

**ASSESSING THE KENYA POLICE CAPACITY TO CONDUCT FINANCIAL FRAUD
FORENSIC INVESTIGATIONS IN KIAMBU SUB-COUNTY**

BY

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DECLARATION

I declare that this dissertation is my original work and has not been previously published or submitted elsewhere for award of a degree. I also declare that this contains no material written or published by other people except where due reference is made and author duly acknowledged.

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ASSESSING THE KENYA POLICE CAPACITY TO CONDUCT FINANCIAL FRAUD FORENSIC INVESTIGATIONS IN KIAMBU SUB-COUNTY

ABSTRACT

This study examined the Kenya Police and Directorate of Criminal Investigations officers' capacity to carry out financial forensic frauds investigations in Kiambu Sub-County. The overall objective of the study was to evaluate the financial fraud forensic capacity of Kenya Police in Kiambu Sub-County. This study was conducted in Kiambu Sub-County, in Kiambu County and targeted the Kenya Police and Directorate of Criminal Investigations officers who are responsible for criminal investigations. The study objectives were; to establish the capacity of Kenya police human resource to carry out forensic investigations on financial frauds in Kiambu Sub-County, to examine the skills capacity of police officers to conduct forensic investigations on financial frauds in Kiambu Sub-County and to assess resource capacity of Kenya Police available for police officers to conduct forensic investigations on financial frauds in Kiambu Sub-County. These objectives sought to answer the following questions: what is the capacity of Kenya police human resource to carry out forensic investigations on financial frauds in Kiambu Sub-County? what skills capacity do police officers have to conduct forensic investigations on financial frauds in Kiambu Sub-County? and what resources are at the disposal of the police officers for conducting forensic investigations on financial frauds in Kiambu Sub-County? The study adopted *ex post facto* research design. Regular police officers and Directorate of Criminal Investigations Officers (DCI) dealing with criminal investigations were randomly sampled while purposive sampling was employed to select specialised DCI officers at DCI headquarters who provides specialised services to Kiambu Sub-County. From the target population of 90, the study sampled 81 respondents to participate in the study where the response rate was impressive at 85.7%. The study used self-administered questionnaires as primary data collection instruments. Self-administered questionnaires collected primary data while police records provided secondary data. Data collected was analysed both descriptively and statistically. Quantitative data was analysed using descriptive statistics such as frequencies, modes, means, variances or standard deviations. Contingency tables were generated by cross-tabulating variables determine the relationship between the study variables. Chi-Square and One-Way ANOVA was used to test the statistical mean difference among variables. Tables and charts present analysed data to represent quantitative findings. Inferences were made to describe the research findings. The study findings revealed that innumerable capacity challenges face the Kenya Police Service in both skills and resources coupled with other challenges, which has greatly influenced the ability to detect, conduct and prosecute financial frauds. The study recommends there is need to come with measures of addressing limited capacity in the police service in order to improve on financial fraud investigations.

Keywords: Forensic Investigation, Fraud, and Investigation Capacity

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DEDICATION

This dissertation is dedicated to my beloved wife Nancy, my Mum, my children Irene, Victor, Derick and Linnette for their moral support, love, patience and understanding during the long and challenging period of academic journey up to the successful completion of this dissertation.

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ACRONYMS AND ABBREVIATIONS

ACFE	-	Association of Certified Fraud Examiners
ATM	-	Automated Teller Machine
DCI	-	Directorate of Criminal Investigations
FBI	-	Federal Bureau of Investigations
EMS	-	Information Management Systems
FF	-	Financial forensics
GDP	-	Gross Domestic Product
GoK	-	Government of Kenya
ICT	-	Information Communication Technology
IPOA	-	Independent Police Oversight Authority
IQ	-	Intelligent quotient
KP	-	Kenya Police
KRA	-	Kenya Revenue Authority
KPMG	-	Klynveld Peat Marwick Goerdeler (An Accounting Firm)
LPO	-	Local Purchasing Order
NPS	-	National Police Service
NPIA	-	National Policing Improvement Agency
NACOSTI	-	National Commission of Science, Technology and Innovation
PWC	-	PricewaterhouseCoopers

SACCO	-	Saving and Credit Organisations
SPSS	-	Statistical Package for Social Sciences
SOP	-	Standard Operating Procedures
UK	-	United Kingdom
USA	-	United States of America

TERMS AND DEFINITION

Crime is an act or the commission of an act against laws of enacted by lawful institution and is punishment by law (Green, 2012).

Criminal Investigations – is a legal process of discovering, identifying, gathering, collating, preparing, and presenting evidence by the police for the purpose of unearthing misdeeds of criminal nature that warrant prosecutions in a court of law (O'hara, 2003).

Evidence - the available material or fact that is credible and acceptable in a court of law to strong enough to convince the court that the information presented before it (Court) inform of evidence is true or valid(O'hara, 2003).

Evidence Gathering - is the process of identifying, collection, preservation of evidence for purpose of reconstructing a crime in an effort to find out why, when and who is responsible for the Criminal Act (Asia Pacific Forum , 2013).

Fraud: an act of misrepresentation of facts or deception to make a personal gain in form of monetary gain, property gain or otherwise which in way causes a loss for another person (Comer, 2003).

Fraudster: a criminal engaged in fraudulent activities recognised as fraud by law (Association of Certified Fraud Examiner, 2012)

Internal Control: is a safe guard in a system for preventing loss or damage of organisation assets by internal and external forces (Comer, 2006).

Risk management: The process of detecting and preventing adverse effects on the management and operations of an organisation in attempt to achieve organisation objectives (Colley , Doyle, Logan, & Stettinius, 2004).

CHAPTER ONE

INTRODUCTION

This chapter contains the background to the study, problem statement and justification, purpose, general objectives, research questions, significance, delimitation, limitation and assumptions of the study.

1.1 Background of Study

The frequencies at which public and private organisations engaged in financial and accounting frauds of late has increased worldwide and therefore calls for law enforcement agencies to have adequate ability or capacity to address this vice (Pedneault, Rudewicz, & Silverstone, 2012). Financial irregularities or frauds have become a major problem in not only developing countries but also globally, which poses a threat to world economies (Njanike, Dube, & Mashayanye, 2009). According to Kasum (2012) in developing economies, financial irregularities has become so widespread that fraud and corruption vices are gradually becoming a typical way of life. In some countries of the world, frauds and corruption have become so prevalent that almost every individual cannot claim not to have participated or is clean from these vices (Caiden, 2003).

Fraud vices are committed in both the public and private sector and it involves all cadres of people be it politicians, managing directors of a company, middle cadre management even lower cadres like messengers (Caiden, 2003). Gbegi and Adebisi, (2014) asserted that there is close relationship between individual who perpetrate frauds and corruption whereby those in higher capacity offices or with higher positions doing it frequently and at higher scale compared to those in lower positions who are involved less often. These frauds may involve huge amounts of money or property that may lead to adverse effects like bad organisational or corporate image,

loss of operating revenues and profits among others to the affected organisations (Orumwense, 2013).

A report by the Institute of Forensic Auditors (Belgium, 2004) describes forensic auditing as an activity that involves the process of gathering, scrutinising, verifying, and reporting on information derived from accounting or financial data for providing material facts of evidential value. It is also involved in discerning and explaining illegal/financial disputes or irregularities with ultimate goal of giving advice of prevention and where possible prosecution. According to Albrecht and Albrecht (2001) forensic investigations entails utilisation of specialised investigative skills to carry out an enquiry whose outcome will be admissible to the affected organisation or in the court of law for prosecution or determination.

Experts in legal and criminologists have found it difficult to define fraud and its associated constituents because frauds are associated with other vices like money laundering, corruption, which are not necessary frauds (Singleton *et al.*, 2006). In the statutes or penal code of law in many countries, fraud is an offense that constitutes all unlawful acts a person commits by taking advantage over another by false pretences (Peter, Dadi, Inyang, & Ogere, 2014). Levanti (2001) opine that there is no universal definition of fraud but some authors and institutions have attempted to define on their own versions. For example, the United States Association of Fraud Examiners (1999) defines fraud as the fraudulent action and gaining of money or property by false tricks that include stealing and forgery of cheques.

According to Masango (1998) as cited in the defunct Common Law Manual, fraud is unlawful act with intention to defraud and falsification and has negative effects. Chapter 63 of Penal Code Laws of Kenya defines fraud as “Any offence by false pretence, and with intent to defraud, obtains from any other person anything capable of being stolen, or induces any other

person to deliver to any person anything capable of being stolen, is guilty of a misdemeanor and is liable to imprisonment for three years”.

According to Singleton (2006) fraud is categorised according to occupation or what ones does like a police officer or non-occupational. Another way of categorising fraud is according to whether it is perpetrated in public or private sector (Comer, 2001). Fraud, according to Skalah *et al* (2001) can be categorised in regard to the industry for example bank fraud and insurance fraud while Lendemen (2003) found it credible to categorise fraud in terms of corporate or non-corporate or according to personnel involved to include management fraud, insider frauds, speculation fraud among other related frauds.

Gee & Button, (2013) report based on global research across nearly 300 successful fraud loss measurement exercises covering more than 40 different types of expenditure in various different countries estimated global loss due to frauds to a total value of £7.22 trillion. This loss is equivalent to four times the value of UK GDP or \$11.22 trillion an equivalent to one seventh of global GDP. Financial fraud is a problem facing highly developed, middle and poor income countries (Njanike, Dube & Mashayanye, 2009). For instance in the USA one of the high income countries, the Association of Certified Fraud Examiners (ACFE) estimates that about six per cent of firm revenues, or \$660 billion, is lost per year as the result of occupational fraud (ACFE, 2004). The same scenario is evident in middle income countries, for example a study that was conducted in Malaysia by KPMG in 2004 targeting 130 listed companies found that majority (62%) of respondents felt that fraud is a major problem for Malaysian business generally (KPMG, 2005). The survey also found that 83 % of respondents admitted they had experienced fraud, which was an increase of 33 % from a previous survey of 2002. The survey identified secret commission or kickbacks, lapping that involved withholding cash receipts and kiting i.e. to

mistake account and false invoicing as the three most common types of fraud experienced by businesses in Malaysia (KPMG, 2005).

In Kenya, a survey conducted by PricewaterhouseCoopers (PWC), revealed that the most predominant forms of financial frauds had been asset misappropriation, accounting fraud, bribery and corruption, commonly referred to as the “big three” (PWC, 2014). This study also revealed that in recent time’s procurement fraud and cybercrime has been added as some of the serious economic crimes, shifting from ‘big three’ to ‘big five’. This shift is in line with global survey findings where cybercrime has become a notorious crime that is facilitating mega financial frauds all over the world (PWC, 2014). The survey also found that although asset misappropriation is still the leading form of economic crime in Kenya with a high incidence level of 77%, followed by accounting fraud at 38%, procurement and cybercrime have prominently featured at incidents levels of 31% and 22% respectively. This revelation implies that there is need for more vigilance in the business operations affected by these additional and emerging forms of crime and put in place financial forensic investigations capacity among the stakeholders and more police investigators.

The anti-banking fraud report of 2013 indicates that banks are mostly affected by financial frauds at 73% as compared to 27% of all other organisations in the country (National Police Service, 2014). According to this report the most prevalent types of fraud that affected the banking industry were Cheque Fraud with 191 cases followed by electronic fund transfer (EFT) or Real Time Gross Settlement, (RTGS) fraud with 108 cases, card fraud 79 cases, forgery(Cheating) 80 cases and embezzlement with 56 cases. It is worth noting that the rate of recovery on frauds involving forgery (Cheating) was high at 89.6% and EFT or RTGS at 44% compared to embezzlement where recovery was at only 3.2%. The report also observed that the

greatest perpetrators of embezzlement type of fraud were the staff of the affected sectors and since they had the means of covering their tracks, tracing of the stolen amounts is a challenge and hence little recovery.

Fraudsters engages on financial frauds due to a variety of reasons ranging from the need to get rich, greediness, insecure systems, loopholes in the financial systems. (Obayelu, 2007) in his studies found that citizens engage in corrupt practices in Nigeria as a result of high level of poverty, lack of employment, low salaries among workers, financial difficulties, influence by friends and colleagues, nepotism, tribalism in the public and private offices and lack of honesty. In Kenya, according to a cybercrime report by Serianu Limited, (2014) the root causes of security vulnerabilities that lead cyber fraud is the lack of risk management programs, poor engineering practices, unsecured application development techniques, and inadequate infrastructure design. This is because of Kenya experiencing unprecedented high growth of Information Communication Technology (ICT) applications in the internet and mobile phone with little regard to cyber security. The effects of this growth of ICT in Kenya have led to rampant financial frauds facilitated through the internet and mobile phone applications (PWC, 2014).

According to PWC (2014) report Kenya is ranked number one in East Africa on cases and costs in monetary values of financial frauds facilitated through the internet. Scam artists over the internet will employ a wide variety of techniques, programs and devices to commit fraud. Some of the most common types of fraud involve: automobile insurance, government contracts, used cars deals, prize drawings, job opportunities, education opportunities among others. The culprits are usually asked to supply certain details like bank accounts, credit cards,

mobile phone among other which they eventually used to fraud money from accounts of unsuspecting victims.

Financial fraud has affected the lives of citizens of the world countries negatively more so in developing countries (Samociuk, Iyer & Dood, 2010). Research has shown that not a single financial organization that is immune to fraud and most organisations loses between 5-7% of its annual revenues to fraud (ACFE, 2004). Government all over the world has instituted several measures to address financial frauds vices. The measures instituted include enactment and enforcement of laws, investigations, arrest and charging in a court of law. Medicare is a major fraud in USA and to address this vice the federal government enacted False Claims Act and the Health Insurance Portability and Accountability Act (HIPAA) of 1996 (Stanton, 2001). The act allows private citizens to sue on behalf of the government and to obtain a percentage of any recovered fund. Nigeria experiences fraudulent practices among the citizens which poses a major challenge facing the development of the country (Dada, Owolabi, & Okwu, 2013). In an effort to address this evil the federal government of Nigeria has set up many anti-corruption institutions to reduce cases of fraud and other economic crimes but the efforts seemed not to have been effective. According to Dada et al (2013) forensic accounting was found to be a panacea to alleviation of fraudulent practices in Nigeria as it provides credible evidence to investigative agencies.

In Kenya several efforts has been put in place to fight fraudulent activities both in public and private sector since this vice is common in all sectors. Several laws has been enacted ranging from anti-corruption, anti-money laundering, anti-bank fraud all by the National Government that specifically attempt to fight financial frauds. Private organisations has developed internal mechanism that are supposed to address fraud practices.

Despite the efforts of the public and private organisations to deal with frauds the vice continues and this calls for the law enforcement agencies to come in. The Kenya Police Service is organized into different units for the purpose of conducting criminal investigations of different nature. Fraud is a criminal act as per the Criminal Procedures Act of 2009 and investigation of frauds is vested on the Kenya Police. The Kenya National Police Act of 2011 mandates the Kenya police to conduct financial frauds investigations and charge the offenders in a court of law (GoK, 2011). Section 35(b) of the National Police Act gives the Directorate of Criminal Investigation (DCI) the mandate to undertake investigations on serious crimes including homicide, narcotic crimes, human trafficking, money laundering, terrorism, economic crimes, piracy, organized crime, and cybercrime among others. The same act on section 24(e) empowers the Kenya Police Service to conduct criminal investigations as stipulated by law.

Kenya has experienced financial frauds of different magnitude and forms. A Kenya National Police report of 2013, on bank fraud investigation indicated 797 cases were reported for investigations as compared to 664 cases reported in the year 2012 and 673 cases reported in the year 2011, representing an increase by 133 Cases (National Police Service [NPS], 2013). The report indicates an upward increase of reported fraud cases reported to police investigations arms of DCI. The report also indicated of the reported cases that were investigated, concluded and taken to the court of law in 2011 was 47% as compared to 42% in 2012 and 37% in 2013. The report established that the rate of recovery of money stolen through frauds was impressive at 98.8% as compared to 31.4% in 2002. The high rate of recovery was been attributed to the fact that large amount of money could only be transferred to known accounts that was easy to follow and recover monies.

1.2 Statement of Problem

The PWC report of 2014 noted that Kenya ranks number one in terms of financial frauds in East Africa despite organisations/institutions having in place measures of deterring such vices. Though Kenya has put in place such measures, the rate at which financial frauds are being committed in Kenya is quite high as compared to other East African Countries (PWC, 2014). Murphy's Law states that 'anything that can go wrong will go wrong even if there are systems of countering the imagination of fraudsters and external events to deter frauds (Bloch, 2003).

Njanike, Dube, & Mashayanye (2009) observed that despite the size and area of business that organizations operate in, they are constantly exposed to operational risk such as frauds due to inadequate internal measures. A workshop report on effective cybercrime legislation in Eastern Africa (2013) found that although Kenya has adequate legislation on cybercrime and other financial frauds, the fight against frauds crimes is lagging behind mainly due to limited number of experts and reduced number of police officers. In Kenya, the ratio of police officers to civilian stands at 1: 800 which is below the United Nations, which recommends a ratio of 1:450.

The low number of police officers has a direct impact on the quality of criminal investigations within the police service such as undetected and under investigated crime due to low policing coverage (Independence Police Oversight Authority, 2013). A report by taskforce on police reforms in Kenya found that Kenya Police faced capacity challenges notably in number of police, which was below the recommends a ratio of 1:450 (Republic of Kenya, 2009). These challenges were lack of operations resources like vehicles, reduced numbers of specialised officers to tackle complex and emerging crimes, loss of high-specialised officers to the private sector, other government agencies and international organisations among other, which had greatly affected policing duties like criminal investigations.

Financial audits are conducted primarily by examining financial data or financial transactions within and without the organisation by financial experts mainly by internal and external auditors. An audit is generally conducted with the objective of expressing an opinion on the financial statements or related information whereas forensic fraud examination's goal is to determine whether fraud has/is occurring, and to determine who is responsible. Financial irregularities or frauds within an organisation can be detected in two ways: by carrying (a) auditing and (2) forensic examinations. Forensic fraud examination/investigations are conducted by: (1) document examination; (2) review of outside data such as public records; and (3) interviews of suspects and witnesses. This practice is unique and is meant in establishing wrongdoing that warrants adversarial action like prosecution in court of law. Police officers in Kenya are by law mandated to investigate financial frauds that are criminal and charge culprits in a court of law. The police officers are not necessary experts in accounting and finance but are expected to have skills and resource capacities to detect and investigate financial frauds and present a credible case in a court of law.

A baseline survey done by the Kenya Independence Police Oversight Authority (IPOA) on Policing Standards and Gaps in Kenya (2013) revealed that 24.7% of the respondents indicated that police officers experiences limited operations resources like transport and other equipment/facilities to aid them gather effective evidence. The same report found that police officers lack the required expertise to deal with emerging crimes like frauds, cyber-crimes, organized crime among other. The report also revealed investigation of certain crimes like murder, cyber-crimes, terrorism, frauds among others remains undetected and under investigated which had led the prosecution losing many cases in a court of law with only 25% conviction rate all the case files reviewed. According to National Policing Improvement Agency (2011)

report the DCI has major weakness of fighting crime due to lack of adequate staff where the optimum national establishment is 5000 DCI officers against the current number of 3500 officers and worse the force lack adequate numbers of experts.

The above findings paints a worrying picture of the capacity of the police officers to gather criminal evidence and therefore this study, evaluated the capacity of the Kenya Police to carry out criminal investigations on financial frauds in Kiambu Sub-County of Kiambu County, Kenya.

1.3 General Objective of the study

The general objective of the study was to evaluate the financial fraud forensic investigation capacity of Kenya police in Kiambu Sub-County

1.3.1 Specific Objectives

The following specific objectives guided this study;

- a) To determine the capacity of Kenya police human resource to carry out forensic investigations on financial frauds in Kiambu Sub-County
- b) To determine the skills capacity of police officers to conduct forensic investigations on financial frauds in Kiambu Sub-County
- c) To determine physical resource capacity of Kenya Police available for police officers to conduct forensic investigations on financial frauds in Kiambu Sub-County

1.4 Study Questions

This following research questions guided this study:

- a) What is the capacity of Kenya police human resource to carry out forensic investigations on financial frauds in Kiambu Sub-County?
- b) What skills capacity do police officers have to conduct forensic investigations on financial frauds in Kiambu Sub-County?

- c) What physical resources are at the disposal of the police officers for conducting forensic investigations on financial frauds in Kiambu Sub-County?

1.6 Significance of the Study

The study comes at a time when many cases have been dismissed in Kenyan courts due to lack of evidence therefore the findings of this study will provide the solutions of addressing dismissal of cases. It will also benefit the national police service in the formulation of future policies aimed at improving financial forensic and resources needed for investigation in Kenya.

The findings of the proposed study will have both theoretical and practical implications for the future of financial forensic investigations in Kenya. The study will contribute to the existing body of knowledge and scarce literature. The study will lead to improvements on the financial forensic by identifying the strengths and constraints and the capacity of the police to conduct financial forensic investigations. Finally, the study findings will be useful to other agents of investigations to address the gaps existing on evidence gathering in criminal investigations in an effort to deal with under investigation and loss of cases in a court of law.

1.6 Scope and Limitations

The proposed study covered Kiambu Sub-County involving only Kiambu and Karuri police stations. The study covered such frauds like; cheque forgery, falsification of accounts books, pretext to defraud through impersonation, system tampering however money laundering will not be included in this study. The study involved the Kenya Police and the Directorate of Criminal Investigations officers as the respondents but Administration police officers are not usually involved in investigations of serious crimes like financial frauds. The study also focused on frauds cases reported and investigated in police stations in Kiambu Sub-County only.

There were challenges of winning the confidence of the police within the district considering the fact that the study touched on matters of security. This challenge was alleviated by strict adherence to ethical considerations, where the participants were assured of the confidentiality and none disclosure before they embark on the exercise. There was limited availability of frauds reports since anti-banking reports are confidential to avoid panic among the customers and investors. This limitation resulted in lack of adequate secondary data on the status of frauds especially among the financial institutions; however, filtered information was obtained and was used in this study.

1.7 Assumptions

This study was conducted on the assumption that police officers in Kiambu Sub-County were involved on forensic investigations on financial frauds as per the constitution and police standing orders as stipulated in the various National Police Acts.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter discussed theoretical background, reviewed literature and conceptual framework. The literature was reviewed under the following subheadings; concept of financial investigations, approaches to financial investigations, forms of financial frauds, human resource capacity and financial forensic investigations, skills capacity and financial forensic investigations and physical resources capacity and financial forensic investigations. The chapter also discussed the gaps identified and summary of literature reviewed.

2.2 Theoretical Background

The study used the General Systems Theory to assess the Kenya police capacity to conduct financial fraud forensic investigations. Biologist L. Von Bertalanffy originally conceived this theory in 1930 as a demonstration plan that accommodates the interrelationships and overlap between separate disciplines. A system theory is a set of elements connected together which form a whole, possessing properties of the whole rather than its component parts (Checkland, 1981). A system is a set of interlocking elements that acquires inputs from the environment, transforms them, and discharges the outputs to the external environment in the form of goods and services (Daft, 2001).

System theory is a philosophical doctrine of describing systems as abstract organisations independent of substance, type, time and space. Systems theories are connected to both ontological and epistemological views. The ontological view imply that the world consist of “systems” or “integrative levels”. The epistemological view implies a holistic perspective emphasizing the interplay between the systems and their elements in determining their respective

functions. The activity within a system is the result of the influence of one element on another. This influence is called feedback and can be positive (amplifying) or negative (balancing) in nature. Systems are not claims of linear cause and effect relationships but complex networks of interrelationships (Senge, 1990). Systems are described as closed or open. Closed systems are completely autonomous and independent of what is going on around them. Open systems exchange materials, energy and information with their environment. The systems of interest in managing of criminal investigations can all be characterized as open systems.

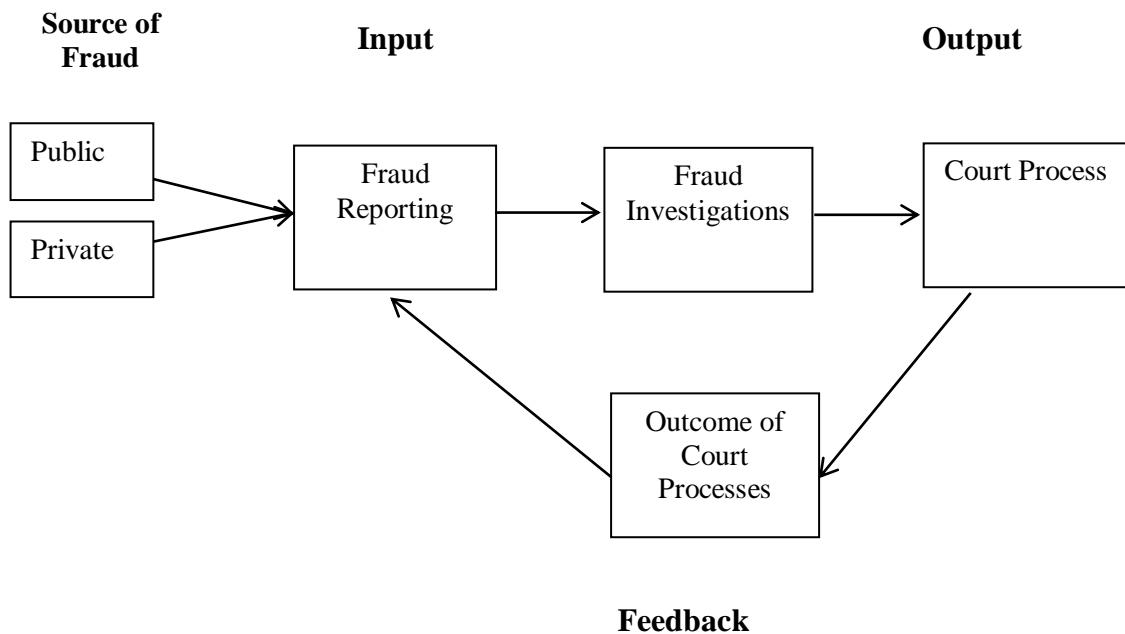
The Systems theory notes the value of integration of parts of problems cannot be solved well if they are considered in isolation from interrelated components. The systems theory presents an ideal guideline for initial familiarization with a problem. A problem can be a question looking for an answer, a situation that is not working properly and needs improving, or a new opportunity or idea that is worthy of further consideration. A problem in systems analysis and design does not mean that there is something wrong but that there is a situation that needs to be understood and a solution to be determined. A system is a set of related components that work together in a particular environment to perform whatever functions are required to achieve the system's objective. A system is goal seeking by definition and its components work together to achieve a common objective to complete a goal.

The objective of financial fraud investigations is to produce complete, correct and timely output. It is important to identify the objectives of any existing or new system in order to understand it and evaluate its effectiveness. A financial fraud investigations component includes personnel, procedures and data from a crime scene. One of the most important concepts in Systems Theory is the notion of interdependence between systems (or subsystems). For criminal investigations to be successful, the evidence gathering from a crime scene needs to be up-dated

to offer the interdependence. If evidence gathering is not effectively done, it will affect the outcome of criminal investigations process.

The institutional theory based on the open systems framework inform on how organisational context may affect police organization activities. The institutional theory describes the environment of expectations of organizations. Together, the task and institutional environments form the context of police organizations. Frequently, institutional environments are described as traditional or taken for granted as elements, while contingency perspectives focus on utilitarian adaptive processes (Zhao *et al.*, 2001). From this system theory the process of financial fraud forensic investigations are depicted in a simplified police investigations process in a police station as indicated in Figure 1

FIGURE 1
Simplified Police Investigation Process



2.3 Background to Financial Investigations

Fraud investigation is the methodology for resolving fraud allegations from inception to disposition. In fraud examination, evidence is obtained by taking statements, writing reports, testifying to findings, and assisting in the detection and prevention of fraud. Credible evidence is obtained from documents or statements by witnesses. The fraud investigator must have skills of gathering proper and legally evidence through conduction interviews of witnesses and related parties. Once evidence has been obtained and the appropriate witnesses have been interviewed, the investigator is responsible for writing clear, accurate, and unbiased reports reflecting the fraud examination results. The purpose of the reports is to assist the police officers to determine if fraud was committed and if so the suspect is charged in a court of law.

Once a fraud examination has been completed, the evidence assembled, and the written report prepared, the fraud examiner often is called upon to testify before judicial authorities regarding the findings. Fraud examiners are expected to testify truthfully to matters relevant to the examination and to do so in a clear and succinct manner. Investigation of any form simply comprises of an examination or inquiry into something, especially a detailed one that is undertaken officially to confirm something in question (Njanike, Dube , & Mashayanye, 2009). The aim of any financial investigation is to discover a fact or truth of the alleged fraud and make report for action like administrative action or a prosecution in a court of law (Gbegi & Adebisi, 2014). Financial investigations in a wider perspective however, implies the process of discovering the fact about financial misconduct through a professional detailed verification and examination exercises so that the causes, effects and perpetrators could be identified and ascertained (Van Duyne and Levy, 1999). It is this in mind that financial frauds investigations are undertaken by designated professionals such as the accountants, auditors, police, or other

government agents. The presence of fraud in an organisation makes it mandatory to be investigated for the purpose of establishing the course and perpetrators to cushion against future occurrences (Pedneault, Rudewicz & Silverstone, 2012).

Professional accountants with requisite knowledge and legal qualification undertake corporate financial activities (Comer, 2003). These professional accountants can be either internally (internal auditors) or externally (external auditors) or financial consultants engaged from experts. The investigation of fraud activities within a corporate entity requires specialised skills, which call for the application of forensic accounting (Peter, 2007). Forensic accounting is the specialty practice area of accountancy that describes engagements that result from actual or anticipated disputes or litigation occasioned from in-depth investigations.

Forensic accountants also referred to as forensic auditors or investigative auditors, as a matter of practice provide expert evidence to the court of law to assist the prosecution to prove a case beyond any reasonable doubt using forensic reports. To ensure smooth running of larger accounting firms, as well as many medium-sized entities, specialist forensic accounting departments have been created. The forensic department have numerous benefits since forensic accounting activities are not limited to detecting fraud but also by determining the extent of business fraud and in addition help business owners avoid bad decisions especially in franchises, mergers and acquisitions (Crumbly *et al*, 2005). Forensic accountants or investigators are increasingly playing more proactive role in risk reduction by developing risk detections and prevention strategies as part of the statutory audit, acting as advisers to audit committees, fraud deterrence engagements, and assisting in investment analyst research.

There are a number of approaches advocated by different authors and organisations. For instance, Van Duyne and Levy (1999) identifies a four-step approach to financial fraud investigations as follows: (a) secure and collect all tangible and oral evidence in a manner consistent with the rules of evidence to ensure admissibility, (b) gather additional evidence through interviews, (c) analyse the evidence, and (d) present the evidence in an understandable manner. According to Greene (2012), the Association of Certified Fraud Examiners (ACFE) has developed a model in form of steps to aid in financial investigations. These steps are useful in performing a basic financial investigation in a litigation matter. These approaches/steps are: (1) planning of the assignment, (2) performing the background investigations (3) examining the relevant documents, (4) interviewing witnesses, information sources, and the subject, (5) analyzing the facts and (6) preparing the report of findings. These stages normally involve application of technology in computer forensic analysis and data analytics.

Successful fraud investigations require skills of interviewing witnesses or people with information about a particular infringement and in some cases; the investigator is expected to speak to the suspected perpetrators of fraud themselves. The professional interviewer, therefore, should have a detailed and organised plan in place in order to carry out a credible inquiry in a professional manner. The objective of an interview in a fraud situation is to gather facts related to potential motives on the part of the perpetrator, and to verify opportunities presented to the perpetrator for committing a fraud. The collected evidence from computer sources and oral interview are analysed, interpreted and reported so that an appropriate conclusion can be obtained to present the case to a court of law for prosecution. O'hara (2003) argues that an accomplished investigator is as a result of doing the same thing repeatedly for a given period of

time. The study findings above confirms that the police officers have adequate experience to gathers effective evidence in criminal investigations.

The evidences obtained from the investigation are presented in the most appropriate manner and using such presentation format that is most suitable and acceptable. According to Crumbley *et al* (2005), forensic accountants must follow the business information and financial reporting systems, accounting and auditing standards and procedures. In addition, they must follow evidence gathering and investigative techniques, and litigation processes and procedures for presenting an acceptable expert opinion, which cannot be challenged in a court of law.

2.3.1 Forms of Financial Frauds

According to Pedneault, Rudewicz and Silverstone, (2012) fraud is deception committed for personal gain or to damage another individual. Kenya Revenue Authority (KRA) policy document of 2005 defines fraud as “as the use of deception with the intention of obtaining an advantage, avoiding an obligation or causing loss to another party” (Kenya Revenue Authority, 2006). In accordance to KRA policy fraud can be perpetrated by persons outside as well as inside an organization. The criminal act is the attempt to deceive and attempted fraud is therefore treated as seriously as accomplished fraud.

Fraud is a crime, and is a civil law violation. Defrauding people of money is presumably the most common type of fraud reported all over the world. Podgor (1999) argue that in criminal law, fraud is the crime or offense of deliberately deceiving another in order to obtain property or services unjustly. Fraud can be accomplished through the aid of forged objects like cheques, forged Local Purchasing Order (LPO), travellers cheques among others. The Canadian Institute of Chartered Accountants defines fraud as "an intentional act, by one or more individuals among management, other employees, who are charged with governance or third parties, involving the

use of deception to obtain an unjust or illegal advantage." These activities can include misappropriation of cash or inventory, fraudulent financial reporting and money laundering. Fraud, in addition to being a criminal act, is also a type of Civil law violation known as a Tort. A Tort is a civil wrong for which the law provides a remedy.

Bank frauds have developed in nature and complexity from the traditional system of simple cheque fraud, where fraudster would just forge his name on a simple cheque by using an ordinary pen to more sophisticated techniques, such as the advance fee fraud, which utilizes the Internet and computer highways (Singleton et al, 2006). Skalah *et al* (2001) managed to identify two species of fraud, those that are committed by insiders and those committed by other fraud felons outside. Among the bank frauds, perpetrated internal fraudsters inform of like non-existence rascal traders, fraudulent loans, wire fraud, forged documents, and theft of identity among other forms. On the other hand, fraud committed by outsiders include forgery and altered cheques, stolen cheques, payment card fraud, booster cheque duplication and skimming of card information among others.

Accountants and managers usually commit accounting frauds by falsifying fraudulently books of accounts to conceal theft (Millichamp, 2002). Frauds can be committed by skimming of information by copying client card number for later using to tamper credit or debit card readers and copy the magnetic storage from a payment card using a hidden camera that captures the number on the face of the card. The data captured fraudulently will be used to produce duplicate cards that could be used to make Automated Teller Machine (ATM) withdrawals from the victim's account (Hassibi, 2000).

Fraud can be in form of impersonation, where one can apply for an identity card, account or credit card in the name of the victim and use it to obtain or withdraw cash (Hassibi, 2000).

Fraud through cheques can take different forms like Cheque kitting that involves the opening of accounts at two or more institutions and using ‘float time’ of available funds to create fraudulent balances (Hassibi, 2000). In addition, fraudsters can forge cheques and present them as genuine to withdraw from banks or pay for goods and services thus defrauding individual and organisations. Tricksters can use Automated Teller Machines (ATM), taking advantage of victims who are not able to operate an ATM and can transfer victim’s money. In Kenya the major financial frauds includes mobile banking, cheque forgery (31%) , EFT and RTGS (16%), cheating (14%), ATM cards (13%), embezzlement among others (National Police Service, 2014).

2.4 Human Resource Capacity and Financial Forensic Investigations

The capacity of the police to carry out forensic investigations is determined by personal capacity in form of knowledge and skills gained before and after joining the police service. Personal capacity determines ability of the police officer to use technologies and to interview suspects in order to get credible evidence (Bruce, 2000). The capacity to gather evidence is realised by adequate training on financial forensic investigations, ability to collect, collate analyse, interpret evidence and present the findings for prosecution (Bruce, 2000). The capacity to conduct financial fraud may aided by availability of physical resources like vehicles, computer software and audit report among others (Sang, 2013). Human resource capacity also plays a critical role in ensuring adequate policing capability (Omeje & Githigaro, 2012). Lack of police capacity specifically adequate personnel, to carry out policing duties was one of the factors affecting police performance (NPIA, 2009; IPOA, 2013).

The Kenya Police Service has the mandate of conducting financial fraud investigations as per the Constitution and National Police Act of 2012. Financial fraud investigations are a

complex exercise that requires adequate expertise and experience in order to carry thorough investigations. The Kenya Police has a Directorate of Criminal Investigations charged with the responsibility of investigating serious crimes like financial frauds. Specialised police officers with background of finance and accounting are seconded to this unit. Specialised training is given to the officers to help them deal with dynamics and challenges of frauds. In order to Human resource is one of the critical resource any organisation should possess in order to attain its organisational goals. Omeje & Githigaro (2012) in their study on challenges of state Policing in Kenya found that Kenya Police was lacking adequate number of police officers to adequately cover the entire country proportionally. These study found that the police service was understaffed with an estimated 40,000 police officers, with police to civilian ratio standing at 1:1000 in 2010 far below the UN recommended ratio of 1: 450. The problem is aggravated by the enactment of the Constitution (2010) which created numerous constitutional offices that required the office holders to offer personal protection.

This has resulted to large number of officers guarding this VIPs leaving in adequate number of police officers attending security of the civilians (Omeje & Githigaro, 2012). According to National Policing Improvement Agency (2011) report, DCI was could not effectively fight crime due to lack of adequate staff where the optimum national establishment was 5000 DCI officers against the current number of 3500 officers at that time. This report recommended the increase of police officers to attain the UN recommended police to civilian ratio of 1:450. The Kenya Independent Police Oversight Authority (IPOA) baseline survey on Policing Standards and Gaps in Kenya (2013) revealed that Kenya police service lacked human resource policy on specialised training to handle certain crimes especially emerging ones like cybercrime. The Kenya anti-banking fraud unit has blamed lack of adequate number of police

investigators as one of the major challenges facing the unit in its effort to fight financial frauds in banks (National Police Service, 2014). In Kenya, specialised criminal investigators are few and are thinly spread in the country. In order to address the link between direct and circumstantial evidence provision of adequate equipment/facilities and also access to modern technology and real time information will come handy to address the shortcomings by provision of a modern forensic laboratory (IPOA, 2013).

2.5 Skills Capacity and Financial Forensic Investigations

In order for the police officers to conduct financial fraud forensic investigations, forensic accounting training is critical in order to carry out effective fraud investigations (Njanike, Dube , & Mashayanye, 2009). The ability to carry out financial forensic investigations is determined by the capacity of the police in terms of adequate training on the disciplines related to forensic investigations. In USA in an effort to ensure Federal Bureau of Investigations (FBI) investigators, have adequate forensic skills accountants have been woven into the fabric of the FBI since its creation in the summer of 1908, when a dozen bank examiners were included among the original force of 34 investigators (FBI, 2012). Today, around 15 per cent of agents employed by the FBI as special agent are necessary they have qualifications of accountants prior to joining the Bureau.

Chinwokwu (2012) in his studies in Nigeria, Enugu State revealed that lack of training, investigation skills, facilities, corruption among other factors account to high rate of undetected and pending cases in Nigeria. A similar study done by The Kenya Independent Police Oversight Authority (IPOA) baseline survey on Policing Standards and Gaps in Kenya (2013) made similar observations that police lack specialised training to handle certain crimes especially emerging ones like cybercrime. Forensic financial investigation is a much specialised discipline which is

normally taught to police officers after the basic training and due to limited training positions only a few of the officers are trained.

The recruitment of police officers in the past was pegged on minimum entry requirement that does not put a lot of emphasis on secondary skills acquired after secondary school. Off late the trend has changed whereby a small number police officers are recruited based on special skills obtained in colleges and universities leading to improved skills capacity prior to joining the service. The DCI recruits from police recruits after basic training and from serving police officers from the Kenya Police with or no special skills. Upon joining DCI, they are taken for specialised training at Directorate of Criminal Investigation training school. A report by National Task of Police Reforms of 2009 found that due to limited capacity at the school only a few of the police officers get a chance of training on special areas (Republic of Kenya, 2009). The same report established that most of the police officers lack adequate training on handling of serious crimes such as murder and frauds hence the need to equip them with specialised skills in order to conduct credible investigations.

2.6 Physical Resources Capacity and Financial Forensic Investigations

A report by Asia Pacific Forum on investigation noted that in order to conduct credible investigations, availability of sufficient resources to the instigators is in crucial for effective investigations outcomes (Asia Pacific Forum , 2013). The Association of Certified Fraud Examiners (ACFE) recognises the need of having a well-equipped library with up to date publications that provide relevant information regarding frauds. According to ACFE (2004) a library is a source for timely and relevant anti-fraud information, tools, services and other resources, which is vital for police officers during forensic investigations. Publications offers a comprehensive collection of anti-fraud publications, articles and reports, sample documents,

videos and podcasts to support professionals with the information needed to fight fraud effectively. ACFE publishes bimonthly publication on white-collar crime and fraud examination techniques. These publications keep the police investigators abreast with current information on financial forensic investigations.

Forensic laboratory is another important resource for effective investigations. According to (Purita, 2006), computer forensics is a valuable tool for investigating cases involving fraud but many auditors are still unaware of the importance of this tool for proper forensic investigation. A forensic laboratory is a division in which forensic specialists apply scientific techniques and procedures to analyse criminal. Financial forensic laboratory are not common in police investigations unlike other types of forensic laboratory dealing with physical evidence like DNA tests and chemical tests. Lack of forensic laboratory to address financial frauds has contributed to ineffective investigations of financial frauds (Purita, 2006). The lack of this critical tool may lead to police officers lacking the necessary capacity to carry out financial fraud investigations and therefor the need to evaluate the resource capacity of Kenya Police.

Application of Technology is one of the most successful methods of detecting frauds or misuse of funds in corporations where fraud is suspected. This is due to the fact nearly all of a records are created and managed electronically with only a little of such record being managed through hard copies or paper. The majority of investigations, therefore, require careful searches of electronic information rather than following a paper trail. Computer forensics is one of the modern ways of carrying financial fraud investigations because it provides investigators with a controlled system to uncover more of the facts, support otherwise unsubstantiated information, confirm or refute allegations, and analyse competing theories in relation to those facts in a quick and efficient manner. The advantage of using computer forensics is that, the forensic

investigator will have the ability to apply modern information technology to search and analyse items like emails, documents and files that may be hidden. In addition, the investigators can crack passwords protected, or encrypted, files, databases, transactions activities like recently opened, accessed, created or deleted files and online activities, like internet banking transactions.

The computer forensics applies Information Management Systems (EMS) to conduct financial forensics (FF). According to Hennop (2009), EMS an important tool of tracking evidence from the point of origin to the point of departure, which enables the investigative officer to follow and prove the chain of evidence from the originator to the destination. The EMS provides real-time information through EMS records can be availed on request by the investigating officer police or prosecutor to prove a case. In addition, EMS is important resource of detailing the chain of evidence should there be a dispute regarding the sequence of evidence for collaborating analysed evidence (Hennop, 2009). Lerner and Lerner (2006) underscored the significance of an electronic or computerised platform in judicial system for validating analysed evidence in question.

Ngboawaji (2012) in his studies in Nigeria linked the many cases of unsolved murders that dot Nigeria criminal justice system to absence of forensic evidence to process collected physical evidence in order to link suspects with committed crime. The observation of Ngboawaji (2012) is supported by Sang (2013) who opined that there is need to equip the investigators with adequate skills, knowledge, attitude and facilities to enable them to build strong cases in a court of law in order to secure conviction.

2.7 Research Gap

In Kenya, a survey study conducted by PWC (2012) identified the most predominant forms of financial frauds have been asset misappropriation, accounting fraud, bribery and corruption, commonly referred to as the “big three”. It also revealed that in recent time’s procurement fraud

and cybercrime has been added as some of the serious economic crimes, shifting from ‘big three’ to ‘big five’. The survey also found that although asset misappropriation is still the leading form of economic crime in Kenya with a high incidence level of 77%, followed by accounting fraud at 38%. At the same time procurement and cybercrime have prominently featured at incidents levels of 31% and 22% respectively an implication that there is need for more vigilance in the business processes affected by these additional forms of crime and step up police investigation capability. The study also revealed that Kenya is not doing well in financial fraud investigation as compared to Nigeria and South Africa where the above frauds are common. The researcher had therefore identified a research gap to explain why Kenya is doing badly in financial fraud investigations in reference to the capacity of Kenya Police.

2.8 Summary of Literature Review

The literature reviewed acknowledged that financial fraud is an offence, which is perpetrated by a fraudster by knowingly falsifying financial records, such as sales or cost records to benefit financially. Forms of frauds include the following among others; false insurance claims, outright theft and misappropriation, tampering with bank and company records, false travel claims, forgeries of cheques and payment documents among others.

A fraud affects both public and private organisations as well as faith based ones. Frauds are categorised in different ways, for example; in the industry affected like banking, insurance, pension scheme among others. In addition, fraud can be grouped according to whether it affects public or private organisations and at the same time can be categorised as either occupational or non-occupational.

The fraudsters may be found within or without the organisation with personnel dealing with money and other disposable assets having a higher possibility of participating in fraud.

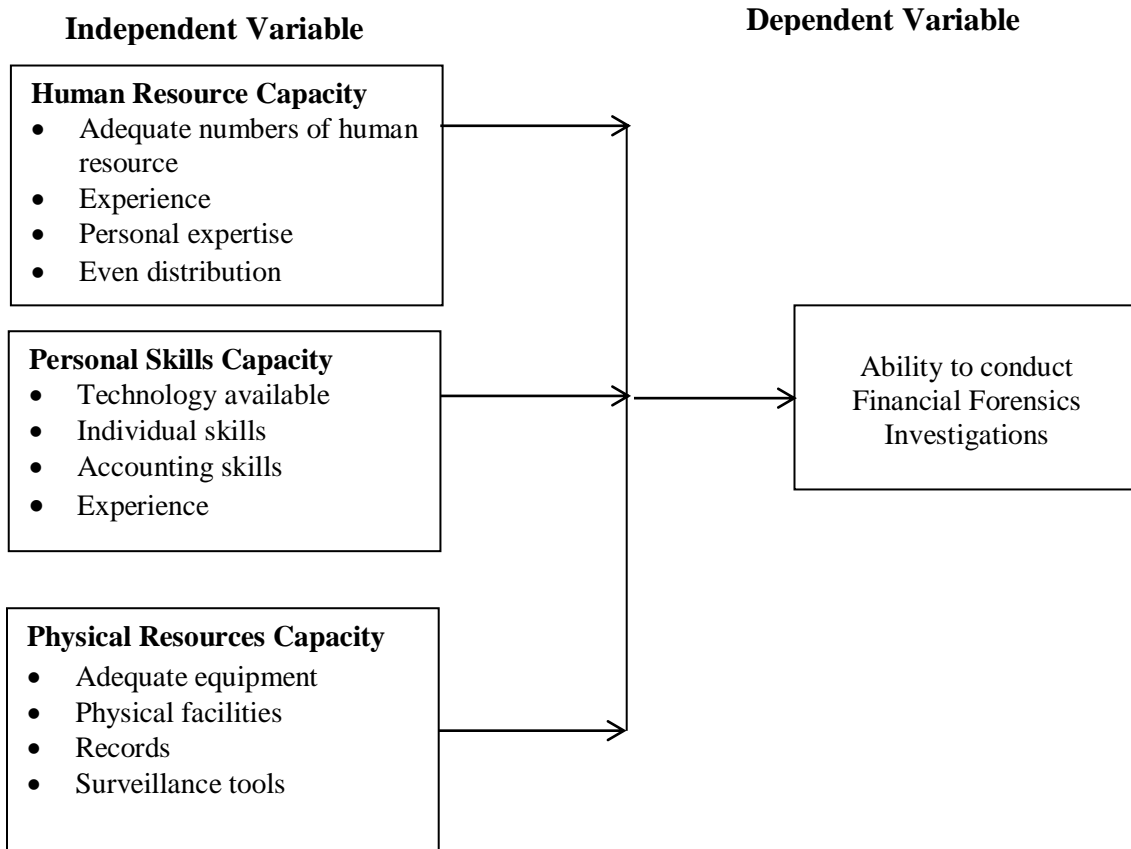
Fraud can be detected by: (a) Detection by chance or by (b) Conducting a proactive inquiry. Investigation or inquiry can be conducted by internal or external initiatives where internal auditors carries the internal inquiry whereas the extern inquiry can be carried out by extern auditors, The law enforcement agencies like the police or anti-corruption bodies comes in if some irregularities are unearthed by internal and external auditors and cannot be explained. Though internal and external auditors are suitable group to perform the task of fraud detection it is the duty of the forensic police to investigate fraud and bring the fraudsters to justice and thus the need for this study to establish their capacity.

2.9 Conceptual Framework

This study was based on following conceptual framework. Onen and Oso (2009) note that a conceptual framework is a diagrammatic presentation of a theory and that its presented as a model when research variables and the relationship between them are translated into a visual picture to illustrate the interconnections between the independent, intervening and dependent variables. The conceptual framework formulated is as shown in Figure 2.

FIGURE 2

Conceptual Framework



Source: Author 2015

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Research Methodology

This chapter discusses the research design, site of the study, study population, sampling techniques and sample size, research instruments, validity and reliability, piloting, data collection, data analysis plan, and data management and ethical considerations

3.2 Research Design

Research design is the conceptual structure within which the study is conducted (Kumar 2012). A design is used to structure the research, to show how all major parts of research project work together to try to address the central research questions (Orodho, 2002). This study adopted ex post facto descriptive research design since there no manipulations variables. Ex post facto descriptive research design guides the study on what items to measure in an effort to discover causes of current situation of phenomena under investigation even when one cannot control the variables. Mugenda and Mugenda, (2003) and Kothari (2004) assert that descriptive research design state of affairs, as it exists at that particular time.

Kothari (2004) also noted that descriptive research incorporates surveys and fact-finding enquiries aimed at discerning the phenomena under study. He also asserted that descriptive research design utilizes all kinds research surveys information already available, and analyse these to make a critical evaluation of the material that are geared at making comparisons and correlations of the research findings.

This research design aimed at determining reasons or causes of the status of the phenomena under study. For this study, descriptive research design was appropriate because it allowed collection of information from a cross section of respondents selected for this study. It

also offered the researcher the advantage of focusing on specific description or characteristics to capture the attitudes and opinions of the respondents on different phenomenon sought in the field of financial fraud forensic investigations.

3.3 Site of the Study

Kiambu Sub-district is one of the administrative units in Kiambu County with its headquarter in Kiambu town. The county is adjacent to the northern border of Nairobi County and has a population of 1,623,282. The district was selected because of its vibrant businesses sectors represented by private sectors and cooperatives. The multinational companies mostly in large-scale farming are also doing a thriving business in this sub-county. The public sector is also a factor when it comes to potential ground for fraud offences. Other businesses operated in the sub-county is the financial sector represented by commercial banks, micro-finances, Saving and Credit Organisations (SACCO) which forms a fertile ground for possible financial frauds hence the choosing of Kiambu Sub-County as study site.

3.4 Study Target Population

The target population for this research was the Kenya Police Officers (Regular police officers) attached at crime section in Kiambu Sub-County. The study also targeted Directorate of Criminal Investigations (DCI) officers at Kiambu Sub-County offices and specialised DCI officers at DCI headquarters. All these targeted subjects were one way or another involved in criminal investigations since fraud is a criminal offence under the penal code.

3.5 Sampling Techniques and Sample Size

Newman (2000) argues that, the main factor considered in determining the sample size is the need to keep it manageable enough. This will enable the study to derive from it detailed data at an affordable costs in terms of time, finances and human resource (Mugenda & Mugenda, 1999).

Further, Patton (2002) argues that the sample size depends on what one wants to know, the purpose of the inquiry, what is at stake, what will be useful, what will have credibility and what can be done with available time and resource. Sampling of Police officers were done from all Police Stations within the Sub-County and from the DCI headquarters using probability simple random sampling and purposive sampling methods to ensure equal representation.

Probability simple random sampling was preferred because the populations for both Kenya Police and DCI officers at Kiambu Sub-County headquarters was too big (90 officers) to warrant using the entire population in the study. This sampling method was also preferred because it ensured the targeted police officers had equal and independent chance to be included in the study without bias. On the other hand, due do the small population size of specialised police officers at the DCI headquarters purposive sampling was used to select the officers who were directly involved in investigations of fraud related crimes. This was necessary to ensure useful information was collected from these specialised police officers since they provided specialised support to criminal investigation in Kiambu Sub-County. Table 1, tabulates the target population.

TABLE 1

Target Population

Target population	Target
Police officer attached to crime section in Kiambu Sub-County	60
DCI officers in Kiambu Sub-County	20
Specialised Junior DCI officers at DCI Headquarters	10
Total	90

Source: Police headquarters – Nairobi

The study used *Slovin* formula;

i) $n = \frac{N}{1+N(e)^2}$, where “ n ” is the desired sample size, “ N ” is the population size, and “ e ” is

the level of precision to determine the study sample size for the respondents. According to Sari & Iskandar (2012) Slovin formula is suitable for calculating sample size when the target populations are known. To determine size for both junior police and DCI officers attached to crime section in Kiambu Sub-County the study used Slovin formula. For this study, the sample size for junior police attached to crime section in Kiambu Sub-County was calculated as follows;

ii) $N = 60$ and $e = 0.05$, $n = \frac{60}{1+60(0.05)^2}$

From this calculation, 52 police officers attached to the crime section in Kiambu Sub-County were sampled for the study. Also using the same Slovin formula,

iii) $n = \frac{20}{1+20(0.05)^2}$,

seventeen (17) DCI officers attached to crime section in Kiambu were sampled to participate in the study out of the above calculation. Ten (10) specialised DCI officers were purposively sampled due to their special characteristics of dealing with unique crimes and for providing specialised support to regular and other police officers during criminal investigations. For this study, eight-one (81) respondents were sampled for the study as tabulated in Table 2.

TABLE 2

Target Population Sample Size

Category of Target Population	Target population	Sampling Method	Sample Size
Specialised DCI officers at DCI Headquarters	10	Purposive	10
Police officers attached to crime section in Kiambu Sub-County	60	Probability simple random sampling	52
DCI officers in Kiambu Sub-County	20	Probability simple random sampling	19
Total	90		81

Source: Author 2014

3.6 Research Instruments

The study used self-administered questionnaires to collect primary data from the respondents. The self-administered questionnaires were used to collect primary data from Kenya police and DCI officers. The choice of self-administered questionnaires because of their relatively ease of collecting data and at the same time have that advantage of reaching many subjects at a short time. In addition, it ensured confidential and could be administered by the researcher or other persons. Secondary data was collected from police records at Police Headquarters, DCI headquarters and Kenya Police County headquarters. Records from court and Directorate of prosecution formed part of secondary data that was revealed.

3.7 Validity

Validity is concerned with the accuracy of the questions that are asked, the data collected and explanation offered after analysis (Denscombe, 2002). The measuring instruments are said to be valid if they measure accurately what they were intended to measure. (Leedy & Ormrod, 2001). The research was guided by the objectives, the research questions and the concept when formulating the research questions, so that the instruments measured what they were supposed to

measure so as ensure validity. Mounton (2001) advocated that research instruments as a measurement instrument must be piloted or pre-tested to ensure their validity. According to Leedy and Ormrod (2001) content validity measures people's achievement or perception in a particular phenomenon, such as knowledge gained or skill acquired.

The sampled respondents who are experts in their duties as investigators who are expected to provide expert opinion in their field will go along in ensuring accurate data is collected. Mason (2004) observed that the use of more than one method to obtain information would enhance the validity of the instruments. It is therefore the reason why this study will use both self-administered and interview schedules to collect data. The researcher engaged the services of research experts and colleague scholars in the field of research all of whom gave their opinions and contributions based on purpose of the study and specific objectives of the study. The researcher also sought expert opinions from experienced financial forensic investigators in the police service, auditors, financial analysts and consultants on the content of the instruments and data collected. They all played a crucial role in the moderation of the content of the data collection instruments before finally administering for the actual study. They also provided expert opinion on how to present analysed data in terms of forms of fraud, perpetrators, affected organisations, frequency and magnitude.

3.8 Reliability

According to Welman and Kruger (1999), reliability refers to the consistency of application of the measuring instrument to ensure that the results are reliable after repeated measures. Reliability therefore, is about the evaluation of the methods and techniques used for the collection of data, to ensure consistent to avoid distortion of the findings (Julie, 2003). According to Leedy and Ormrod (2005), reliability of a measuring instrument, denotes obtaining

consistent results from the various sources, using the same measuring instruments. Babbie (2011) opined that reliability means that the testing of an item with a particular instrument should produce exactly the same result every time it is tested. The reliability of the instruments was ensured by running a pilot test. The pilot test is discussed in section 3.9 below.

3.9 Pilot Study

A pilot study was done at anti banking fraud unit headquarters in Nairobi, which is the DCI arm responsible of countering banking fraud in Kenya. A pilot study using test re-test method where the research instruments were administered to the police officers and after one week, the same instruments were re-administered. The pilot study was done test the feasibility of the study to determine the reliability of the research instruments. The pilot study aimed at identifying any unforeseen problems the respondents could encounter while interacting with research instruments and inform on their improvement. The pilot study also aimed at determining whether the items reflected in the instruments were eliciting the types of responses expected for ascertaining the accuracy and consistency of the research instruments before embarking on the actual data collection.

The pilot study results were subjected to correlation test using Cronbach Alpha, which gave a correlation score of 0.78. According Julie (2003) correlation coefficient of 0.7 and above is an acceptable threshold for reliable instruments. Though the pilot study results revealed that research instruments were reliable, some correction such as changing the order of questions to facilitate smooth data collection.

3.10 Data Collection

Questionnaires were used to collect primary data from the sampled respondents through self-administering. This involved administering questionnaires to the sampled police officers at their

places of duty with the help of research assistants. Secondary data was collected from police records, journals, books, and published and unpublished research materials.

3.11 Data Analysis Procedure

Quantitative data collected using questionnaires was cleaned, coded and keyed into Statistical Package for Social Sciences (SPSS) data analysis software for analysis. Descriptive statistics such as frequencies, modes, means, variances and standard deviations examined different variables of the study. The SPSS analysis output produced tables and charts for presenting study results. Quantitative data was analysed using descriptive statistics such as frequencies, modes, means, variances or standard deviations to examine the determinants of effective evidence gathering in criminal investigations based on the independent variables. After analysis, tables and charts presented the study results.

A generation of contingency tables by cross tabulation was done to determine the relationship between categorical study variables. A Chi-Square test results generated after cross tabulation to make inferences on the statistical significance difference between variables. A generation of One-Way ANOVA inferential statistics was done to test mean difference of independence and dependence variables.

Secondary data was analysed by critically reviewing literature mainly from journals, books, various government and organisation documents and reports and compared with results drawn from primary data. Secondary data especially on empirical findings was used to support the research findings or to disapprove the findings in attempt to discourse the study findings.

3.12 Ethical Considerations

Authority to carry this study was sought from National Commission of Science, Technology and Innovation (NACOSTI) and National Police Service before any data was collected. Participants

were given enough information pertaining to the study that included the aims of the research, the procedures that would be followed, the possible advantages and disadvantages for the participants, the credibility of the researcher and the way in which the results will be used. This enabled participants to make an informed decision on whether they wanted to participate in the research or not.

CHAPTER FOUR

FINDINGS AND DISCUSSION

4.1 Introduction

This chapter discusses the study analysis and findings. Data was analysed using descriptive statistics such as mean, standard deviation and inferential statistics. The study findings were presented in tables, graphs and charts. The statistical findings are explained for each question in the questionnaire and inferences made.

The purpose of the study was to assess the Kenya Police Capacity to conduct financial fraud forensic investigation in Kiambu Sub-County of Kiambu County. Primary data was analysed as per the research objectives and aimed to specifically answer the following research questions: (a) what is the capacity of Kenya police human resource to carry out forensic investigations on financial frauds in Kiambu Sub-County? (b) what skills capacity do police officers have to conduct forensic investigations on financial frauds in Kiambu Sub-County? and (c) what resources are at the disposal of the police officers for conducting forensic investigations on financial frauds in Kiambu Sub-County?

The above research questions were posed in order to address the following specific objectives. (a) To establish the capacity of Kenya police human resource to carry out forensic investigations on financial frauds in Kiambu Sub-County, (b) to examine the skills capacity of police officers to conduct forensic investigations on financial frauds in in Kiambu Sub-County and (c) to assess resource capacity of Kenya Police available for police officers to conduct forensic investigations on financial frauds in Kiambu Sub-County. This section therefore presents the research findings as per the demographic characteristics of the respondents and

specific objectives of this study. The analysis involved respondents derived from 66 police officers who filled self-administered questionnaires out of 77 administered questionnaires.

4.2 Response Rate

The study targeted to administer seventy-nine questionnaires but due two respondents who did not participate; the study therefore administered seventy-seven questionnaires. Table 3 shows the response rates.

TABLE 3

Response Rates

Respondents	Issued questionnaires	Returned	% Response Rate
Police officers	77	66	85.7

As presented in Table 3, 66(85.7%) of the questionnaires were filled and returned while 11(14.3%) were not returned. Mugenda and Mugenda (2008) opine that a 50% response rate is adequate, 60% good while above 70% can be rated very well and based on the response rate for this study at 85.7% the filling of the questionnaires was excellent. The high response rate could be attributed to discipline nature of the respondents being police officers. About 14.3% did not return the questionnaire due to unexplained reasons.

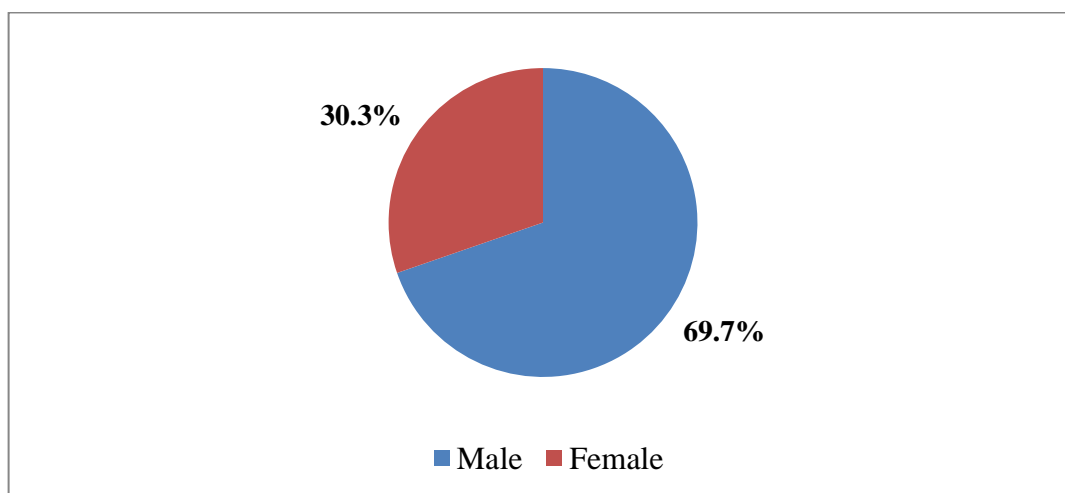
4.3 Demographic Characteristics of the Population Sampled.

This section presents background information of the study participants. The study background captured views of 66 police officers with a wide range of demographic characteristics. These characteristics included gender, service formation, rank, duty station, experience in the National Police Service and highest education attained as discussed below.

4.3.1 Gender of the Respondents

The study deemed it necessary to know the gender composition of the respondents. The Constitution of Kenya (2010) stipulates that public institutions should ensure that 30% of its workers should be of either gender. The distribution of the study findings according to gender is as presented in Figure 3.

FIGURE 3
Gender of the Respondents



As presented in Figure 3, from the sampled police officers 46 (69.7%) were males while 20 (30.3%) were females. From the above findings, it is important to note that there is disproportionate in gender representation within the police service in Kiambu Sub- County where males dominates. This is so because over the years, more male police officers were recruited compared to female police officers due to associated risk nature of police work that does not attract many females during recruitment. The Kenya Constitution (2010) stipulates that no public institution should have more than 30% employees of either gender therefore from the findings above the genders threshold rule as stipulated in the constitution has been realised in Kiambu Sub-County.

4.3.2 Service Formation

It was deemed prudent to know the service formation of the police officers since crime management is a multi-agency effort within the National Police Service. Each service has specific mandate as per the service formation Acts for carrying out policing duties. The Directorate of Criminal Investigation (DCI) has a mandate of preventing and investigating serious crimes and providing specialised expert support to other police formations. The Kenya Police has a wider mandate like traffic management, maintenance of law and order, criminal investigations among others. Table 4 tabulates the study findings.

TABLE 4
Respondent Service Formation

Police Formation	Frequency	Percent
Kenya Police (KP)	37	56.1
Directorate of Criminal Investigation (DCI)	29	43.9
Total	66	100.0

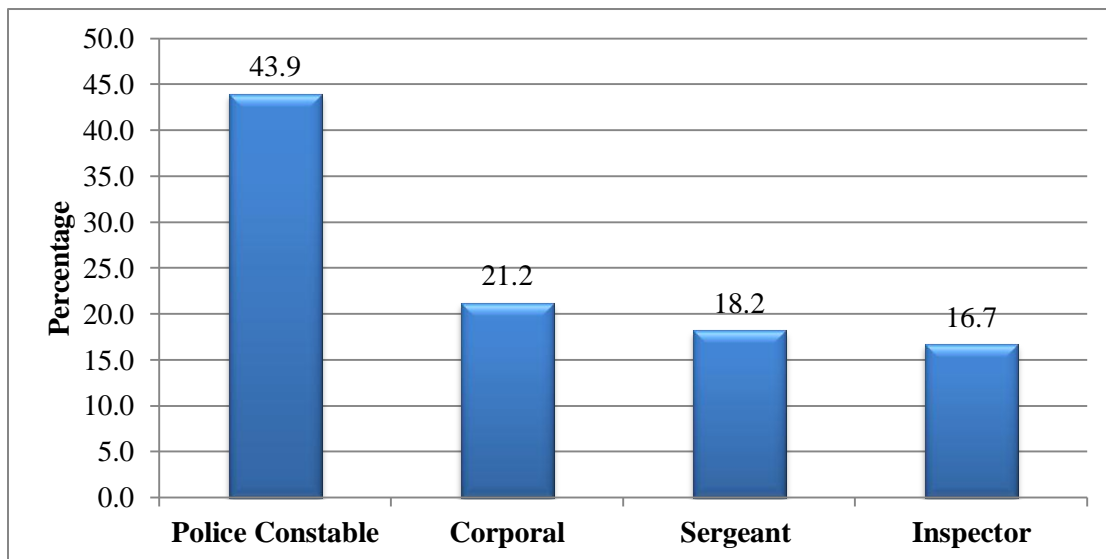
From study findings in Table 4, majority 37 (56.1%) of the respondents belonged to the Kenya Police (KP) while 28 (43.9%) were from the Directorate of Criminal Investigation (DCI). The high number of KP can be attributed to the force standing orders where more officers are required in Kenya Police formation at Police Stations as compared to DCI which is a specialised unit hence a small establishment in terms of number for the purpose of investigating serious crimes and as a supportive unit to other police units.

4.3.3 Respondents Rank

The study sought to identify the rank of police officers because it was felt it may play a role in management and outcome of criminal investigations. The higher the rank the more the authority is vested in that person. The study findings are as shown in figure 4.

FIGURE 4

Respondents Rank



The study result shows that the majority 29(43.9%) of the respondents were Police Constables, Corporal rank 14(21.2%), Sergeant 12(18.2%) while Inspectors scored 11(16.7%). The findings show there is a large number of Police Constables as compared to others ranks which can be attributed to the fact that other ranks are responsible of supervising the junior officers as per the force standing orders on staff establishments.

4.3.4 Duty station of the Respondents

The respondents were required to indicate their duty stations. The district headquarters deals mainly with administrative issues while the police stations deal with police operations in a division or a section within the district. The distribution of the police officer's duty station is as tabulated in the table 5.

TABLE 5
Police Officers Duty Station

Duty Station	Frequency	Percent
Police Station	28	42.4
County DCI Office	16	24.2
National DCI Headquarters	12	18.2
Patrol Base/Police post	6	9.1
Police County Headquarters	4	6.1
Total	66	100.0

The study revealed that majority 28(42.4%) of the officers were stationed in police stations, 16(24.2%) in District DCI Offices, 12(18.2%) from National DCI Headquarter, 6(9.1%) from the Patrol base/Police Post while Police County Headquarters registered 4(6.1%) score. From study findings above, the majority of the police officers were stationed in Police Stations since they are the cornerstone of police operations where the Kiambu Sub-county is covered by two police stations. The study also reveals that the Kiambu Sub-County is well catered for specialised investigation due to relatively high number of DCI officers stationed at County level and at DCI National headquarter which is about five kilometres from the Kiambu County Headquarters.

4.3.5 Police Officers Work Experience

The study sought to establish the level of experience of the police officers in the police service. Studies have shown that the longer one participate in one activity the more one becomes acquitted with the activity since experience lead to specialization and in-depth masterly of the subject area (Hashmi, 2012). The study findings are as tabulated in Table 6.

TABLE 6

Police Officers Work Experience

	N	Minimum	Maximum	Mean	Std. Deviation
Experience in National Police Service	66	2	36	12.70	8.348

The study, findings in Table 6 above, revealed that the longest serving officer had served for 36 years while the lowest had served for 2 years. From the study finding above, it is clear that there is great difference in work experience among the police officers. Most of the police officers have been in the profession for an average of more than 12 years as indicated by the mean of 12.7, which is long enough for the police officers to have gained wide experiences on criminal investigations. According to O'hara (2003) a skillful investigator is as a result of doing the same thing repeatedly for a given period of time. The study findings above can confirm that some police officers have adequate experience to carry out investigations.

4.3.6 Level of Education Attained.

The study found it vital to establish the level of education of the respondents. Verhaest and Omey (2009) argued that the higher the education a person attains the more the person is likely to be informed and this makes him/her to learn new skills. Table 7 presents the study findings on the levels education attained.

TABLE 7
Respondent Highest Education

Highest Education Attained	Frequency	Percent
Secondary School Certificate	23	34.8
Diploma or Certificate	19	28.8
Degree	15	22.7
Master's Degree	7	10.6
Primary School Certificate	2	3.0
Total	66	100.0

From the results in table 7 above, it can be observed that majority 23(34.8%) male and female police officers have attained at least secondary school education. The levels of education attained is as follows; Primary school education 2(3.0%), Secondary school education 23(34.8%), Tertiary education 19(28.8%), Undergraduate degree education 15(22.7%) while Master's degree 7(10.6%). These findings imply that the police in Kiambu Sub-County have a pool of well-educated officers who are capable of handling issues during training and coping with emerging issues of frauds and forensic investigations.

A chi-square test was carried out to determine the correlation between education and police officer experience in police service. The result is tabulated in Table 8.

TABLE 8
Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	126.660 ^a	92	.010
Likelihood Ratio	100.502	92	.256
Linear-by-Linear Association	15.149	1	.000
N of Valid Cases	66		
$X^2 = 126.66, df = 92, p = .010$			

From the chi square test the ($p > .05$) which indicates that there is no statistical significance difference between education and experience among the police officers. These results imply that the highest education attained has no influence at all on the police officers experience as there are very highly experienced police officers with primary level of education (See appendix III).

4.4 Background Information of the Study

The study in an effort to have a wide perspective on situations of financial fraud in Kiambu Sub-County, background information was collected which was critical in evaluating the capacity of police officers to conduct financial fraud investigations. Background information collected included forms of financial frauds, magnitude of frauds, sources of frauds, Source of Fraudsters, organisations or Institutions Affected by Financial Frauds, Potential Fraudsters and characteristic features of fraudsters.

4.4.1 Forms of Financial Frauds Reported in Police Station in Kiambu Sub-County.

The respondents were asked to identify the forms of financial frauds reported in Kiambu Sub-County Police Stations. The research findings are as tabulated in Table 9.

TABLE 9
Forms of Financial Frauds

Frauds	Responses	
	N	Per cent
Stealing/Forgery of Cheques	63	95.5
Mobile phone money transfer fraud	60	90.9
Theft by employees	59	89.4
Forgery of payment documents like payment vouchers etc.	57	86.4
Asset misappropriation	53	80.3
Illegitimate insurance claim	43	65.2
Falsifying books of accounts	40	60.6
Payment of non-delivered services and goods	35	53.0
Tampering with banking records	30	45.5
Computer/Cyber crimes	28	42.4
Inflating costs of goods and services	20	30.3
Intra & interbank money transfer fraud	19	28.8
Credit card fraud	16	24.2
Tax evasions	11	16.7
Illegitimate claims like travel expenses etc.	3	4.5
Ghost workers payment	2	3.0

From the study findings in Table 9 above, it's clear that fraud involving stealing/forgery of cheques, mobile phone money transfer, theft by employees, forgery of payment document and asset misappropriation are rampant in Kiambu Sub-County registering over 80%. Ghost workers payment, illegitimate claims like travel expenses and tax evasions recorded the least reporting in that order. Worth noting is high reporting of mobile phone money transfer fraud which can be attributed to high usage of mobile money transfer among the citizens in Kiambu Sub-County.

Low tax evasion reporting can be attributed to the fact that this vice is normally reported to the Ethics, and Anti-Corruption Commission and Kenya Revenue Authority which deals with such cases. The results above are in agreement with the report of Kenya Police of 2014, which

established that cheques forgery, electronic fund transfer and mobile phone money transfer were the major forms of financial frauds in Kenya (National Police Service, 2014).

4.4.2 Magnitude of Frauds

The respondents were asked to identify the frequency of occurrence of different forms of financial frauds reported in Kiambu Sub-County Police Stations. This was necessary in order to establish the most common frauds reported. The research findings are as tabulated in Table 10.

TABLE 10
Magnitude of Frauds Reported

Frauds	Magnitude	
	High	Low
Mobile phone money transfer fraud	58(87.9%)	8(12.1%)
Theft by employees	46(69.7%)	20(30.3%)
Asset misappropriation	45(68.2%)	21(31.8%)
Stealing/Forgery of Cheques	41(62.1%)	25(37.9%)
Forgery of payment documents like payment vouchers etc.	41(62.1%)	25(37.9%)
Tampering with banking records	40(60.6%)	26(39.4%)
Illegitimate insurance claim	37(56.1%)	29(43.9%)
Inflating costs of goods and services	25(37.9%)	41(62.1%)
Payment of non-delivered services and goods	24(36.4%)	42(63.6%)
Illegitimate claims like travel expenses etc.	20(30.3%)	46(69.7%)
Computer/Cyber crimes	20(30.3%)	46(69.7%)
Intra & interbank money transfer fraud	19(28.8%)	47(71.2%)
Falsifying books of accounts	18(27.3%)	48(72.7%)
Tax evasions	17(25.8%)	49(74.2%)
Credit card fraud	13(19.7%)	53(80.3%)
Ghost workers payment	8(12.1%)	58(87.9%)

From the study findings in table 10 above, mobile phone money transfer was identified as one of the fraud with the highest frequency at 87.9 % of reporting, followed by theft by employees at 69.7% and asset misappropriation at 68.2%. Other frauds which recorded high frequencies above 50% are; stealing/forgery of cheques (62.1%), forgery of payment documents

(62.1%), tampering with banking records (60.6%) and illegitimate insurance claim at 56.1%. The high frequency of mobile phone money transfer fraud can be attributed to high number of residents being involved in mobile money transactions cutting across all cadre of people both employed and non-employed where the fraudsters have a wider reach of culprits. The research findings also revealed that some frauds frequencies were low below 50% especially the frauds involving procurements and travel claims.

The intra and interbank frauds recorded as low as 71.2% while tax evasions and falsifying books of accounts, scored as low as 74.2% and 72.7% respectively. Worth noting, is computer/cybercrime though recording a high of 30.3% it is a concern being an emerging crime, which is difficult to investigate. The findings above is almost similar to the findings of KPMG, (2005), PWC, (2014) and National Police Service, (2014) which found that the frauds through cheques, Electronic Fund Transfer, mobile phone money transfer and embezzlement of public and private funds were the majors forms of frauds in Kenya. From the study findings above, it can be concluded that Kiambu Sub-County is a fertile ground for different types of frauds with high magnitude of frequency and will require the police investigators to be well equipped with adequate and skilled work force and resource to effectively investigate the above frauds.

4.4.3 Source of Fraudsters

The respondents were asked to indicate the source of fraudsters of different forms of financial frauds reported in Kiambu Sub-County Police Stations. The research findings are as tabulated in Table 11.

TABLE 11
Source of Fraudsters

Frauds	Source of Fraudsters		
	Internal	External	Both Internal and External
Mobile phone money transfer fraud	4(6.1%)	43(65.2%)	19(28.8%)
Theft by employees	43(65.2%)	5(7.6%)	18(27.3%)
Asset misappropriation	25(48.1%)	3(5.8%)	24(36.4%)
Stealing/Forgery of Cheques	13(19.7%)	15(22.7%)	38(57.6%)
Forgery of payment documents like payment vouchers etc.	40(60.6%)	5(7.6%)	21(31.8%)
Tampering with banking records	36(54.5%)	3(4.4%)	27(40.9%)
Illegitimate insurance claim	9(13.6%)	13(19.7%)	44(66.7%)
Inflating costs of goods and services	39(59.1%)	None	27(40.7%)
Payment of non-delivered services and goods	10(15.2%)	2(3.0%)	54(81.8%)
Illegitimate claims like travel expenses etc.	26(83.9%)	2(6.5%)	3(9.7%)
Computer/Cyber crimes	12(18.2%)	21(31.8%)	7(10.6%)
Intra & interbank money transfer fraud	21(31.8%)	8(12.1%)	37(56.1%)
Falsifying books of accounts	44(66.7%)	7(10.6%)	15(22.7%)
Tax evasions	None	18(52.9%)	16(47.1%)
Credit card fraud	8(12.1%)	30(45.5%)	28(42.4%)
Ghost workers payment	5(100%)	None	None

From the research findings in Table 11, it reveals that there is a mixed source of fraudsters, emanating from internal, external and both external and internal sources. For example mobile phone money transfer the fraudsters are mainly external at 43(65.2%) and credit card fraud at 30(45.5%). The research findings shows that internal frauds are also a major source of frauds with falsifying books of accounts scoring 44(66.7%), theft by employees accounting to 43(65.2%) while forging payment documents scoring 40(60.6%) among others.

Both internal and external source of frauds is also prevalent with payment of non-delivered services and goods accounting for 54(81.8%) and illegitimate insurance claim at 44 (66.7%) constituting some of the major source of fraudsters in Kiambu Sub-County. From the research findings above it can be concluded that internal sources are the major contributors of fraudsters accounting to eight (8) out of sixteen (16) of the identified frauds. The External and

both internal external sources share the remaining eight slots, however in terms of total percentages both internal and external sources contribute more as compared to internal sources.

4.5 Organisations or Institutions Affected by Financial Frauds.

Financial frauds affect both public and private organisations and institutions at different magnitudes. The public institutions comprises of the National Government, the County Government, government parastatal, independent commissions and learning institutions. Companies and family businesses represent the private sector. The social organisations consists of cooperatives, Savings and Credit Co-operatives (SACCOs), faith based organisations among others. This study sought to identify the organisations affected by financial frauds in Kiambu Sub-County.

4.5.1 Organisations or Institutions Affected by Financial Frauds.

The study sought to identify the organisation or institutions affected by fraudsters. This was important in order to establish the vulnerability of different organisations to fraudsters. The study findings are as tabulated in Table 12.

TABLE 12

Organisations/institutions Affected by Financial Frauds in Kiambu Sub-County

Affected Organisations/ Institutions	Affected	Not Affected	Magnitude	
			High	Low
Banks	62(93.9%)	4(6.1%)	45(68.2%)	21(31.8%)
Cooperatives	63(95.5%)	3(4.5%)	44(66.7%)	22(33.3%)
Schools (Public)	39(59.1%)	27(40.9)	30(45.5%)	36(54.5%)
Schools (Private)	18(27.3%)	48(72.7%)	13(19.7%)	53(80.3%)
SACCOs	60(90.9%)	6(9.1%)	47(71.2%)	19(28.8%)
Churches	9(13.6%)	57(86.4%)	12(19.0%)	51(81.0%)
Family business	15(22.7%)	51(77.3%)	13(19.7%)	53(80.3%)
Private companies	56(84.8)	10(15.2%)	38(57.57%)	28(42.43%)
National government institutions	50(75.76%)	16(24.24%)	62(93.9%)	4(6.1%)
County government	60(90.9%)	6(9.1%)	63(95.5%)	3(4.6%)

From the findings above it is revealed that frauds as a vice has affected both public and private organisations and had affected the organisations at different magnitudes. For example apart from churches and private institutions which are least affected at below 27.3% the rest of the institutions were affected above 50%. The most affected organisations are banks (93.9%), Cooperatives and SACCOs at 95.5% and 90.9% respectively. These findings can be attributed to the very nature of their business operations where there is a lot of money transaction, which is likely to attract fraudsters mostly from within. Churches and family business operates with little public involvement there leaving little room for fraudsters to strike.

4.5.2 Potential Fraudsters

The study found it necessary to identify the fraudsters and their magnitude of the contributions. Fraudulent activities are committed by different cadre of personnel in various organisations due to different reasons. This section presents the fraudsters and their magnitudes of their contribution in Table 13.

TABLE 13
Fraudsters of Financial Frauds

Fraudsters	Involved	Not Involved	Frequency	
			High	Low
Directors	46(69.7%)	20(30.3%)	31(47.0%)	35(53.0)
Senior Managers, School principals	49(74.2%)	17(25.8%)	47(71.2%)	19(28.8%)
Financial controllers/Managers	56(84.8%)	10(15.2%)	53(80.3%)	13(19.7%)
Accountants	54(81.8%)	12(18.2%)	58(87.9%)	8(12.1%)
Account clerks	50(75.8%)	16(24.2%)	34(51.5%)	32(48.5%)
Messengers	16(24.2%)	50(75.8%)	16(24.2%)	50(75.8%)
Cooperative officials	50(75.8%)	16(24.2%)	45(68.2%)	21(31.8%)

The study overwhelmingly revealed that directors, senior managers, school principals, financial controllers/managers, accountants, account clerks, messengers, and cooperative

officials are potentially liable to engage in financial frauds. From the study findings above accountants 58(87.9%), financial controllers/managers (53(80.3%), senior Managers, School principals 47(71.2%) and cooperative officials 45(68.2%) had the highest frequency of engaging in fraudulent activities. This can be attributed to their position and proximity to finances and they are mainly the custodian of finances, inform of cash, cheques, books of accounts and more so they make decisions regarding financial transactions in their organisations. The above findings is in line with ACFE (2004) report on occupational fraud which noted that workers who directly deals with finances be it cash money or payment avenues are more likely to be involved in frauds in an organisation. This observation explains the reason why financial managers, accountants and account clerks are highly involved and had high frequency of engaging on fraud activities.

4.5.3 Characteristic Features of Fraudsters

The study sought to assess the influence of characteristics features to fraudsters on the contribution to fraud activities. The study results are as tabulated in Table 14.

TABLE 14
Contribution by Different Features of Fraudsters

Features	Contribution			
	High/Major	Moderate	Low	No Contribution
Male	54(81.8%)	6(9.1%)	5(7.6%)	6(9.1%)
Female	23(34.8%)	29(43.9%)	10(15.2%)	4(6.1%)
Education status	34(51.5%)	19(28.8%)	5(7.6%)	8(12.1%)
Marital status	3(4.5%)	5(7.6%)	20(30.3%)	38(57.6%)
Age	31(47.0%)	24(36.4%)	4(6.1%)	7(10.6%)
IQ level	39(59.1%)	13(19.7%)	6(9.1%)	8(12.1%)
Working conditions	31(47.0%)	15(22.7%)	8(12.1%)	12(18.2%)
Position in the organisation/institution	49(74.2%)	4(6.1%)	2(3.0%)	11(16.7%)
Relations with outside world	41(62.1%)	10(15.2%)	8(12.1%)	7(10.6%)

From the study findings in table 13 above male features 54(81.8%) are the major fraudsters, followed by position in the organisation/institution at 49(74.2%) while marital status 3(4.5%) is the least contributor of fraudulent activities. Police officers must be equipped with information regarding the major contributors to frauds in order to identify the point of entry for the purpose of detecting, preventing and carry out effective investigations.

4.6 Police Human Resource Capacity to conduct Financial Frauds in Forensic Investigation in Kiambu Sub-County

Adequate human resource capacity is critical in ensuring the police service has adequate number of police officers, which well distributed, having proper training and properly supervised. Financial fraud forensic investigation is a specialised field that requires adequate expertise to ensure efficient evidence gathering and prosecution.

4.6.1 Human resource establishment in Kiambu Sub-County

The human resource establishment data was gathered using Likert scale where the respondents indicated on a scale of 1-5 (1- Strongly Disagree, 2-Disagree, 3- Uncertain 4- Agree, 5- Strongly Agree) their opinions on the human resource capacity of Kenya Police to carry out financial fraud forensic investigations.

4.6.2 Number of police officers in crime section

The respondents were asked their views on whether the numbers of police responsible of crime section were adequate. This was important in order to establish if the crime section is well manned by adequate number of human resource to ensure effective investigations. The study findings are tabulated in Table 15.

TABLE 15**Number of Police Officers in Crime Section**

	Frequency	Percent	Valid Percent	Cumulative Percent
Strongly Disagree	48	72.7	72.7	72.7
Disagree	18	27.3	27.3	100.0
Total	66	100.0	100.0	

From the study findings in table 15 above, 72.7% strongly disagreed while 27.3% disagreed that police officers in Kiambu Sub-county have adequate human resource capacity to cover the crime sections adequately. This finding clearly shows that there is limited human resource capacity in Kiambu Sub-county. The lack of adequate number of police officers could be attributed to challenges of recruiting enough police officers due to limited place at training colleges, natural attrition and loss of officers to other employers. These findings concur with the report of the National Task Force on police reforms in Kenya, which established that the Directorate of Criminal Investigations was lacking adequate number of police officers to handle serious crimes (Republic of Kenya, 2009). These findings call for the increase of the number of police officers through regular recruitment.

One-Way ANOVA was generated to determine if there was any statistical mean difference between the police rank (independent variable) and adequacy of police officers in the crime section in Kiambu Sub-County. Table 16 presents One-Way ANOVA statistics.

TABLE 16

**One-Way ANOVA Statistics on Adequacy
of Police Officers in Crime Section**

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.511	3	.170	.839	.478
Within Groups	12.580	62	.203		
Total	13.091	65			

The ANOVA results, $p=0.478$, ($p>0.05$) indicating there was no significance difference on the means score of police officers ranks and their views on the adequacy of police officers in the crime section. These findings confirm there is in adequate police officers in Kiambu Sub-county. Post hoc tests were conducted to determine the differences among the ranks of the police officers. Table 17 presents the post hoc tests results.

TABLE 17

**Post Hoc Test Analysis on Adequacy
of Police Officers in Crime Section**

(I) Rank	(J) Rank	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval Lower Bound	Upper Bound
Constable	Inspector	.219	.160	.519	-.20	.64
	Corporal	-.047	.147	.989	-.43	.34
	Sergeant	.060	.155	.980	-.35	.47
Inspector	Constable	-.219	.160	.519	-.64	.20
	Corporal	-.266	.181	.463	-.75	.21
	Sergeant	-.159	.188	.832	-.66	.34
Corporal	Constable	.047	.147	.989	-.34	.43
	Inspector	.266	.181	.463	-.21	.75
	Sergeant	.107	.177	.930	-.36	.57
Sergeant	Constable	-.060	.155	.980	-.47	.35
	Inspector	.159	.188	.832	-.34	.66
	Corporal	-.107	.177	.930	-.57	.36

Post Hoc analysis indicates that there was no statistical difference (sig, $p > 0.05$) among all police ranks. These revelations indicate that there is an adequate number of police officers attached to the crime section in Kiambu Sub-county. This situation may pose a challenge of conducting financial frauds bearing in mind there are so many forms of frauds reported.

4.6.3 Number of police officers with specialized skills

The respondents were asked their views on whether there were an adequate number of Kenya Police officers with specialised skills to conduct financial frauds. This was important in order to establish if the crime section is well manned by an adequate number of human resources with specialised skills to ensure effective investigations. The study findings are tabulated in Table 18.

TABLE 18

Police Officers with Specialized Skills

	Frequency	Percent	Valid Percent	Cumulative Percent
Strongly Disagree	57	86.4	86.4	86.4
Disagree	9	13.6	13.6	100.0
Total	66	100.0	100.0	

From the study findings in table 18 above, 86.4% strongly disagreed while 13.6% disagreed that police officers in Kiambu Sub-County have adequate human police officers with specialised skills to carry out investigations. This finding clearly shows that there is limited human resource with specialised training in Kiambu Sub-county. Ngboawaji (2012) in his studies in Nigeria linked the many cases of unsolved murders that dot Nigeria's criminal justice system to the absence of an adequate number of police officers with special skills of carrying forensic investigations.

The observation of Ngboawaji (2012) and supported by Sang (2013) who opined that there is a need to equip police investigators with adequate skills, knowledge, attitude and facilities

to enable them to investigate and build strong cases in a court of law in order to secure conviction. One-Way ANOVA was generated to determine if there was any statistical mean difference between the police rank (independent variable) and adequacy of police officers with specialised skills in Kiambu Sub-County. Table 19 presents One-Way ANOVA statistics.

TABLE 19
One-Way ANOVA Statistics on Adequacy of
Police Officers with Specialized Skills

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.559	3	.186	1.602	.198
Within Groups	7.213	62	.116		
Total	7.773	65			

The ANOVA results, $p=0.198$, ($p>0.05$) indicating there was no significance difference on the means score of police officers ranks and their views on the adequacy of police officers with specialized skills. These findings confirm there is in adequate police officers with specialized skills in Kiambu Sub-county.

Post hoc tests were conducted to determine the differences among the ranks of the police officers and adequacy of police officers with specialized skills. Table 20 presents the post hoc tests results.

TABLE 20
Post Hoc Test Analysis on Adequacy
of Police Officers in Crime Section

(I) Rank	(J) Rank	Mean	Std.	Sig.	95% Confidence Interval	
		Difference (I-J)	Error		Lower Bound	Upper Bound
Constable	Inspector	.103	.121	.827	-.22	.42
	Corporal	-.182	.111	.363	-.48	.11
	Sergeant	-.063	.117	.949	-.37	.25
Inspector	Constable	-.103	.121	.827	-.42	.22
	Corporal	-.286	.137	.171	-.65	.08
	Sergeant	-.167	.142	.648	-.54	.21
Corporal	Constable	.182	.111	.363	-.11	.48
	Inspector	.286	.137	.171	-.08	.65
	Sergeant	.119	.134	.812	-.24	.47
Sergeant	Constable	.063	.117	.949	-.25	.37
	Inspector	.167	.142	.648	-.21	.54
	Corporal	-.119	.134	.812	-.47	.24

Post hoc analysis indicates that there was no statistical difference (sig, $p > 0.05$) among all police ranks. These revelations indicate that there is an adequate number of police officers with specialised skills in Kiambu Sub-county. This situation may pose a challenge of conducting financial frauds bearing in mind financial frauds require highly specialised personnel.

4.6.4 Distributions of Specialist

The respondents were asked their views on the distribution of specialist Police officers within the sub-county. This was vital in order to establish the specialized human resource coverage. The study findings are tabulated in Table 21.

TABLE 21

Investigations Specialist Distributions

	Frequency	Percent	Valid Percent	Cumulative Percent
Strongly Disagree	60	90.9	90.9	90.9
Disagree	6	9.1	9.1	100.0
Total	66	100.0	100.0	

From the study findings in table 21 above, 90.9% strongly disagreed while 9.1% disagreed that there is a balanced distribution of specialist police officers within Kiambu Sub-county. This finding clearly shows that there is limited specialist human resource capacity in Kiambu Sub-county. The lack of balanced distribution of specialised police officers could be attributed to challenges of lack of continuous training of police officers after basic training. This revelation concurs with the study finding by IPOA (2013) and Republic of Kenya, (2009) reports which found that one of the major challenges facing police investigation is skewed distribution of specialist police officers with majority being deployed in major towns and police headquarters leaving some areas with no specialised officers.

One-Way ANOVA was generated to determine if there was any statistical mean difference between the police rank (independent variable) and distribution of investigations specialists in Kiambu Sub-County. Table 22 presents One-Way ANOVA statistics.

TABLE 22
One-Way ANOVA Statistics and
Distribution Specialized Investigations Police Officers

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.292	3	.097	1.169	.329
Within Groups	5.163	62	.083		
Total	5.455	65			

The ANOVA results, $p=0.329$, ($p>0.05$) indicating there was no significance difference on the means score of police officers ranks and their views on distribution of police investigations specialists. These findings confirm there is poor distribution of police investigations specialists in Kiambu Sub-county.

Post hoc tests were conducted to determine the differences among the ranks of the police officers and distribution of police investigation specialists. Table 23 presents the post hoc tests results.

TABLE 23
Post Hoc Test Analysis on the
Distribution Specialized Investigations Police Officers

(I) Rank	(J) Rank	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Constable	Inspector	.138	.102	.535	-.13	.41
	Corporal	-.005	.094	1.000	-.25	.24
	Sergeant	.138	.099	.509	-.12	.40
Inspector	Constable	-.138	.102	.535	-.41	.13
	Corporal	-.143	.116	.611	-.45	.16
	Sergeant	.000	.120	1.000	-.32	.32
Corporal	Constable	.005	.094	1.000	-.24	.25
	Inspector	.143	.116	.611	-.16	.45
	Sergeant	.143	.114	.593	-.16	.44
Sergeant	Constable	-.138	.099	.509	-.40	.12
	Inspector	.000	.120	1.000	-.32	.32
	Corporal	-.143	.114	.593	-.44	.16

Post hoc analysis indicates that there was no statistical difference (sig, $p > 0.05$) among all police ranks. These revelations indicate that there is no balance on the distribution of police investigations specialists in Kiambu Sub-county. This revelation implies that some cases reported might not be attended with the speed they deserve due to lack of particular specialist. This scenario may pose a challenge of conducting financial frauds leading to delays of completing investigations

4.6.5 Senior Officers in Crime Section are Specialist in a Given Field

The respondents were asked their views on the whether the senior officers who were heads of a crime section were specialist in a given field. This was vital in order to establish whether Kenya Police Service investigation units are headed by specialised human resource which is critical in ensuring proper management of investigations. A Cross tabulation findings is as tabulated in Table 24.

TABLE 24

Senior officers in Crime Section as Specialist in a Given Field

		The senior officers in crime section are specialist in a given field of investigations				Total
		Strongly Disagree	Disagree	Agree	Strongly Agree	
Kenya Police	Count	10	17	10	0	37
	% of Total	15.2%	25.8%	15.2%	0.0%	56.1%
Directorate of Criminal Investigation	Count	2	1	20	6	29
	% of Total	3.0%	1.5%	30.3%	9.1%	43.9%
Total	Count	12	18	30	6	66
	% of Total	18.2%	27.3%	45.5%	9.1%	100.0%

From the study findings in Table 24, specialised officers head largely the DCI crime section as compared to Kenya Police where 39.4% (agree + strongly agree) had a positive opinion for DCI as compared to 15.2% for Kenya Police. This finding confirms that DCI unit has adequate human resource capacity in terms of specialists and deployment, which can translate into better investigations management as compared to Kenya Police.

This revelation concurs with the report on task force on police reforms that noted that the regular Kenya Police unit was facing human resource capacity challenges since most of the

specialised units were headed by officers with discordant qualifications (Republic of Kenya, 2009).

One-Way ANOVA was generated to determine if there was any statistical mean difference between the police rank (independent variable) and their views on the specialised heading crime sections in Kiambu Sub-County. Table 25 presents One-Way ANOVA statistics.

TABLE 25
One-Way ANOVA Statistics and
Specialised Head of Crime Sections

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	4.988	3	1.663	.896	.448
Within Groups	115.012	62	1.855		
Total	120.000	65			

The ANOVA results, $p=0.448$, ($p>0.05$) indicating there was no significance difference on the means score of police officers ranks and their views on crime section being headed by a specialized police officer. These findings confirm that crime sections are headed by specialized investigation police officer.

Post hoc tests were conducted to determine the differences among the ranks of the police officers and heading of crime section by a specialized police officer. Table 26 presents the post hoc tests results.

TABLE 26
Post Hoc Test Analysis on the
Distribution Specialized Investigations Police Officers

(I) Rank	(J) Rank	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Constable	Inspector	-.649	.482	.538	-1.92	.62
	Corporal	-.175	.443	.979	-1.35	1.00
	Sergeant	.230	.467	.961	-1.00	1.46
Inspector	Constable	.649	.482	.538	-.62	1.92
	Corporal	.474	.549	.823	-.97	1.92
	Sergeant	.879	.569	.417	-.62	2.38
Corporal	Constable	.175	.443	.979	-1.00	1.35
	Inspector	-.474	.549	.823	-1.92	.97
	Sergeant	.405	.536	.874	-1.01	1.82
Sergeant	Constable	-.230	.467	.961	-1.46	1.00
	Inspector	-.879	.569	.417	-2.38	.62
	Corporal	-.405	.536	.874	-1.82	1.01

Post hoc analysis indicates that there was no statistical difference (sig, $p > 0.05$) among all police ranks. These revelations indicate that specialised police officers in Kiambu Sub-county head all the crime sections. This revelation implies that management of financial frauds investigations is safe and failure to investigate frauds adequately may be attributed to other factors.

4.7 Police Skills Capacity to Conduct Financial Frauds in Forensic Investigation

The ability of police officers to conduct financial fraud investigations is dependent on several factors. These factors may include; background training on finance or accounting, specialised training on financial forensic investigations, experience and skills gained when carrying out

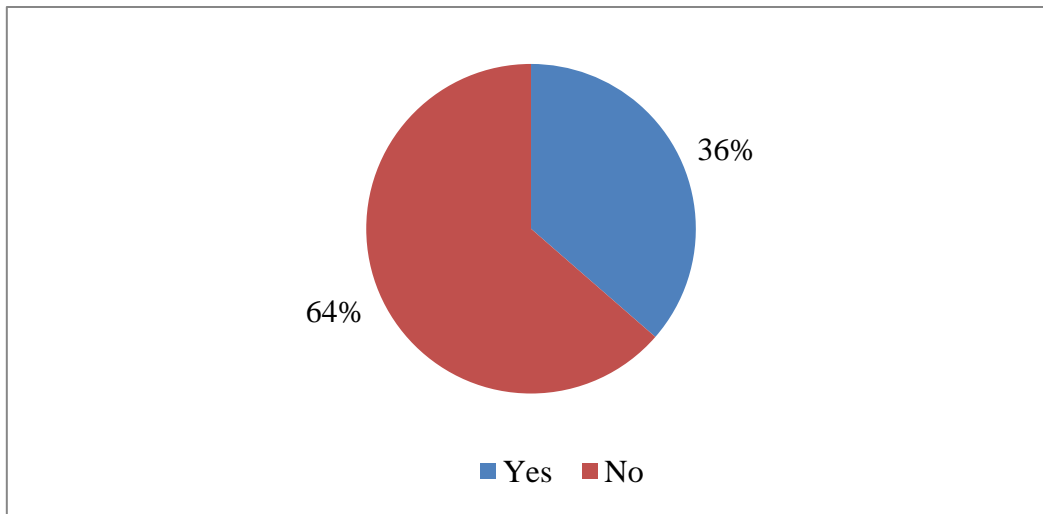
investigation. In addition, continuous and adequate training on relevance courses from recognised institutions is vital in ensuring effective investigations. Lack of training and skills capacity among the police officers to carry out policing duties was revealed as one of the reasons affecting performance of police officers in Kenya (NPJA, 2009 & IPOA, 2013).

4.7.1 Background Training in Finance or Accounting Prior to Joining Kenya Police Service

The respondents were asked to indicate if they had finance or accounting training before joining the Kenya Police Service (KPS). This was vital in order to establish the knowledge and skill inherent to the police officers before joining the service. The study results are as shown by Figure 5.

FIGURE 5

Background Training in Finance and Accounting before Joining KPS



The study findings in figure 5 above Majority (64 %) did not have background training on finance or accounting while 36% had prior training before joining police service. These research findings can be attributed to the fact that it is not a requirement for one to have a background of finance or accounting before joining the Kenya Police.

4.7.2 *Experience of Working in the Crime Section*

The study found it necessary to establish the experience of the police officers in the crime section since it may have a profound effect on the quality of investigations. According to O'hara (2003), the longer an officer is engaged in investigations the more the officers becomes acquitted with interviews and interrogation skills and would result in success of apprehending suspects and building strong case in a court of law. The findings are as tabulated in Table 27.

TABLE 27

Experience of Working in the Crime Section

Valid N	66
Mean	7.27
Median	6.00
Mode	3
Std. Deviation	5.626
Range	24
Minimum	1
Maximum	25

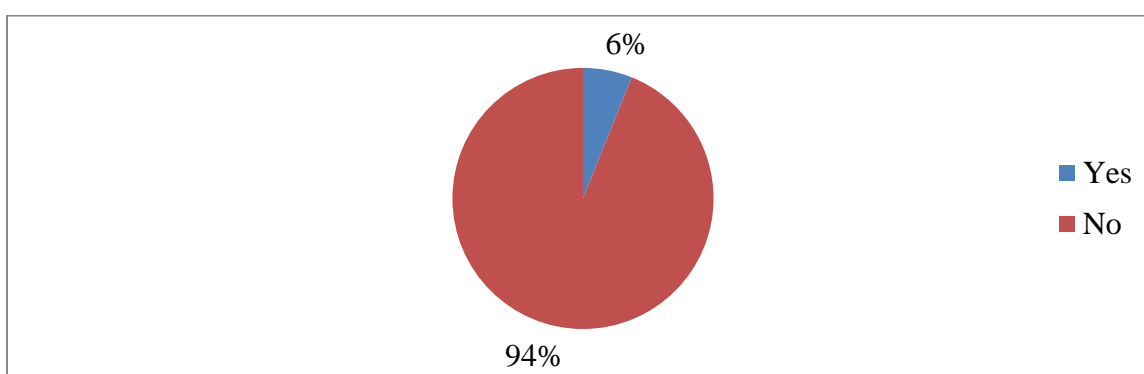
From the research findings in table 27, above the most experienced police officers had worked in the crime section for 24 years while the most inexperienced police officers had worked for only one year. Majority of the police officers had worked for three years and had worked on average of seven years, which are enough periods for the officers to have gained considerable experience in criminal investigations. O'hara, (2003) advocates that the number of years of experience is major factor for effective investigations because it builds expertise and confidence to a police officer therefore from the findings above police officers in Kiambu Sub-County have adequate experiences to handle criminal cases.

4.7.3 Training on Financial Forensic Investigation during the Basic Recruit Training

The respondents were asked to indicate if they took financial forensic investigations course during the basic recruit training. This was vital in order to establish the knowledge and skills acquired during the basic training relevant to financial fraud investigations. The findings results are as shown by Figure 6.

FIGURE 6

Police Officers Trained on Forensic Investigation during the Basic Recruit Training



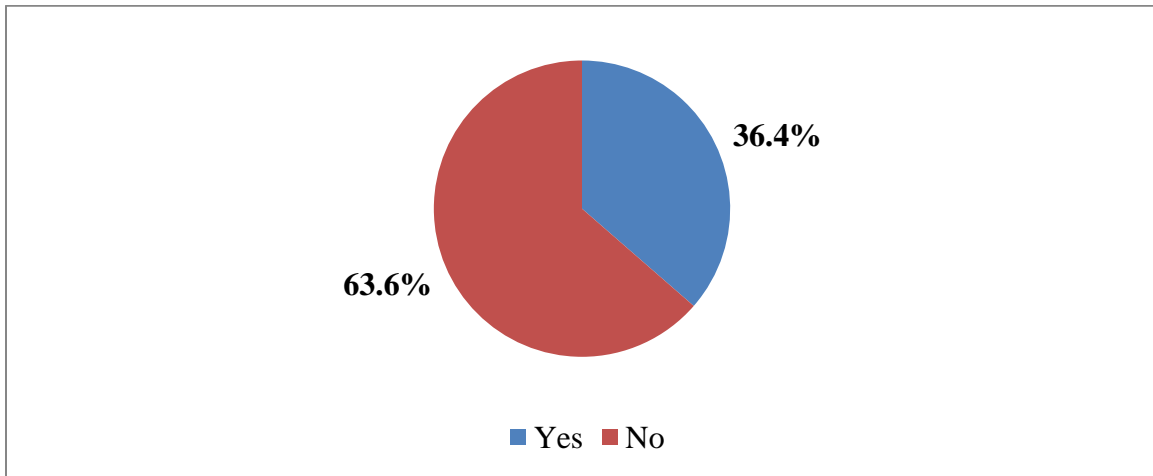
The findings above in figure 6 reveals that majority (94%) of the police did not undertake a course in financial forensic investigations during the basic recruit training with only 6% indicating they were trained on the financial forensic investigations. These unfortunate results can be attributed to the old police-training curriculum that did not include the financial forensic investigations courses.

4.7.4 Training on Financial Forensic Investigation after the Basic Recruit Training

The respondents were asked to indicate if they took financial forensic investigations course after the basic recruit training. This was vital in order to establish the knowledge skills development after the basic training relevant to financial fraud investigations. Figure 7, shows the findings results.

FIGURE 7

Proportion of Police Officers Trained on Specialised Course on Financial Forensic Investigations



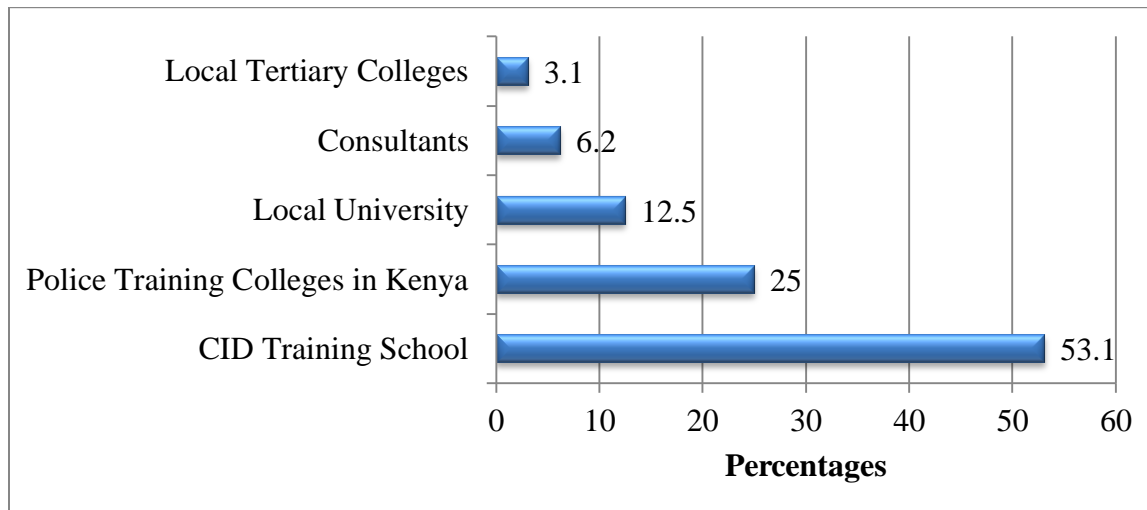
The findings above in figure 7 reveals that majority (63.6%) of the police did not undertake a course in financial forensic investigations after the basic recruit training with 36.4% indicating they were trained on the financial forensic investigations. These unfortunate results may be attributed to lack of training policy to address emerging crimes like financial frauds.

4.7.5 Institution Offering Specialised Courses after the Basic Recruit Training

The study deemed it vital to identify the institutions that offered specialised training to the police officers after the basic training. Specialised training is one of the strategies used by KPS to acquire new knowledge and skills and at same time improving on what an officer has gained during working experience. The study findings are tabulated in Figure 8.

FIGURE 8

Institutions that Offered Specialised Training on Financial Forensic Investigations



From the study, findings in figure 8 above majority (53.1%) of the respondents took their specialised training at DCI training School and 25% at Police Training Colleges. The rest of the trainings were conducted in local universities (12.5%), consultants (6.2%) and tertiary accounting to 3.1%. The reason why the Directorate of Criminal Investigation Training School accounting for the largest share of trainings can be attributed to the fact that it deals mainly with specialised trainings geared to equip police officers with knowledge and skills of carrying out investigations.

4.7.6 Specialised Financial Forensic Investigation Course(s) Taken

The study found it prudent to identify the specialised courses in financial forensic investigation taken by police officers after the basic recruit course to assist them in fraud investigations. The Kenya Police Service has a policy of ensuring professional development through the in-service training programmes that are envisaged to equip each police officer with relevant knowledge and skills necessary to improve job performance and enhance service delivery in line with the best practices in the world (Republic of Kenya, 2001).The study findings are tabulated in Table 28.

TABLE 28
Specialised Courses

Specialised Courses Taken	Responses	
	N	Percent
Basic Investigations and Fraud	20	31.7
Accounting and Finance	6	9.5
Banking Fraud	6	9.5
Data Forensics	4	6.3
Financial Audit Trail	4	6.3
Anti-Money Laundering	4	6.3
Cybercrime Investigation Course	4	6.3
Document Investigation	3	4.8
Fraud Detection and Forensic Accounting	3	4.8
Card Fraud Course	3	4.8
Financial Management Course	3	4.8
Degree in Forensic Investigations	2	3.2
Diploma in Forensic and Criminal Investigations	1	1.6
Total	63	100

From the research, findings in Table 28 above majority (31.7%) had taken Basic Investigation and fraud course while 9.5% had taken Accounting and Finance course. The study findings have shown that varieties of specialised courses were offered after the basic recruit training in attempt to develop officer’s skills of financial fraud investigations. Worth noting though there were a variety of courses that were undertaken, only a small proportion undertook the individual courses.

4.7.7 Duration of Training for Specialised Courses

The study found it relevant to establish the duration of training on specialised courses. The study findings are tabulated in Table 29.

TABLE 29

Duration of Training for Specialised Courses

Type of Course	Minimum Duration	Maximum Duration
Short Courses	5 days	3 Months
Long Courses (Degree and Diploma)	1 year	4 years

From the study findings above it is evident that the shortest specialise course took a minimum of five (5) days while the longest took duration of 3 months for short courses while for long Courses (Degree and Diploma Courses) took between 1 and 4 years. From the above results, its apparent with adequate resources more police officers can be adequately trained on short courses especially those taking a minimum five days.

4.7.8 Financial Fraud Investigations Skills Possessed by Police Officers

The study found it necessary to establish the financial fraud investigation skills possessed by police officers. This was vital in order to assess the ability of the police officers to carry out fraud investigation. The findings are as tabulated in Table 30.

TABLE 30**Financial Fraud Investigation Skills Possessed by Police Officers**

Skills	Yes		No	
	N	%	N	%
1 Basic Accounting	37	56.1	29	43.9
2 Fraud detection	17	25.8	49	74.2
3 Fraud Detection and Forensic Accounting	17	25.8	49	74.2
4 Anti-banking fraud	21	31.8	45	68.2
5 Cybercrime detection	15	22.7	51	77.3
6 Investigation and file case preparation	43	65.2	23	34.8
7 Investigation, file case preparation and prosecution	7	10.6	59	89.4
8 Risk detection and control	26	39.4	40	60.6
9 Application of computer software to detect fraud and investigations	8	12.1	58	87.9
10 Report writing and presentation	52	78.8	14	21.2
11 Reconstruction of accounting records	9	13.6	57	86.4
12 Auditing of books of accounts	25	37.9	41	62.1
13 System auditing	9	13.6	57	86.4
14 Digital data recovery	15	22.7	51	77.3
15 Documents /Signature authentication	14	21.2	52	78.8

The study findings above present mixed responses in relation to skills possessed by police officers with some skills available while some skills lacking. The police officers had relatively adequate skills on report writing and presentations at 78.8%, investigation and file case preparation at 65.2% and basic accounting at 56.1%. The officers fared poorly in skills like application of computer software to detect fraud and investigations, reconstruction of accounting records and system auditing which are very critical in fraud investigations. These findings are

supported by Obayelu (2007) and Sang (2013) who noted that police officers lack skills to deal with emerging crimes like cyber crimes and they need to be trained on specialised skills in order to deal with complex crimes.

4.8 Resources Capacity for the Police Officers to Conduct Financial Forensic Fraud Investigations

Resources availability plays a crucial role of ensuring credible investigations. Apart from human resources, forensic investigations call for other resources, which aids in gathering evidence to identify and prosecute a suspect. To ensure success in forensic investigations such resources must be readily available to the investigating officers.

4.8.1 Availability of Resources to Facilitate Fraud Investigations

The study decided to assess the resources at the disposal of the police officers to facilitate financial fraud investigations. This was necessary in order to determine the police resource capacity to carry out effective financial fraud investigations for the purpose of identifying and prosecuting a suspect. The study findings are as tabulated in Table 31.

TABLE 31**Resources Available for Facilitating Financial Fraud Investigations**

Tools, equipment and facilities		Availability			
		Readily Available		Not Readily Available	
		N	%	N	%
1.	Computer software	31	47.0	35	53.0
2.	Data mining tools	18	27.3	48	72.7
3.	Interrogation rooms	58	87.9	8	12.1
4.	Standard Operating Procedures (SOP) for financial frauds forensic investigations	5	7.6	61	92.4
5.	Financial forensic laboratory	2	3.0	64	97.0
6.	Policies/Law for investigating and prosecuting fraudsters	62	93.9	4	6.1
7.	Information sharing systems to aid in investigations.	13	19.7	53	80.3
8.	Safe for keeping exhibits	55	83.3	11	16.7
9.	Criminal records and intelligence reports	22	33.3	44	66.7
10.	Gadgets for intercepting communications to detect frauds	11	16.7	55	83.3
11.	Audit reports	4	6.1	62	93.9

From the findings in table 31 above the most readily available resource was Policies/Law provisions regarding investigating and prosecuting of fraudsters at 93.9%, interrogation rooms (87.9%) while least available were Financial forensic laboratory and Audit reports which scores 3.0% and 6.1% respectively. From the study, findings above it can be observed that most of the facilitating resources for financial frauds investigations are not readily available which can influence negatively on the effective investigations of financial frauds. The above findings are in agreement with the Kenya task force report on police reforms Republic of Kenya (2009) which

noted that Kenya Police is facing challenges of investigating cases due to lack of specialised and basic computer skills. Lack of police capacity to carry out policing duties was cited as one of the factors affecting police performance (NPIA, 2009 & IPOA, 2013).

4.9 Challenges Facing Police Officers in Carrying Frauds Investigations

The study deemed it necessary to identify the challenges facing police officers in carrying out forensic financial fraud investigations in Kiambu Sub-County. The research findings revealed that apart from lack of specialised skills, lack of sufficient resources and in sufficient human resource in crime sections, police officers are also faced with other challenges. The study findings are tabulated in appendix IV.

These challenges can be summarised as follows:

- a) Lack of continuous training on specialised areas due to lack of implementation of in-service training programmes.
- b) Welfare challenges that includes lack of poor pay, poor housing, working long hours with inadequate allowances among others, which has contributed to low morale.
- c) Frequent transfers of officers and mismatch of specialists due to nepotism, favourism and due to lack of human resource policy.
- d) Interferences and intimidation of investigating officers by external and internal forces
- e) Unethical practices like corruption and unprofessionalism among the police officers
- f) The provisions of Criminal laws that require the production of suspects to a court of law within 24 hours and granting of bail to suspects has created a loophole for fraudsters to influence investigations abscond or intimidate witnesses.
- g) Emerging crimes like computer and cyber-crimes, which requires officers to be trained on modern technology of addressing these emerging crimes.

- h) Lack of coordination between different security agencies in order to share information regarding criminals involved in frauds.

From the study findings above, the challenges, facing police officers are personal, administrative and structural and need to be addressed holistically by involving all the stakeholders in the public and private sector.

CHAPTER FIVE

CONCLUSION AND RECOMMENDATIONS

This chapter comprise of the summary, conclusion and recommendation on the evaluation of financial fraud forensic investigation capacity of Kenya Police in Kiambu Sub-County. It also offers other areas for future research.

5.1 Summary of the Study Findings

5.1.1 *Background Information*

The background information covered: officer's personal information, forms of financial frauds investigated and organisations/institutions affected by financial frauds Kiambu Sub-County. What emerged from the study is that the police officers have at least form four education and quite impressive tertiary and university education. The study revealed that the 30 per cent gender rule as stipulated in the Kenya Constitution (2010) is attained in Kiambu Sub-County though the males were many. The study found that there were wide range of work experience among the police officers with the most experience having worked for 36 years and the least experience having worked for only two years. On average, the officers had work experience of about 12 years adequate for effective criminal investigations.

On forms of financial frauds reported, what emerged from the study is that there was a wide range of frauds that involved cash money, cheques, assets, illegitimate claims, tampering with books of accounts and financial records, electronic money in form mobile phone money transfer intra and interbank transfers. The study also revealed that fraudsters are either internal, external or both internal and external with internal perpetrators being the major ones. These findings are an eye-opener to the law enforcement to be well equipped with skills and resources to investigate these numerous frauds in Kiambu Sub-County.

What emerged from the study is that fraud had affected both private and public organisation. Organisations dealing mostly with money like banks, cooperatives, SACCOs are the ones, which are mostly affected by frauds and to a large magnitude. Family businesses and churches were the least affected and had low magnitude of effects. What also emerged from the study is that personnel who have access to finances are more likely to frauds their organisations especially the financial controllers/mangers 56(84.8%), accountants 54(81.8%), accounts clerks 50(75.8%), Cooperative officials 50(75.8%) among others. Though messengers are also potential fraudsters their contribution is low because they do not deals with finances more often and in large sums.

5.1.2 Human Resource Capacity and Financial Forensic Investigations

The first objective was to establish the capacity of Kenya police human resource to carry out forensic investigations on financial frauds in Kiambu Sub-County. The study revealed that the Kenya Police Service in Kiambu Sub-County is faced with human resource capacity since there is no adequate number of police officers to cater for the large population in the Sub-County. Kiambu County headquarters records shows that the ration of police to civilian stand at 1: 650 ways below the UN recommended ratio of 1:450. The study also found that the deployment of police officers within DCI with special qualifications was higher especially the senior officers as compared to Kenya Police. What was also found is that the distribution of police officers is not well balanced within the sub-county and thus has affected the distribution of police officers with special skills in DCI and Kenya Police. One – Way ANOVA tests results yielded a $p > 0.05$ and post hoc tests indicated there was not statistical difference on the views of police officers on lack of adequate human resource to deal with financial frauds in Kiambu Sub-County.

5.1.3 Skills Capacity and Financial Forensic Investigations

The second objective was to examine the skills capacity of police officers to conduct forensic investigation on financial frauds in in Kiambu Sub-County. It was revealed that only about 36% of the police officers had prior training on finance or accounting before joining the Kenya Police Service. It was also found that only 6% of the police officers were trained on financial forensic investigations during the basic recruit training using the new basic police-training curriculum. The study found that most of the police officers had an experience of three years of dealing with crime that is not adequate to become an accomplished investigator. The research findings revealed that there is government effort and individual efforts to improve their knowledge and skills of financial fraud investigations but the number trained (36.4%) is not impressive to warrant large coverage on all forms of frauds reported in Kiambu Sub-County. The National Police training institutions led by DCI training school and other Kenya Police Training Colleges are the major training institution for police officers taking specialised courses. Local universities and other private institutions are not doing much in supplementing government efforts and therefore there is need to involve all stakeholders. It also emerged that specialised courses taken per individual police officers is not impressive as the highest was Basic Investigations and Fraud Course at 31.7% while the least was between 1 and 6%.

What also emerged from the study is that overall the police officers lacked crucial skills for investigating financial frauds. The police officers for example scored poorly in application of computer software to detect fraud and investigations 8(12.1%), system auditing and reconstruction of accounting records which both scored 9 (13.6%). These skills are vital when dealing with emerging frauds and serious economic financial frauds.

5.1.4 Physical Resources Capacity and Financial Forensic Investigations

The third objective was to assess physical resource capacity of Kenya Police available for police officers to conduct forensic investigations on financial frauds in Kiambu Sub-County

What emerged is that police officers lack crucial resources like financial forensic laboratory 2(3.0%), Standard Operating Procedures (SOP) for financial frauds forensic investigations 5(7.6%), audit reports 4(6.1%), gadgets for intercepting communications to detect frauds 11(16.7%) and information sharing systems to aid in investigations at 13(19.7%).

5.2 Conclusion of the Study

The objective of this research was to assess the financial fraud investigation capacity of Kenya Police in Kiambu Sub-County of Kiambu County. The study concludes that the police officers in Kiambu Sub-County have limited investigations capacity due to limited human resource capacity, knowledge, skills, and lack of adequate physical resources for conducting financial fraud investigations. The study also concludes that if the challenges facing police officers in carrying out financial forensic fraud investigations in Kenya, remain un-addressed the vices will remain rampant and will negatively affect operations of public and private organisations.

5.3 Recommendations

The study recommends that the Kenya Government should address the following among others in order to improve on financial fraud investigations by police officers. Address the police human resource capacity by developing and implementing human resource capacity policy. Develop a policy of ensuring that all police officers are trained on specialised courses especially on emerging crimes of financial nature. The police officers must undergo a basic financial forensic investigation training during basic recruit course and those who are serving to take an in-service training to improve on the knowledge and skills. Encourage the officers to take specialised

courses on investigations in private institutions in order to build the expertise pool quickly. Continuously and adequately address the emerging crimes like cybercrime by providing relevant training and resources to the police officers. The law enforcement agencies and private organisations should develop a strategy of sharing informations and experiences on financial frauds to help in investigations. The government should educate the public on the need to report financial frauds and divulge informations to assist in investigations.

5.4 Recommendation for Further Research

The following areas may require further research;

Evaluate the effects of the new Constitution (2010) on investigations of financial frauds in Kenya, explore the strategies used by cooperatives to detect and prevent financial frauds and assess the contribution of free primary and secondary education on financial frauds in Kenya education system.

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APPENDICES

Appendix I

Letter of Introduction

Stephen Kariuki

P. O Box 30036

Nairobi

15th August 2015

Dear Respondent,

RE: DATA COLLECTION

I am a student at Kenya College of Accountancy University pursuing a Master's of Science in Commerce Degree in Finance and Accounting. I am undertaking a study entitled **Evaluating the Financial Fraud Forensic Investigation Capacity of Kenya Police in Kiambu Sub-County of Kiambu County.**

The purpose of this study is purely for academic pursuits and information will be treated in strict confidence. Your help in the study will be highly appreciated.

Yours faithfully,

Stephen Kariuki

Appendix II

Questionnaires for Police Officers

My name is Stephen Kariuki a Master of Science student in Accounting and Finance at Kenya College of Accountancy University. I have cleared my course work and therefore am currently embarking on a study titled “Evaluating the Financial Fraud Forensic Investigation Capacity of Kenya Police in Kiambu Sub-County of Kiambu County”.

This questionnaire is meant to collect primary data for the aforementioned research. You have been selected as one of the respondents. Kindly provide your honest information on all the items in this questionnaire. It is purely for academic pursuit and the views expressed will be treated confidential.

SECTION A: DEMOGRAPHIC INFORMATION OF THE RESPONDENTS

Please answer the following questions by ticking [√] your choice of answer and where applicable explain or make your suggestions.

1. Please indicate your sex
 Male Female
2. Please tick your police service/Formation
 Kenya Police (KP)
 Directorate of Criminal Investigation (DCI)
3. Please indicate your rank _____
4. Indicate your duty station [] Police station
 Patrol base or Police post
 Police district headquarter
 Others indicate _____
5. Please indicate how long you have served in the **National Police Service (NPS)** in full years

6. Please indicate your highest education attained (**Tick one option**)
 Primary school certificate
 Secondary school certificate
 Diploma or Certificate
 Degree

- [] Master's Degree
 [] Others qualification (specify)_____

SECTION B: BACKGROUND INFORMATION OF THE STUDY

7. There are different forms of financial frauds that are normally reported in Kiambu Sub-County police stations. Please fill the table below to identify such financial frauds, their frequency of occurrence and source of fraudsters. **(Tick where appropriately)**

Type of frauds	YES	NO	Frequency		Source of Fraudsters		
			High	Low	Internal	External	Both Internal & External
Stealing/forgery of cheques							
Theft by employees							
Falsifying books of accounts							
Tampering with banking records							
Forgery of payment documents like payment vouchers etc.							
Intra & interbank Money transfer							
Mobile phone money transfer							
Insurance claim							
Ghost workers							
Payment of non-delivered services and goods							
Credit card							
Inflating costs of goods and services							
Illegitimate claims like travel expenses etc.							
Asset misappropriation							
Tax evasions							
Others please indicate							

8. Financial frauds affect a number of organisations or institutions. Please fill the table below to identify the affected organisations or institutions in Kiambu Sub-County. **(Tick in the appropriate box)**

Organisations or institutions	YES	NO	Frequency	
			High	Low
Banks				
Cooperatives				
Schools (Public)				
Schools (Private)				
Sacco's				
Churches				
Family business				
Private companies				
National government institutions				
County government institutions.				

9. Financial frauds are perpetrated by various culprits, Fill the table below identify the fraudsters involved in financial frauds in Kiambu Sub-County

Fraudsters	YES	NO	Contribution	
			High	Low
Directors				
Senior Managers, School principals				
Financial controllers/Managers				
Accountants				
Account clerks				
Messengers				
Cooperative officials				

10. Fraudsters have characteristic features, which identify them for the purpose of investigations. Please fill the table below to identify them and their level of contribution in propagating the fraud.

Features	Contribution		
	High/Major	Moderate	Low
Male			
Female			
Education status			
Marital status			
Age			
IQ level			
Working conditions			

Features	Contribution		
	High/Major	Moderate	Low
Position in the organisation/institution			
Relations with outside world			

SECTION C: POLICE HUMAN RESOURCE CAPACITY TO CONDUCT FINANCIAL FRAUDS IN FORENSIC INVESTIGATION IN KIAMBU SUB-COUNTY

11. By putting a tick in the appropriate column, indicate the extent to which you agree on human resource capacity to conduct financial fraud forensic investigations in Kiambu Sub-County.

#	Human Resource Practices	Strongly Disagree [1]	Disagree [2]	Uncertain [3]	Agree [4]	Strongly Agree [5]
a)	There is enough number of police officers to cover entire Kiambu Sub-County in crime section					
b)	There is adequate number Kenya Police officers with specialised skills to conduct financial frauds					
c)	There is a balanced deployment of specialist within the sub-county					
d)	The senior officers in crime section are specialist in a given field					

SECTION D: POLICE SKILLS CAPACITY TO CONDUCT FINANCIAL FRAUDS IN FORENSIC INVESTIGATION IN KIAMBU SUB-COUNTY

12. For how long have you worked in **crime section since you joined** the National Police Service (NPS). _____

13. Apart from police training do you have background training in finance/accounting

Yes No

14. Did you took **financial forensic investigation course** during the basic recruit training

Yes NO

15. (a) Have you received specialised training on financial forensic investigation **after basic recruit course?**

Yes No

(If NO question in 11(a) go to question 13, below)

(b) Where was the training conducted? **(Tick more than one option if applicable)**

- DCI Training School
- Police Training College in Kenya
- Local Universities
- Foreign universities /institutions
- Foreign police specialised training institutions
- Others specify _____

16. **If YES** in question 11(a) above fill the table below

#	Name of the course	Course duration (Days, months, years etc.)
1		
2		
3		
4		
5		
6		

17. A financial fraud forensic investigation is a specialised area that requires an officer to have certain skills in order to carry out credible investigations. Which of the following skills do you think you **possess that assists** you to carry financial forensic investigations? **(Tick where applicable)**

#	Skills	Yes	No
1	Basic Accounting		
2	Fraud detection		
3	Fraud Detection and Forensic Accounting		
4	Anti-bank fraud		
5	Cybercrime detection		
6	Investigation and file case preparation		
7	Investigation, file case preparation and prosecution		
8	Risk detection and control		
9	Application of computer software to detect fraud and investigations		
10	Report writing and presentation		
11	Reconstruction of accounting records		
12	Auditing of books of accounts		
13	System auditing		

#	Skills	Yes	No
14	Digital data recovery		
15	Documents /Signature authentication		

SECTION D: RESOURCES CAPACITY FOR THE POLICE OFFICERS TO CONDUCT FINANCIAL FORENSIC INVESTIGATIONS IN KIAMBU SUB-COUNTY

18. As an investigating officer which of the following tools, equipment and facilities that are always available to you to carry out financial fraud investigation?

#	Tools, equipment and facilities	Readily Available	Not Readily Available
12.	Computer software		
13.	Data mining tools		
14.	Interrogation rooms		
15.	Standard Operating Procedures (SOP) for financial frauds forensic investigations		
16.	Financial forensic laboratory		
17.	Policies/Law for investigating and prosecuting fraudsters		
18.	Information sharing systems to aid in investigations.		
19.	Safe for keeping exhibits		
20.	Criminal records and intelligence reports		
21.	Gadgets for intercepting communications to detect frauds		
22.	Audit reports		

19. A part from skills and resource capacity challenges facing police officer in carrying out financial fraud forensic investigation, state other challenges do the police officer experiences.

- i) _____
- ii) _____
- iii) _____
- iv) _____

Appendix III

A Cross Tabulation between Experience in National Police Service and Highest Education

Attained

Experience in National Police Service	Highest Education Attained					Total
	Primary School Certificate	Secondary School Certificate	Diploma or Certificate	Degree	Master's Degree	
2	0	0	2	2	0	4
3	0	0	2	4	0	6
4	0	1	0	2	1	4
5	0	0	1	3	0	4
7	0	0	1	0	0	1
8	0	2	0	0	2	4
9	0	0	2	1	0	3
10	0	1	4	1	1	7
11	0	2	0	1	0	3
12	0	1	0	0	1	2
13	0	1	0	0	0	1
14	0	2	1	0	0	3
15	0	0	2	0	0	2
17	0	2	1	1	0	4
18	0	2	1	0	0	3
19	0	1	0	0	0	1
20	0	1	0	0	0	1
22	0	2	0	0	0	2
23	0	0	0	0	2	2
24	0	1	0	0	0	1
25	0	1	1	0	0	2
26	1	2	1	0	0	4
33	0	1	0	0	0	1
36	1	0	0	0	0	1
Total	2	23	19	15	7	66

Appendix IV

Challenges facing Police Officers

Challenges	Responses	
	N	Percent
Noncooperation from the public	6	4.5
Frustrations from courts/delay	7	5.2
Absconding witness	7	5.2
Premature withdraw of cases	4	3.0
Lack of adequate laws	2	1.5
Lack cooperation of stakeholders in criminal justice system	6	4.5
Lack of enough intelligence	5	3.7
In adequate specialists in forensic investigations	11	8.2
Lack of forensic laboratory	3	2.2
Lack of training on modern technology/ICT	10	7.5
Corruption/Nepotism/Tribalism	11	8.2
Frequent transfers	3	2.2
Lack of commitment	3	2.2
Bureaucratic management	3	2.2
Lack of continuous training	12	9.0
Poor management of case investigations	2	1.5
Lack of motivation	11	8.2
Emerging forms of frauds	5	3.7
Lack of public awareness on frauds	5	3.7
Mismatch on deployments	2	1.5
Interference from within and outside/Harassments	8	6.0
Selective application of law	1	0.7
Organisations refusing to share information with law enforcement agencies	6	4.5
Delay in reporting	1	0.7
Total	134	100.0