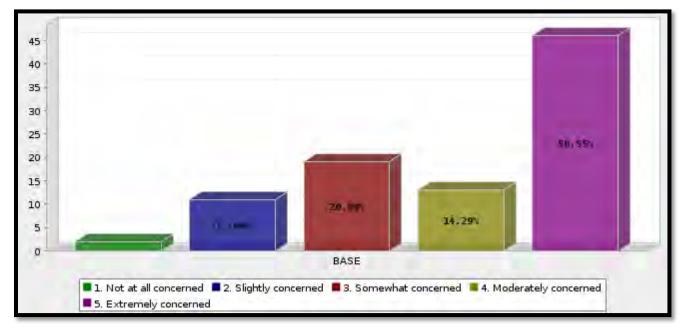


Figure 4.9: Concerns with level of fraud

The results show that 46 respondents (more than 50% of the sample) were extremely concerned with the fraud in the Department, while two respondents (above 2% of the sample) were not at all concerned. Eleven respondents (12% of the sample) were slightly concerned, thirteen were moderately concerned and 19 were somewhat concerned of the level of fraud in the Department. The mean stood at 3.99, standard deviation 1.19 and 1.14 for variance.

# 4.4.4. Problem with fraud

The respondent's opinions on the fraud problem within the Department are reflected in Figure 4.10 below:

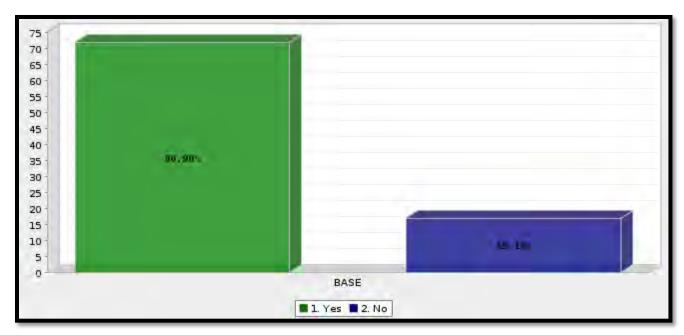


Figure 4.10: Problem with fraud

An overwhelming majority, 72 respondents (more than 72% of sample) believed that the Department had a problem with fraud compared to 17 respondents (19%) who believe that the Department has no problem.

# 4.4.5. Participation in the fraud awareness training

The Department's FPP emphasizes that one of its priorities is to train all staff members and management on fraud. The results are presented on Figure 4.11 below

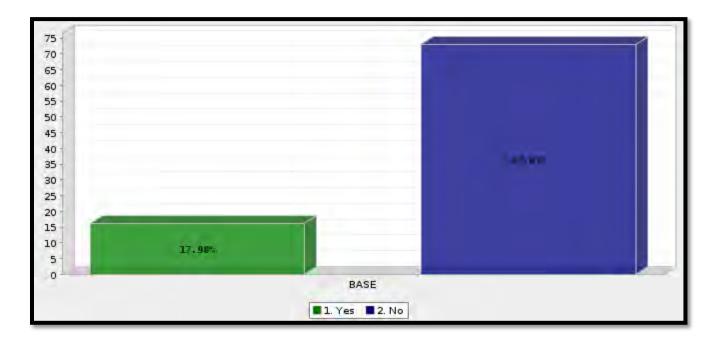


Figure 4.11: Fraud Awareness Training

The results show that more than 82% of the sample (73 respondents) have never participated in the fraud awareness training while only 16 respondents (more than 17% of the sample) have participated in the same training.

# 4.4.6. Tip-Offs anonymous number

The literature review indicated that the most effective tool in fighting fraud is Tip-Offs Anonymous or whistleblowing hotline (Pickett, 2011). The results are presented in Figure 4.12.

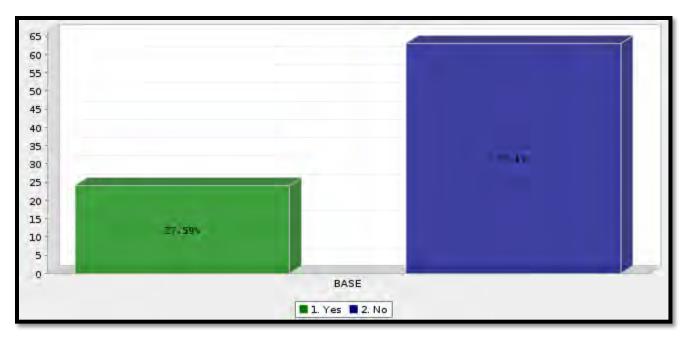


Figure 4.12: Tip-Offs anonymous number

The results indicate that only 24 respondents (more than 27% of the sample) know the Tip-Offs Anonymous number, as compared to 63 respondents (more than % of the sample) who are not aware of the Tip-Offs Anonymous number.

# 4.5. Opinion on the causes of fraud committed by employees

The objective of this section of the questionnaire was to ascertain whether respondents have an understanding of where fraud stems from. The feedback gives the Department indications that employees might be aware of who are the perpetrators of fraud within the Department. With adequate training and awareness, they might be willing to give information. The findings were as follows:

# 4.5.1. Department has been a victim of fraud committed by staff

Respondent's views on whether the Department is a victim of fraud committed by staff are presented in the graph Figure 4.13 below:

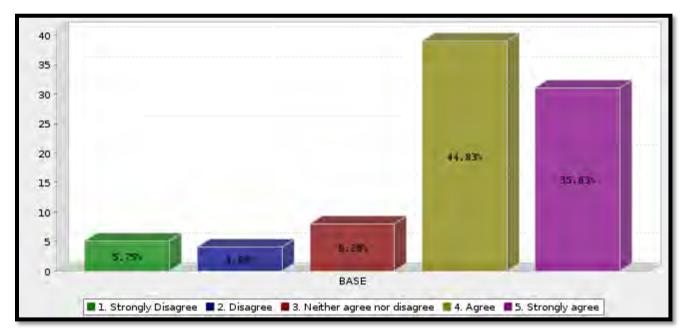


Figure 4.13 Fraud committed by staff

The results showed that 84% of the sample (70 respondents - made up of 39 who agreed and 31 who strongly agreed) believe that the Department has been a victim of fraud committed by staff members. Fourteen respondents (more than 15% of the sample) were neutral. Nine respondents (five strongly disagreed and four disagreed), making up more than 8% of the sample believe KZNDOH has not been a victim of fraud committed by staff.

# 4.5.2. Greedy employees commit fraud

Figure 4.14 below shows responses to whether greedy employees commit fraud.

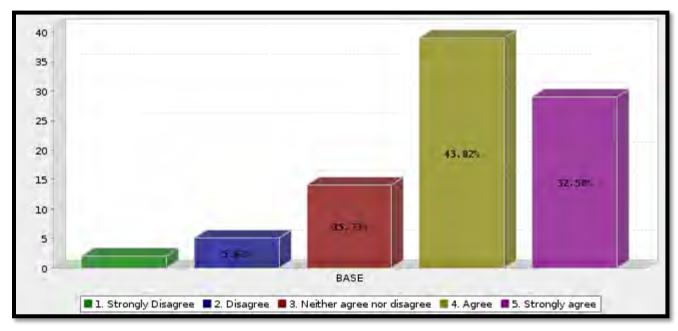


Figure 4.14: Greedy employees commit fraud

An overwhelming majority of 68 respondents (76%), was made up of 39 who agreed and 29 who strongly agreed that greedy employees commit fraud. Fourteen respondents (16% of the sample) neither agreed nor disagreed. Seven respondents, two who strongly disagreed and five who disagreed that fraud is not committed by greedy employees, made up 8% of the sample.

#### 4.5.3. Non ethical staff commits fraud

Figure 4.15 below shows responses to whether non-ethical staff committed fraud in the Department.

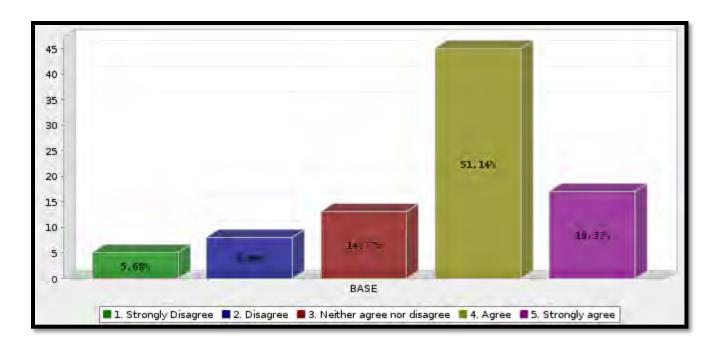


Figure 4.15: Non ethical employees commit fraud

Sixty-two respondents, representing more than 70% of the sample, were made up of 45 who agreed and 17 who strongly agreed that non-ethnical employees commit fraud. Thirteen respondents (more than 14% of the sample) neither agreed nor disagreed, while five strongly disagreed and eight disagreed that non-ethical employees commit fraud.

# 4.5.4. Inadequate internal controls led to employees committing fraud

Internal controls play an integral role in fighting fraud. The stronger internal audits are, the higher the possibility that fraud risk is low, as reiterated in the literature. The results are reflected in Figure 4.16.

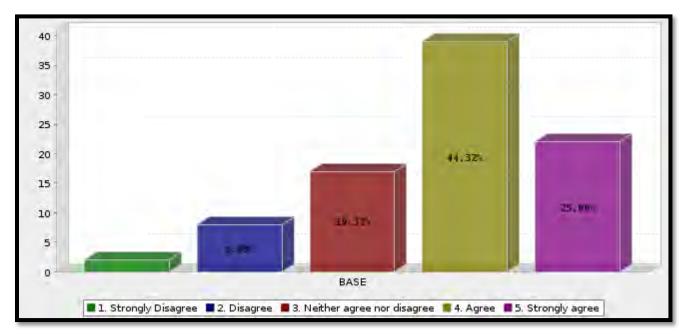


Figure 4.16 Inadequate internal controls

The results reveal that the majority of respondents, representing more than 69% of the sample (61 respondents, made up of 39 who agreed and 22 who strongly agreed) believed that inadequate internal controls led employees to commit fraud. Seventeen respondents (representing more than 19% of the sample) neither agreed or disagreed, while only 10 respondents (made up of two who strongly disagreed and eight who disagreed, representing more than 11% of the sample) believed that inadequate internal controls did not lead employees to commit fraud.

# 4.5.5. Poor ethical culture led to employees committing fraud

The ethical culture of an organisation might influence the level of fraud or corruption being committed. If the tone at the level of senior management appears to be promoting a poor ethical culture, it might encourage staff to commit fraud. The results are reflected on Figure 4.17 below:

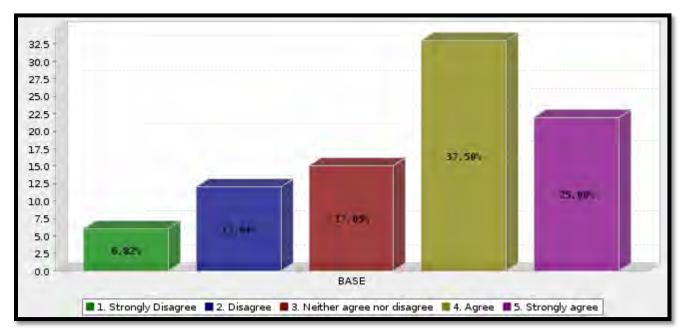


Figure 4.17: Poor ethical culture

The results illustrate that more than 37% and 25% respectively of the sample agreed and strongly agreed that the poor ethical culture within the Department led to employees committing fraud. Fifteen respondents (representing 17% of the sample) neither agreed nor disagreed, while eighteen respondents (made up of six who strongly disagreed and eight who agreed, representing 20% of the sample) do not believe that a poor ethical culture led to employees committing fraud.

#### 4.6. Current FRM interventions

This section addresses the existing intervention of the Fraud Prevention Plan or FRM strategies to ascertain whether they are reaching the intended employees and serving their purpose of helping the Department in their fight against fraud.

## 4.6.1. Fraud risk training attended

The literature with regards to fraud risk training emphasises that training of staff in fraud risk should occur regularly. The respondent's responses are set out in Figure 4.18 below:

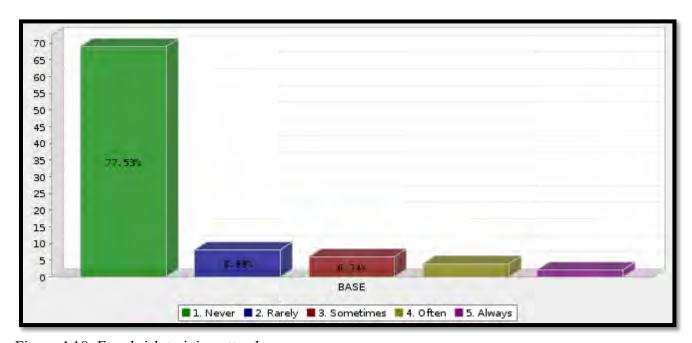


Figure 4.18: Fraud risk training attendance

The results show that most of the employees (69 respondents, representing more than 77% of the sample) have never attended fraud risk training. For the remaining respondents, some have rarely (9%), sometimes (7%), often (4%) and always (2%) attended the training.

# 4.6.2. Fraud awareness campaigns

The literature with regards to fraud awareness campaigns, emphasises that they target all employees. The results are shown below in Figure 4.19:

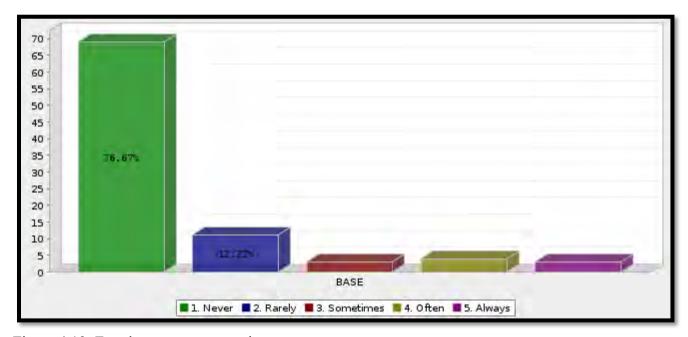


Figure 4.19: Fraud awareness campaigns

The results reveal that 69 respondents (representing 77% of the sample) have never attended fraud awareness campaigns. The remaining respondents have rarely (12%), sometimes (3%), often (4%) and always (3%) have attended the fraud awareness campaign.

#### 4.6.3. Fraud risk on the intranet

The literature review has indicated that employees must be informed about fraud risk and one of the effective ways is through intranet networks, which most employees have access to. Results are presented in a graph below (Figure 4.20).

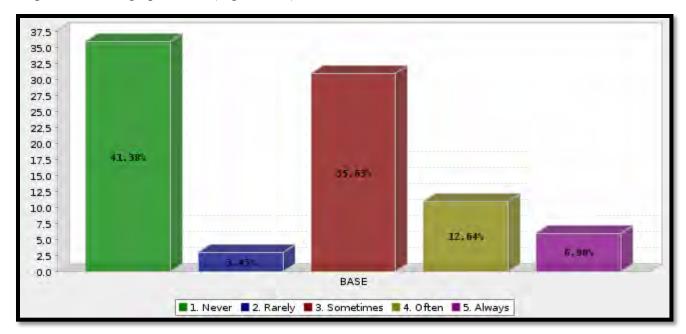


Figure 4.20: Fraud risk on intranet

The results show that 36 respondents (representing 41% of the sample) have never read about fraud risk on the intranet, while 31 respondents (36%) have read about it sometimes. Eleven respondents (13%) often read about it. Only 6% always read about fraud risk on the intranet, while three respondents (7%) rarely read about it.

# 4.6.4. Types of fraud that might occur

The literature makes emphasis on making employees aware of possible fraud risks within their environment. Employees then can become more vigilant on types of fraud that might occur, and fraud can be detected early. The respondent's awareness on the type of fraud that might occur in their units is presented in Figure 4.21.

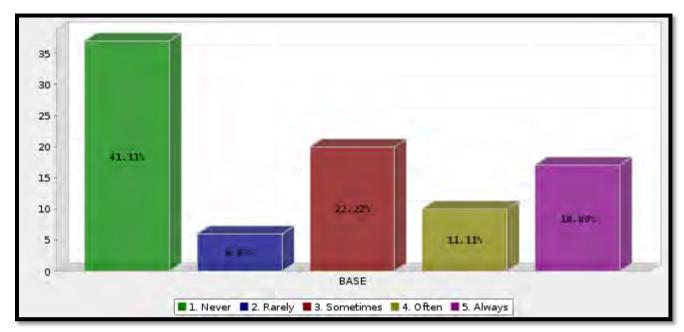


Figure 4.21: Type of fraud that might occur

The results show that 37 respondents (representing 41% of the sample) have never been made aware of the types of fraud that might occur in their units, while 20 respondents (22%) have sometimes been made aware. Ten respondents (10%) were often made aware. Seventeen respondents (19%) have always been made aware, while six respondents (7%) have rarely been made aware of the type of cases that might occur.

# 4.6.5. Awareness of the investigation findings

One of the key aspects of FRM is disclosure. The literature review highlights that an organisation needs to make employees aware of its zero percent tolerance policy against fraud, by taking decisive action against perpetrators. Employees need to be informed of the findings and decisions on cases investigated within the Department. The results are presented in Figure 4.22 below.

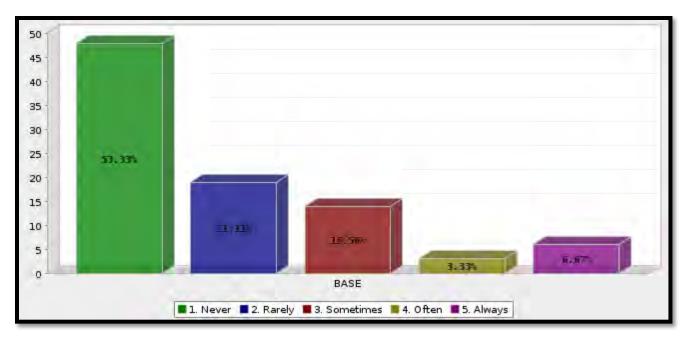


Figure 4.22 Awareness of the investigation's findings

The results above reveal that 48 respondents (representing 53% of the sample) have never been made aware of the findings from acts of fraud investigated in the Department. Nineteen and fourteen respondents have rarely and sometimes been made aware respectively. At least three and six respondents (representing 10% of the sample) have often and always been made aware of the investigation findings.

# 4.6.6. Fraud hotline

A Fraud Hotline has been perceived as the most effective tool for reporting fraud and corruption. The Department has a dedicated fraud hotline and anonymous email line. The results are presented in Figure 4.23 below:

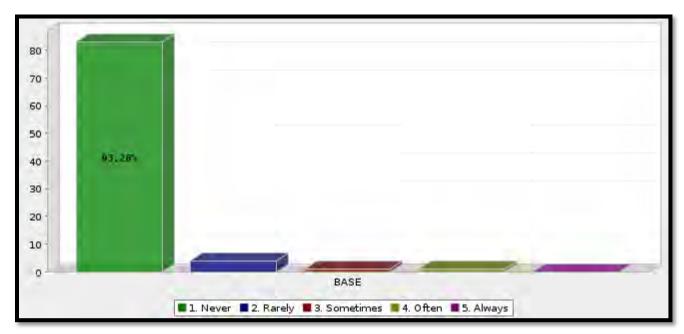


Figure 4.23 Fraud Hotline

An overwhelming majority of the respondents (83 out of 89), representing 93% of the sample have never used the hotline to report fraudulent act. The other six respondents (representing 7%) have rarely, sometimes and often used the hotline.

# 4.7. Involvement of employees in combatting fraud

The involvement of employees in the fight against fraud is crucial. Their understanding of their role in preventing and curbing fraud is without a doubt the most powerful tool in Fraud Risk Management (Sangweni, 2007, Mgijima, 2011). In this section we look at the respondents understanding of the role and solutions that can help in the fight against fraud.

#### 4.7.1. Allegations to be investigated by internal staff

Respondent's opinion regarding who investigates the allegations of fraud is crucial. The literature also talks of transparency and fairness when investigating allegations of fraud. Staff might feel uncomfortable in reporting matters to their colleagues for investigation. The respondents were asked whether the allegations of fraud must be investigated by the Department's internal staff, their responses are presented in Figure 4.24 below.

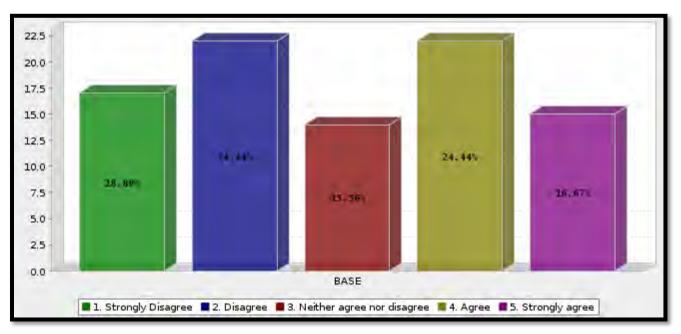


Figure 4.24: Investigation to be investigated by the internal staff

The results show that 22 respondents (24%) agreed and 22 (24%) disagreed on whether the investigation should be conducted by internal staff. Fourteen respondents (representing 16% of the sample) were neutral (neither agreed nor disagreed), while seventeen and fifteen respondents (representing a total of 36%) strongly disagreed and strongly agreed respectively. The data indicates that employees are divided on whether Departmental investigators be used or not. The survey did not ask as to the reasons behind their choices.

### 4.7.2. Allegations of fraud to be investigated by consultants

Respondents feel at ease being investigated by an external party, who has no interest in the company. The disadvantage of using external parties is that they still have to learn about the environment, which might cause the investigations to take a longer time. The results are presented in Figure 4.25 below

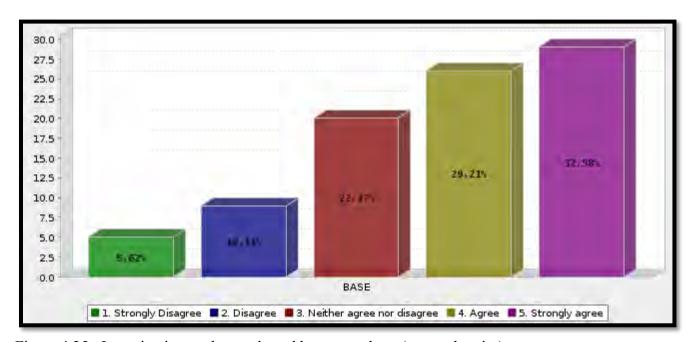


Figure 4.25: Investigations to be conducted by a consultant (external entity)

As shown in the Figure 4.25, it appears that the majority of the respondents are in agreement that Departmental investigations be carried out by external parties (consultants). Twenty-nine and 26 respondents (representing more than 62% of the sample) agreed and strongly agreed respectively, while 20 respondents (representing 22% of the sample) were neutral. The rest of the respondents (16%), disagreed and strongly disagreed with the use of consultants for internal investigations.

### 4.7.3. Strong internal controls prevent the occurrence of fraud

Literature has found that having strong internal controls do not necessarily prevent the occurrence of fraud, rather the monitoring and evaluation of those controls might help. The results are presented in Figure 4.26 below:

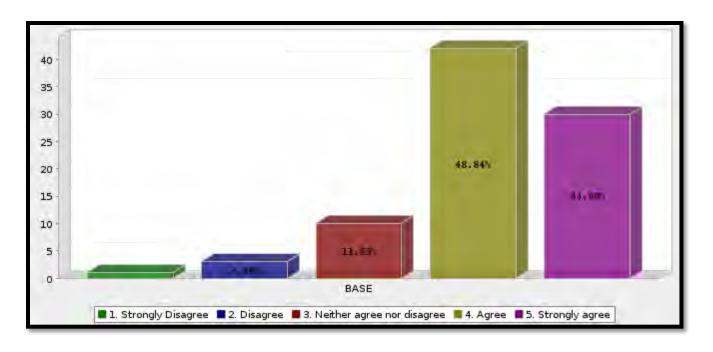


Figure 4.26: Strong internal controls prevent the occurrence of fraud

An overwhelming majority of respondents (72 subjects, made up of 42 who agreed and 30 who strongly agreed) making up over 83% of the sample, believe that stronger internal controls might prevent the occurrence of fraud. Ten respondents (representing 12% of the sample) were neutral, while only one and three respondents either strongly disagreed or disagreed with the strong internal controls.

## 4.7.4. Management is responsible for preventing fraud

Although there are conflicting views in relevant literature as to who is responsible for prevention of fraud, most literature used for this study indicates that it is management's responsibility to ensure that fraud is prevented. The results are presented in the Figure 4.27 below:

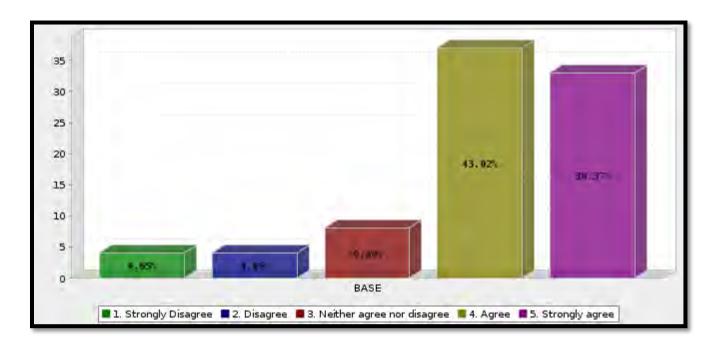


Figure 4.27: Management is responsible for preventing fraud

Approximately 81% of the sample (made up of 37 respondents who agreed and 33 who strongly agreed) believed that it was management's responsibility to prevent fraud. Eight respondents (9% of the sample) remained neutral, while the remaining 9% either disagreed or strongly disagreed that it was management's responsibility.

## 4.7.5. Auditors are responsible for preventing fraud

Surveys have found that internal auditors have very little influence in identifying fraud and corruption (Wells, 2011). Staff have faith in internal auditors as they can be used to build awareness and prevent fraud.

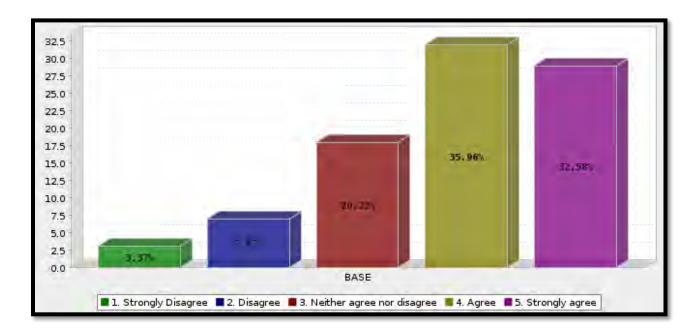


Figure 4.28: Internal Auditors are responsible for preventing fraud

As shown in Figure 4.28 above, approximately 69% of the sample (made up of 32 respondents who agreed and 44 who strongly agreed) believed that it was the responsibility of internal auditors to prevent fraud. Eighteen respondents (20% of the sample) remained neutral, while the remaining 11% either disagreed or strongly disagreed that it was the internal auditors' responsibility.

#### 4.7.6. Code of ethics of staff

The literature review highlighted that employees should embrace sound organisational code of ethics. It further stated that a zero tolerance policy to fraud starts with employees possessing and understanding the organisation's ethical culture (Pickett, 2011). Respondent's perception on the codes of ethics for staff were collected and the results are presented in the Figure 4.29 below:

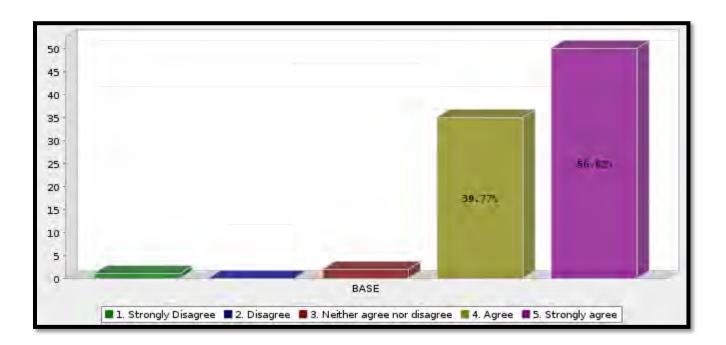


Figure 4.29: Codes of ethics staff

The results show that 85 (97 %) of all respondents (made up of 35 who agreed and 50 who strongly agreed), believed that the Department should have a sound code of ethics for all staff. Two respondents neither agreed nor disagreed and only one respondent strongly disagreed that the Department should have a code of ethics for all staff members.

## 4.7.7. Department should provide a whistle blowing hotline for staff and other stakeholders to report suspicions of fraud

The literature emphasized the importance of having a reliable and independent whistle blowing hotline. It can be used by both employees and external stakeholders to report fraud related matters. A sound whistleblowing policy that ensures the freedom and safety of the whistle-blower is also needed. Results on respondent's opinion on the whistle blowing hotline are highlighted in Figure 4.30 below:

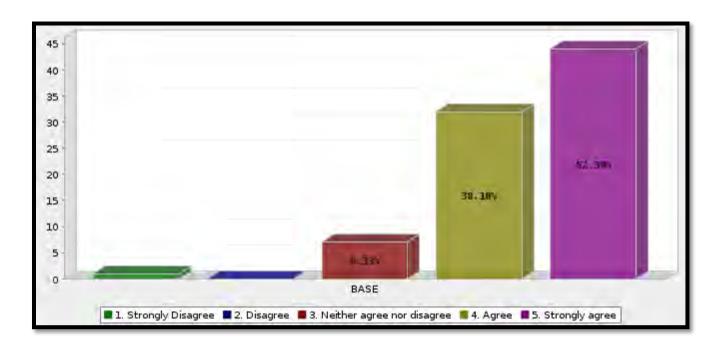


Figure 4.30: Whistle blowing Hotline for staff and other stakeholders

The results show that over 90% of respondents (32 respondents agreed and other 42 strongly agreed), believed that the Department should provide a whistle blowing hotline for staff and other stakeholders to report suspicious fraud. Seven respondents (representing only 8 % of the sample) neither agreed nor disagreed, while only one respondent strongly disagreed with the Department providing a whistle blowing hotline.

## 4.7.8. Conduct regular surprise fraud audits

Sivnarain (2013) states that surprise fraud audits are one of the most effective tools in fighting and combating fraud. It also ensures that employees behave properly. Figure 4.31 shows the results of respondent's perception on Departmental surprise fraud audits.

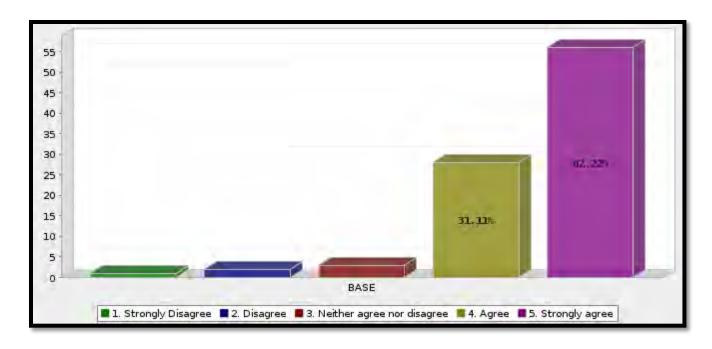


Figure 4.31: Respondent's perspectives on conducting surprise fraud audits often

The results show that 84 respondents, made up of 28 who agreed and 56 who strongly agreed, and representing more than 92% of the sample, believed that the Department should conduct regular surprise fraud audits. Three respondents (representing only 3% of the sample) neither agreed nor disagreed, while 3% disagreed and strongly disagreed on conducting surprise fraud audit.

## 4.8. Summary

This chapter presented the results of the questionnaires conducted with staff of KZNDOH to determine the efficiency and effectiveness of FRM in the Department. The results were divided into five broad thematic areas, namely:

- a. Profile of the respondent;
- b. Information on fraud risk management at KZNDOH;
- c. Respondent's opinion to the causes of fraud committed by employees;
- d. Opinion on the effectiveness of the current FRM intervention; and
- e. Department's role in involving all the employees to combat fraud

The results met the objectives of this study and answered the research questions. A key finding from the data showed that the key objectives of FRM have not been fully achieved at the

Department. Furthermore, the respondents do not comprehend the concept and are not sure of their expectations in combating fraud. The findings identified all the variables (negative or positive) necessary to determine whether the current FRM at the Department is efficient and effective. The next chapter (Chapter Five) discusses these results in details.

#### **CHAPTER FIVE - DISCUSSION**

#### 5.1. Introduction

This study investigated the efficiency and effectiveness of the Fraud Risk Management/Fraud Prevention Plan for KwaZulu Natal Department of Health, eThekwini Region. This chapter discusses the results from the questionnaires conducted with staff in the KZNDOH. This chapter will present findings that the Department should consider in addressing fraud. It further recommends ways that the Department can utilise it's already existing fraud risk plans to combat fraud. The limitations of this study are discussed in detail at a later stage in the chapter. Finally, this chapter highlights possible gaps and possibilities for further research.

## 5.2. Discussion

Discussions in this section will be based on the objectives of the study highlighted in Chapter One and discussed in conjunction with the findings as presented in Chapter Four. The study met its objectives as the discussions and the analysis below will show.

## 5.2.1. Demographics of the sample

Specific demographics such as the age and gender of the participants were not pertinent to the study. The study targeted any gender and age, as participants were chosen randomly and it was dependent on their availability at the time the questionnaires were distributed. Female respondents made up over 50% of respondents while men made up less than 45% of the respondents. The largest age group was those 40 and above at over 44% of the sample. This was expected as more than 57% of respondents have been with the Department for more than 5 years. Wells (1990) in his article "Six Common Myths about Fraud", states that the assumption that older employees commit fraud more than younger ones is a myth.

# 5.2.2. Objective One: To investigate whether the current fraud risk management strategies are yielding any results in the fight against fraud.

There is no way of measuring the effectiveness of the current Department's fraud prevention plan, as it is still investigating numerous cases of fraud. The Governance unit mostly concentrates their energies in fraud investigations, and hardly in the fraud prevention strategies. Statistics from the 2013/2014 Annual Report show that fraud is still a problem in the Department (Zungu, 2014a). Fraud occurs despite various resources in place to curb and prevent fraud like the National

Treasury Draft Fraud Management Framework, the KwaZulu Natal Anti-Fraud Strategy, the KwaZulu Natal Anti-Fraud Policy and KZN Health Fraud Prevention Plan. Unauthorised expenditure does not fall under the broad definition of fraud, but for the layman it is always construed as fraud. The damning 2014/2015 report by the Auditor General that more than 90% of the unauthorized expenditure came from the Department of Health in KwaZulu Natal (Makwetu, 2015); suggests that the interventions in place are currently not adequate.

## 5.2.3. Objective Two: To investigate employee's knowledge of fraud risk management.

The objectives of the Department's fraud prevention plan are to involve all the employees in the fight to combat fraud within the Department. Objectives B, C and D of the Department's fraud prevention plan, emphasizes how all employees must be part of the fight against fraud (Dlamini, 2014). Previous studies on fraud and corruption show that in order for fraud risk management to work, employees must be fully aware of its objectives and be included at all times (Kaptein and Schwartz, 2008). The findings by a survey conducted by the PSC, found that Departments had adequate and comprehensive fraud risk management strategies, but did not test whether employees within those Departments had knowledge of such strategies (Sangweni, 2007). Literature review indicated that the most effective tool in fighting fraud is a Tip-Offs Anonymous or whistleblowing hotline (Pickett, 2011).

The results of the study revealed that most respondents were familiar with the concept of FRM. They were also aware of an in-house forensics investigation unit. Ultimately, the goal should be to ensure that all employees in the Department are aware of the various fraud risk strategies. The results further give a picture that more than 80% of the respondents think that the Department has a problem with fraud, while more than 82% have never attended a fraud awareness training. The overwhelming 72% of the respondents did not know the Department's Tip-Offs Anonymous number. The results show inconsistences in the training of employees, with only 18% of respondents having participated in the Department's fraud awareness training. All the 16 respondents who have been trained were in the management and senior management positions. It is important that the Department provides training and implements the awareness campaigns to all staff at all levels.

## 5.2.4. Objective Three: To establish employee involvement in the fight to combat fraud

A review of a wide range of literature show the importance of involving employees in the fight to combat fraud in organisations. The study considers the involvement of employees in the fight against fraud. Based on the findings, most of the employees are not involved in the fight again fraud.

The aim of fraud risk is to ensure that staff get involved and own the process of fighting fraud and corruption. Staff have a huge role to play in the fight against fraud. There is no way an organisation can win the fight against fraud without the support and commitment of employees in the anti-fraud strategy. Failure to involve them might result in increased and never-ending fraudulent activities (Pickett, 2011). Possessing a wide range of detailed and comprehensive documentation on fraud risk management/anti-fraud strategies is not on its own effective in informing, training and building employee awareness. Training and awareness campaigns are needed, so that employees will understand their role and how they can involve themselves in the fight against fraud (Richard et al., 2011). The Integrity Survey of 2008-2009 conducted by KPMG, found that more than 94% of respondents found that training on standards of conducts was clear and easy to comprehend, 91% stated that communication and training is effective in guiding their decisions and conduct on a daily basis, while 90% felt the training was provided to them when they needed it (Richard et al., 2011).

The results of this study are not in line with effective fraud risk management. No employee involvement was identified during the study. Over 77% of respondents have never attended fraud risk training of any kind. The vast majority of respondents are not even aware of the Fraud Prevention Plan document. Wells (2011) states that unless the majority of employees are committed to reducing occupational fraud or any type of proactive fraud fighting, the program is not going to be successful. He further suggests that at the very least, an organisation should provide some form of antifraud training at orientation for new employees.

## 5.2.5. Objective Four: To investigate the effectiveness and efficiency of the Department's current fraud risk management.

Like any other organisation, the Department's desired goal is zero percent fraud, as outlined in their fraud prevention plan. The Department has no statistical results to prove that there has been a vast improvement its fight against fraud since the adoption of its fraud risk plan.

No studies have been found to measure the effectiveness and efficiency of the fraud risk management. Wei et al. (2013) found that it is very hard to determine the effective and efficient detection of banking fraud. Scholars agree that there is insufficient existing research to explore effective practices to reduce fraud and corruption. Materials need to be developed to implement an effective anti-corruption practice for the public service (Nkondo, 2015).

This study is unable to ascertain whether the Department's current fraud prevention plan is effective and sufficient, because of the lack of comparable data before the document was introduced prior to the conduct of this study. The fact that there are still allegations of fraud and newspaper reports of fraud within the Department, one can conclude that the Department has not reached a zero percent fraud rate as of yet.

## 5.2.6. Objective Five: Help the Department in identifying areas that are susceptible to fraud (risk areas), where more efforts can be concentrated in the fight against fraud.

This study covered a wide range of units including Administration, Corporate, Specialized, and Health Services, Maintenance and Technical Services, and Risk Assurance Management. The reason behind covering this wide spectrum was to try and identify sections that were worse off in terms of vulnerability to fraud. A full fraud health check, where individual units will be diagnosed further on their susceptibility to fraud is recommended. The study revealed that most respondents were not informed with regards to the fraud that occurred in their respective units.

Literature reiterates the importance of informing and disclosing findings of fraud and the taking of decisive action against perpetrators. These actions show how important it is for the Department to fight and combat fraud (Pickett, 2011).

## 5.3. Summary

The primary objective of the study was to research the efficiency and effectiveness of the Department's fraud risk management. Based on the objectives of the study, the data collected revealed that although the Department has documents in place, they have failed to implement them. The respondents presented evidence that the Department has not involved them in the fight against fraud. The Department has also failed to reach all its employees to train them in their fraud prevention plan. Furthermore, most employees were aware of the investigation unit, but did not have full knowledge of anti-fraud/fraud risk/fraud prevention strategies that the Department has. The overwhelming majority believed that the Department is a victim of crime because of fraud committed by staff. More than 80% of respondents knew that the Department has a problem with fraud. The objectives and aims of the study were achieved, although some were not fully addressed, because they required further research and there was a lack of literature. The next chapter presents recommendations and conclusions based on the findings presented in this chapter.

#### CHAPTER SIX - RECOMMENDATIONS AND CONCLUSION

#### 6.1. Introduction

The high incidence of fraud in South Africa, particularly in the public service (Public Sector) has resulted in a high number of government interventions to combat fraud, including Chapter 9 institutions such as the offices of the Auditor General and Public Protector; in house fraud fighting units like the SAPS Commercial Crime Units; legislation and other documents such as fraud risk management frameworks. The fraud epidemic filters down to provincial Departments and municipalities. The Department of Health in KwaZulu Natal is no exception as well as other government Departments. It has a well-run corporate governance unit, with professional staff to ensure that the Department operates with integrity and honesty. The Department has very comprehensive documents to ensure governance prevails.

The study was conducted to examine the efficiency and effectiveness of fraud risk management at KZNDOH. The findings were analysed in the previous chapter to generate recommendations that could not only help the Department better combat fraud, but to address gaps in existing literature on FRM.

## 6.2. Recommendations

This study recommends that the KwaZulu Natal Department of Health:

a. Create a comprehensive training plan on fraud prevention plan/fraud risk management and conduct regular awareness campaigns that target all employees in the Department. The employees should not be selected on the basis of their gender, religion, position they occupy or their level. Governance management should work in conjunction with the Human Resources Department to align their orientation of new employees with these awareness campaigns. Training could increase staff awareness of their expectations when it comes to fighting fraud.

- b. Consider developing a computer program where employees must read and answer questions on the Department's fraud prevention plan. The exercise should be made compulsory for all employees and be part of the Department's annual performance management processes. Employees should also receive regular emails regarding new findings or developments in fraud issues from the governance unit in the Department. More efforts by management is needed to encourage employees to go through the intranet page and provide regular updates;
- c. Ensure management considers separate training for higher level employees, so they can be held accountable for fraud committed under their watch. This could also encourage good governance at the top.
- d. Consider conducting a fraud health check for all its units, to determine which ones are vulnerable to fraud. This could help in identifying units that require more attention and enhancing internal controls for the most vulnerable units. The fraud register should be monitored more frequently to look for common trends of fraud and seek solutions. On identification of vulnerable units, snap or surprise audits can be initiated to ensure that the gaps are closed and perpetrators are brought to book.
- e. Consider sharing information regarding cases involving fraud, corruption and maladministration. Speculations and gossip by employees must be eliminated through regular and accurate information. The Departmental wins (on tribunal) must be shared with all employees. This will demonstrate that the Department is serious about taking decisive action against fraud, corruption and maladministration. The information on employees that hold high morals must also be recognized and communicated.
- f. Promote the anonymity and safety of reporting on the whistle blowing hotline. Matters received from the hotline are attended to immediately so that people will be encouraged to report matters.

## **6.3.** Limitations of the Study

The following limitations were identified during the study:

A few limitations emerged in the process of conducting the study, these include:

- a. The limited time (less than four months) to conduct the the study due to delays in the ethical clearance process.
- b. The focus of the study on one region (eThekwini Region) out of the four in KZN and the participation of some, not all, of the officials in the Department. Thus the findings of the study do not reflect the views of all employees of the KZNDOH.
- c. The unwillingness, by respondents, to complete an online (questionpro.com) survey which led to the manual distribution and capture of their responses, resulting in a time-consuming data collection process.
- d. A limited availability of literature on the efficiency and effectiveness of fraud risk management.

#### 6.4. Recommendations for further research

The limitations identified above and the research findings give grounds for furthering this study. It is therefore recommended that further research be conducted in this field. Nkondo (2015) recommended that further research be conducted on the effectiveness of anti-fraud strategies. The following are suggestions for an expansion of future research:

- a. A full study that explores the effectiveness and efficiency of FRM for the entire KwaZulu Natal Department of Health should be conducted, to obtain a holistic view on the findings form this study.
- b. Investigate in more detail the reasons why the policies and regulations pertaining to fraud, corruption and maladministration set by the provincial national government Department are not effective.

## 6.5. Conclusion

This study aimed at examining the efficiency and effectiveness of fraud risk management within the Department. The research objectives were met and limitations were also noted. The study will help the Department in designing a workable approach into ensuring the effectiveness of their fraud prevention plan. Comprehensive recommendations informed by the findings of the study were made, with the hope that they will be implemented. Areas for further research on the subject of fraud risk management were also identified.

#### **REFERENCES -**

- AREFF, A. 2015. Auditor General flags R25.7 billion in irregular govt spending. Mail and Guardian, 25 November 2015, p.2 4.
- ASARE, S. K. & WRIGHT, A. M. 2004. The Effectiveness of Alternative Risk Assessment and Program Planning Tools in a Fraud Setting\*. Contemporary Accounting Research, 21, 325-352.
- BARNES, S. 2014. Department of Health to Establish an anti-fruad unit. Available: <a href="http://sharmilachowdhury.com/2014/07/25/Department-of-health-to-establish-an-anti-fraud-unit/">http://sharmilachowdhury.com/2014/07/25/Department-of-health-to-establish-an-anti-fraud-unit/</a> [Accessed 24 August 2015].
- BEIGELMAN, M. T. & BARTOW, J. T. 2012. Executive Roadmap to Fraud Prevention and Internal Control New Jersey, USA, John Wiley and Sons Inc.
- BELL, E. O. & JHANG, P. 2013. Developing a Fraud Risk Management Program. 68.
- CONRADIE, H. A. W. 2010. Kwa-Zulu Natal Provincial Treasury Fraud Policy and Response Plan. In: TREASURY, K. P. (ed.). Pietermaritzburg.
- CRESSEY, D. R. 1953. Other People's money: A study in the Social Psychology of Embezzlement, The University of Michigan, Montclair, N. J.; Petterson Smith.
- CRESWELL, J. W. 2002. Educational research: Planning, conducting, and evaluating quantitative, Prentice Hall.
- DLAMINI, V. 2014. Fraud Prevention Plan. In: HEALTH, K. N. D. O. (ed.). Pietermaritzburg.
- EPSLEY, B. 2008. Fraud Risk Management A Guide to Good Practice. 49.
- EPSLEY, B. 2001. Fraud Risk Management A Guide to Good Practice. 49.
- FORENSIC, K. 2006. Fraud Risk Management. KPMG.
- GOLAFSHANI, N. (2003). Understanding reliability and validity in qualitative research. The Qualitative Report, 8(4), 597-606. Retrieved [7 February 2016], from http://www.nova.edu/ssss/QR/QR8-4/golafshani.pdf.
- GOLDMAN, P. D. & KAUFMAN, H. 2010. Anti-Fraud Risk and Control Workbook, USA, John Wiley and Sons Inc.
- HARTLEY, T. 2014. Kroll's Global Fraud Report 2013 2014. In: KIELSTRA, D. P. (ed.) Fraud on the Rise. 7th Edition ed. America, New York: Kroll and Economist Intelligence Unit.
- HEDLEY, T. 2012. Fraud Risk Management. In: GILL, G. (ed.). KPMG.
- HEDLEY, T. P. & COHEN, C. C. 2010. Structuring An Effective FRAUD Risk Management Program. Financial Executive, 26, 49-51.
- HOPWOOD, W., LEINER, J. & YOUNG, G. 2012. Forensic Accounting and Fraud Examination, New York City, McGraw Hill.
- IYER, M. S. N. 2010. A short guide to Fraud Risk Fraud resistance and detection, England and USA, Gower Publishing Limited.
- KAPTEIN, M. & SCHWARTZ, M. 2008. The Effectiveness of Business Codes: A Critical Examination of Existing Studies and the Development of an Integrated Research Model. Journal of Business Ethics, 77, 111-127.
- KASSEM, R. & HIGSON, A. 2012. The New Fraud Triangle Model. Journal of Emerging Trends in Economics and Management Sciences (JETEMS), 5.
- KOTHARI, C. 2004. Research methodology: Methods and techniques, New Age International.
- MAKWETU, K. 2015. Consolidated general report on the national and provincial audit outcomes 2014-15. In: GENERAL, A. (ed.). Pretoria.

- MARIAS, P. 2013. 3rd Annual Africa Fraud Barometer. In: SMITH, N. (ed.). Pretoria, South Africa: KPMG.
- MOCK, T. J. & TURNER, J. L. 2005. Auditor identification of fraud risk factors and their impact on audit programs. International Journal of Auditing, 9, 59-77.
- NEWHAM, G. 2014. Why is Corruption Getting Worse in South Africa? Corruption News [Online]. Available: <a href="http://www.corruptionwatch.org.za/why-is-corruption-getting-worse-in-South-Africa/">http://www.corruptionwatch.org.za/why-is-corruption-getting-worse-in-South-Africa/</a> [Accessed 29 October 2015].
- NKONDO, P. M. 2015. Effective Active-Corruption Practices and the Future of Democracy in South Africa: An Analytical Framework. Anti-Fraud and Corruption Seminar eThekwini Municipality City Hall.
- NXUMALO, Z. 2010. Fraud Risk Management Policy Guidebook. In: TREASURY, N. (ed.). Pretoria: National Treasury.
- PICKETT, K. H. S. 2011. Fraud Smart, USA, New Jersey, John Wiley and Sons Inc.
- PILLAY, S. 2004. Corruption-the challenge to good governance: a South African perspective. International Journal of Public Sector Management, 17, 586-605.
- POWER, M. 2013. The apparatus of fraud risk. Accounting, Organisations and Society, 38, 525-543.
- RENDER, B., RALPH M. STAIR, J. & HANA, M. E. 2012. Quantitative analysis for management, London, Pearson Education India.
- RICHARD, H., GIRGENTI, J. D. & HEDLEY, T. P. 2011. Managing the Risk of Fraud and Misconduct, Meeting the Challenges of a Global regulated, and digital environment, United States of America, McGraw-Hill.
- ROOYEN, P. V. 2013. Fraud Corruption in Eastern Cape Department of Health: R1.4 billion fraud revealed within the DOH. Available: <a href="http://www.leadership.co.za/articles/fraud-corruption-in-eastern-cape-Department-of-health-4439.html">http://www.leadership.co.za/articles/fraud-corruption-in-eastern-cape-Department-of-health-4439.html</a> [Accessed 26 August 2015].
- SANGWENI, P. S. 2007. Report on the implementation of Fraud Prevention Plans in the Public Service. In: COMMISSION, P. S. (ed.). Pretoria, South Africa.
- SAPA. 2015. Gauteng Health Department sacks eight workers over fraudulent qualifications. Available: http://www.sowetanlive.co.za/news/2015/03/30/gauteng-health-Department-sacks-eight-workers-over-fraudulent-qualification [Accessed 24 August 2015].
- SAUNDERS, M. N., SAUNDERS, M., LEWIS, P. & THORNHILL, A. 2011. Research methods for business students, 5/e, Pearson Education India.
- SCOTT, B. F. 2015. KZN Budget in a glance 2015/2016. In: TREASURY, K. P. (ed.). Pietermaritzburg.
- SEKARAN, U. & BOUGIE, R. 2013. Research methods for business: A skill building approach, United Kingdom, John Wiley & Sons.
- SIVNARAIN, R. 2013. The University of KwaZulu Natal Fraud Risk Management Strategy 2013-2016. UKZN: University of KwaZulu Natal.
- SLEZAK, K. 2013. Fraud Prevention and Employee Rationalization in New York State Public Schools. Albany: State University of New York.
- STATSA 2014. Victims of Crime Survey 2013/14. In: AFRICA, S. S. (ed.) P0341. Pretoria: SA Government.
- STATSA. 2015 The nine provinces of South Africa [Online]. online document. Available: <a href="http://www.southafrica.info/about/geography/provinces.htm#.Vjh91tIrLIW">http://www.southafrica.info/about/geography/provinces.htm#.Vjh91tIrLIW</a> [Accessed 3 November 2015 2015].

- TALANE, V. 2013. KZN Health Department's clean sweep. Heroes and zeroes [Online]. Available: <a href="http://www.curruptionwatch.org.za/kzn-health-Departments-clean-sweep/">http://www.curruptionwatch.org.za/kzn-health-Departments-clean-sweep/</a> [Accessed 26 August 2015].
- TAMUKAMOYO, H. 2014. No Accurate stats for corruption in South Africa. Corruption News [Online]. Available: <a href="https://www.corruptionwatch.org.za/no-accurate-stats-for-corruption-in-South-Africa/">www.corruptionwatch.org.za/no-accurate-stats-for-corruption-in-South-Africa/</a> [Accessed 20 September 2015].
- WEI, W., LI, J., CAO, L., OU, Y. & CHEN, J. 2013. Effective detection of sophisticated online banking fraud on extremely imbalanced data. World Wide Web, 16, 449-475.
- WELLS, J. T. 1990. Six common myths about fraud. If not debunked, they can obscure the existence of white-collar crime. Journal of Accountancy, 169, 82.
- WELLS, J. T. 2011. Corporate Fraud Handbook Prevention and Detection, New Jersey USA, John Wiley and Sons Inc. .
- ZIKMUND, W., BABIN, B., CARR, J. & GRIFFIN, M. 2012. Business research methods, Cengage Learning.
- ZUNGU, D. 2014a. KwaZulu Natal Department of Health 2013/2014 Annual Report In: HEALTH, D. O. (ed.). Pietermaritzburg.
- ZUNGU, D. S. 2014b. 2013/1014 Annual Report Vote 7. In: HEALTH, K. N. D. O. (ed.). Pietermaritzburg.



04 September 2015

Mr Mzamo Mkhwanazi (213569498) Graduate School of Business & Leadership **Westville Campus** 

Dear Mr Mkhwanazi,

Protocol reference number: HSS/0535/015M

Project title: Efficiency and effectiveness of Fraud Risk Management at the Department of Health KwaZulu Natal Province (KZNDOH), eThekwini district

Full Approval - Expedited Application

With regards to your response received on 24 July 2014 to our letter of 29 May 2015. The documents submitted have been accepted by the Humanities & Social Sciences Research Ethics Committee and FULL APPROVAL for the protocol has been granted.

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

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

The ethical clearance certificate is only valid for a period of 3 years from the date of issue. Thereafter Recertification must be applied for on an annual basis.

I take this opportunity of wishing you everything of the best with your study.

Yours faithfully

Professor Urmilla Bob (University Dean of Research) On behalf of Dr Shenuka Singh (Chair)

/ms

Cc Supervisor: Dr Abdul Kader

Cc Academic Leader Research: Dr Muhammad Hoque

Cc School Administrator: Ms Zarina Bullyraj

**Humanities & Social Sciences Research Ethics Committee** Dr Shenuka Singh (Chair) Westville Campus, Govan Mbeki Building

Postal Address: Private Bag X54001, Durban 4000

Telephone: +27 (0) 31 260 3587/8350/4557 Facsimile: +27 (0) 31 260 4609 Email: ximbap@ukzn.ac.za / snymanm@ukzn.ac.za / mohunp@ukzn.ac.za

Website: www.ukzn.ac.za



