

UNIVERSITY OF NAIROBI

FACULTY OF ARTS

**CHALLENGES ASSOCIATED WITH CRIME MEASUREMENT BY
POLICE OFFICERS: A CASE STUDY OF NAIROBI COUNTY**

BY

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DECLARATION

I declare that this research project is my original work and that it has not been submitted to this, or any other University for the award of a degree or certificate.

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This research project has been submitted for examination with my approval as the University supervisor.

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DEDICATION

I dedicate this project to my wife Caroline Mumbi and my son Emmanuel Muuo.

ACKNOWLEDGEMENT

My sincere gratitude goes to my supervisor Dr. Mike Chepkonga without whose instructive guidance and direction this proposal would not have been a success. I greatly appreciate the time and efforts he has spared for me during the whole process of this research project.

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ABBREVIATIONS/ACRONYMS

CI	:	Chief Inspector
CID	:	Criminal Investigation Department
CPL	:	Corporal
DCIO	:	Divisional Criminal Investigation Officer
DNA	:	Deoxyribonucleic acid
FBI	:	Federal Bureau of Investigation
FSO	:	Force Standing Orders
GoK	:	Government of Kenya
GSU T/S	:	General Service Unit Training School
IP	:	Inspector of Police
KPC	:	Kenya Police College, Kiganjo
KPS	:	Kenya Police Service
NCVS	:	National Crime Victimization Survey
NIBRS	:	National Incident Based Reporting System
OCPD	:	Officer In-charge of Police Division
OCS	:	Officer In-charge Police Station
PC	:	Police Constable
PPO	:	Provincial Police Officer
S/SGT	:	Senior Sergeant
SGT	:	Sergeant
SP	:	Superintendent of Police
SRIC	:	Security Research and Information Centre
SSP	:	Senior Superintendent of Police
UCR	:	Uniform Crime Report

ABSTRACT

Ascertaining the true level of criminality has always been a major challenge in Kenya; besides, studies on the same are scanty. This study therefore sought to establish challenges associated with crime measurement by Police officers deployed in Nairobi County, with a view to generating information that would assist in ascertaining the true level of crime in the County and in formulating effective crime control strategies. The study investigated crime-recording practices, competencies and challenges crime recorders and analyst encountered.

The study employed a descriptive survey design targeting a sample size of 136 respondents. The respondents were stratified into crime recorders and crime analysts and randomly sampled. Semi-structured questionnaires and interview scheduled was used to collect data from respondents. Descriptive statistics and content analysis were used to analyze data.

The study findings indicate that the basic items of crime recorded by police were nature of the reported crime, place and time of commission, particulars of the complainant and suspect, and the motive behind the crime. None of the crime recorders had received specialized training on crime recording. Apart from Uniform Crime Report, less than half of the respondents were conversant on the use of other techniques of measuring crime. The major challenges respondents experienced when measuring crime were inadequate computers, stationeries, office space as well as lack of a standardized method of recording crime data.

The study recommended that the Kenya Police Service should develop a standardized training for crime recorders and analysts; embrace technology in its crime measurements; provide adequate equipments and stationeries; and construct offices for crime-recorders and analyst in the County.

CHAPTER ONE: INTRODUCTION

1.1 Background of the Study

Ordinarily, crime is measured in the society for the purposes of combating, understanding the nature, predicting and controlling crime (Maguire, 1997). Reasons for measuring characteristics of crimes and criminal behavior in the society vary. First, Law enforcers and criminologist need to collect and analyze information in order to test theories about why people commit crime. One Criminologist might record the kinds of offences committed at different times of the ages; another might count the numbers of crimes committed at different times of the year. But without ordering these observations in some purposeful way, without a theory, a systematic set of principle that explain how two or more phenomena are related, criminologists would be limited in their ability to make predictions about crime from the data concerning crimes. It is on these bases that accurate measurement of crime has always been important as the basis for evaluating criminological theory and the effectiveness of various crime control policies in the society in general and Kenya in particular. This is to verify the empirical accuracy of competing crime theories and the success or failure of crime control programmes (Maguire, 1997).

Secondly measuring crime enhances knowledge of the characteristics of various types of crime / offences. It helps to provide answers for such important questions as; why are some offences more likely to be committed than others? What situational factors, such as time of day or type of place, influence the commission of crime? This information is needed to enable law enforcement agencies to prevent crime and develop strategies to control it (Biderman and Lynch, 1991).

Criminal justice agencies depend on certain kind of information to facilitate daily operations and to anticipate future needs (Moynihan, 1961). For instance, how many person flows through county jails? How many will receive sentences? Besides the questions that deal with a day to day functioning of the system (number of beds, distribution and hiring of personnel). Other questions affect legislative and policy decisions. For instance what does change in law have on the amount of crime committed? Consider legislation on the death penalty, it is argued that homicides decrease when a death penalty is instituted (Biderman and Lynch, 1991). Other claims that capital punishment laws make no difference, does fear of crime go down if more police officers are put in a neighborhood. Does drug smuggling move to another entry point if old access routes are cut off? These and other potential changes need to be evaluated and evaluations requires measurement. On the other hand, understanding how the extent of crime is measured will help the Kenya police service and in particular crime recorders serving in Nairobi area in future estimations of the costs of crime and in the evaluation of crime prevention, control strategies and associated programs. Crime statistics seek to provide an indication of the levels of crime and victimization within the community. Over time, these statistics can be used to show trends in the incidence of certain offences in the country.

In many countries, the frequently cited measures of crime are those compiled by official government bodies such as the police, courts and correctional services (Michael and Malts, 1999). Among these measures, the police sources in particular are designed to provide an indication of whether crime is increasing or decreasing, allow geographical areas to be compared as well as give a good indication of police workload. However, due to numerous biases in the manner in which the data is sourced, compiled and disseminated, police

statistics often fall short in providing the actual true measure of crime in society (Horts, 1996). On the other hand, courts records only provide information on conviction rates for criminal offences whereas the correctional services provide offences of inmates (Michael and Malts, 1999). In that respect, criminologists use data obtained from other sources such as victimization surveys, hospitals and insurance records to supplement crime data collected by government bodies (Howitt, 2009).

In Kenya, the Kenya Police Service (KPS) and agencies that deal on security research such as United Nations Office on Drugs and Crime (UNODC) and Security Research and Information Center (SRIC) often provide crime data. Among these sources, police data is the official source of crime data in the country that is often used by other government departments such as the Kenya National Bureau of Statistics (KNBS) for planning purposes and to provide measure of security in the country. However, as earlier mentioned, crime data provided quarterly and annually by the KPS is replete with biases and do not provide an accurate and comprehensive picture of the nature and extent of crime in the country.

1.2 Statement of the Problem

The security environment in the country today faces many forms of crimes such as, organized crimes, cyber crimes, terrorists' threats; drug trafficking, money laundering, homicides, rape, defilement, robberies and crimes involving officers. According to crime survey conducted by SRIC (2012), Nairobi area recorded for the third year running the highest rate of crime (robbery). Another study carried out by the UN office on Small Arms (2008) indicate that 37 out of every 10,000 people have been victims of armed robberies in county with criminal violence being concentrated in cities and urban centers. In particular,

the study attributed the increase in incidences of criminal activities in urban areas to the lack of effective policing due to insufficient and poor crime prevention and control strategies by law enforcers coupled with lack of proper measurement of crime to ascertain its true level (UN, 2008). Despite these alarming statistics, police crime data have all along indicated a declining rate of crimes in the country. For instance, police crime statistics show a 4 percent decline on the number of reported crimes in the country between from the year 2009 and 2010 (Kenya Police, 2011).

According to Mastrofski (1998), the accuracy of crime measurement depends on the measurement technique used, training and development of police officers, technology, public perceptions, organizational culture and resources. This study therefore undertook a critical examination of the challenges associated with crime measurements conducted by the KPS focusing on Nairobi County to establish whether police officers deployed to crime measurement are adequately trained and provided with appropriate technology and tools to carry out their duties effectively.

1.2.1 Key Research Questions

1. What basic items do crime recorders capture when recording crime?
2. Have crime recorders received any specialized training on crime measurement?
3. Are crime recorders familiar with alternative methods of measuring crime in society?
4. What challenges do crime recorders in Nairobi County experience when compiling crime data?

1.3 General Objectives

The general objective of the study was to establish challenges associated with crime measurement by the police officers deployed in Nairobi Police County.

1.3.1 Specific Objectives

1. To establish the basic items of crime recording officers capture when recording crime.
2. To assess the level of training of crime-recorders in crime measurement.
3. To find out whether crime recorders are familiar with the different techniques of measuring crime in society.
4. To establish challenges crime recorders in Nairobi County experience when compiling crime data.

1.4 Significance of the Study

For society to combat, predict, control or prevent crime it is important to ascertaining the precise level of criminality in society, hence the study is important and beneficial to the following users: first, it would help suggest appropriate methods of ascertaining the incidence of crime by the Kenya police. Secondly, one of the main responsibilities of the government is to guarantee right to freedom, information to citizens and security of persons and property in addition to guaranteeing life. This study would therefore help the government to realize this objective by proposing recommendations that if implemented, would enable law enforcers to institute measures, strategies for safeguarding themselves and their

properties. The information would possibly prompt the police service to reassess and/ or strengthen their crime control and/or prevention strategies.

The study findings are timely in that it comes at a time when the Kenya Police Service is embarking on a radical reform of its strategies and operations. Thus, the findings will therefore enhance effective policing in addition to contributing to efficient enforcement of law, maintenance of public safety and guaranteeing of law and order that are essential to economic growth and improvement of life. In fact, security for all persons and property throughout the country is a key target of the Kenya Vision 2030 (GOK, 2007, p.18).

In addition, there has been relatively little research on crime measurement in Kenya, compared to other developed countries like United States of America and United Kingdom. The study therefore provides insights to the shortcomings of police crime data in the country as well as ways of overcoming them.

1.5 Scope and Limitations of the Study

The study was limited at establishing the items of crime recorded by the crime recorders, their level of training and familiarity with different techniques of measuring crime as well as the challenges they experienced when compiling crime data.

The main respondents were 102 KPS officers that were deployed to crime recording and analysis in randomly sampled police stations in Nairobi County. Since the study was confined to a major urban area, its findings may not be generalized to all parts of the country. However, the study findings provide insights to understanding of the challenges associated with police crime data in the country.

1.6 Definition of Key Terms and Concepts

Crime measurement: The process of recording, compiling, analysis and dissemination of crime data.

Crime recording: Refers to the process of capturing, indexing and storing crime data.

Kenya Police Service: One of the two Services in the National Police Service established under article 243 (2a) of the Kenya constitution.

Occurrence book: A record maintained in all police establishments where all complaints and charges preferred and names of all persons arrested and offences charged with.

Police division: Refers to a police jurisdiction comprising two or more police stations under the command of an Officer Commanding Police Division.

Police station: A place designated by Inspector General of police as a police station and under the command of an Officer In-charge Police Station.

CHAPTER TWO: LITERATURE REVIEW AND THEORETICAL FRAMEWORK

2.1 Introduction

This chapter reviews pertinent literature relevant to the study. The literature reviewed includes technology and crime, training and development of officers, organizational culture, public perception toward police, reporting and recording of crime and methods of measuring crime in the society from secondary sources of information. The chapter also presents the study theoretical and conceptual framework.

2.2 Sources of Crime Data

Given the importance of data for research, policymaking, and the daily operation and planning of the criminal justice system, criminologists have continued to refine data collection technologies. The major sources of crime data are official statistics, victimization surveys and self-reported data. The methods criminologists choose depend on the questions they want answered. For instance, to estimate the nature and extend of crime in the society, criminologists rely primarily on official statistics obtained from police compiled data sources such as the United States Uniform Crime Reports (UCR) (Howtt, 2009).

2.2.1 Official criminal statistics

This refers to statistical data compiled by the police and the courts and routinely published by government, as indices of the extent of crime (Michael and Malts, 1999). Most countries annually collect data that are a count of the volume of particular categories of crime as recorded by the police. In the USA, the FBI collects most important crime record data from police agencies and publishes it yearly their UCR (Siegel, 2011). Conceived in 1929, the

UCR separate crime into two categories: Part 1 offence (or index crime), and part 11 offences. Part 1 offences include, four violent (homicide, aggravated assault, forcible rape and robbery) and four property offences (larceny/theft burglary, motor vehicle and arson). These are all universally condemned *mala in se* offence. Part 1 offences correspond with what most people think of "serious" crime. Part II offences are treated as less serious offences and are recorded based on arrest made, rather than cases reported to the police. Part II offences figure under state extend of criminal offending for more than is the case with part 1 figures because only a very small proportion of these crimes result in arrest. In addition to providing details of crimes reported to the police in terms of place and time of commission, the UCR also collects data on the number and characteristics (age, race and gender) of individuals who have been arrested by the police (Siegel, 2011).

According to Maquire (1997), the first national crime statistics were produced in France in the early nineteenth century. In England and Wales, crimes recorded by the police have been published since 1876 and in the USA since 1930. Both of these latter countries have witnessed a dramatic rise in the crime rate since the mid 1950s with the only sustainable fall occurring in the mid to late 1990s. A similar long-term upward trend has been a feature of most western democracies, with the notable exception of Switzerland (Maquire, 1997).

In UK, the police, the courts and the British Crime Survey (BCS) collects the official statistics on crime. The BSC in particular is responsible for the public presentation of crime in the UK. In Australia, national crime statistics are derived from two sources: administrative data such as data from State and Territory police forces, courts, hospitals, community services; and crime victimization surveys. Each of these data sources provides a different

picture of crime in Australia. This is because data may be collected for different purposes, using different methodologies, and may seek to capture different aspects of crime and victimization. Administrative data refers to information recorded by agencies on their administrative systems. Police data is the most widely sourced administrative data. It refers to those criminal offences that have been reported to or detected by police, and subsequently recorded by them. Police data is useful for compiling crime statistics since it represents an official record of crime. All police forces collect information about crime in their respective States and Territories. In addition, given that police data is recorded once it has come to the attention of police, it is a source of up-to-date information that can be broken down by day, month, and year and so on. This also enables police data to be used for comparative purposes and to track trends in the incidence of certain offences.

In Canada, the police, courts, and correctional agencies gather data on the CJS across Canada. The Canadian Centre for Justice Statistics (CCJS) is the focal point of the federal-provincial-territorial collection of information on the nature and extent of crime and the administration of criminal justice. However, there is additional data on federal offenders, those serving sentences of two years or longer, that is not readily available to CJS. Each year, Public Safety Canada collaborates with CCJS, Correctional Service of Canada, the Parole Board of Canada, and the Office of the Correctional Investigator to collate and publish up-to-date statistics on corrections and conditional release in Canada. The goal of this publication is to provide a useful source of statistical information and assist the public in gaining a better understanding of these various components of the CJS.

Like in Australia, Police reported crime in Canada is an important source of information. The statistics are based upon members of the public coming forward to report the occurrence of a crime. Court information is different from police reported crime in that it is a workload measure counting the number of cases processed. Adult courts in Canada have shown small increases in the number of adult cases that have been processed.

Here in Kenya, official crime statistics are derived from crime data that is reported and recorded in police stations across the country. Generally, the police enter crime that is detected or reported to them in the occurrence book and classify as a serious crime, petty crime and traffic crime. They then enter the recorded crime in registers such as the serious crime register, petty crime register, traffic crime register, inquest crime register. Each police station then summarizes and submits the data from the above registers to police headquarters crime and intelligence section through their respective OCPDs and PPOs. The crime and intelligence section analyzes the crime data and compile it as either operational or strategic crime data. Crime statistics based on police data may therefore fall well short of providing an accurate and comprehensive picture of the nature and extent of crime in Kenya since they only capture crime data that is reported or detected by the police. Besides, police data may reveal more about the efficiency of police in recording reported crime than reflect any real change in crime levels. Despite such obvious shortcomings, police crime data is the only data available for compilation as annual national crime statistics otherwise known as annual police crime data.

Criminologists have long questioned the reliability of statistical measures. Self-evidently they only measure those offences reported to and recorded by the police (Maquire 1997;

Coleman and Moynihon, 1996). As a result, criminologists regularly use data from victimization surveys and self-report surveys to supplement police sources. In 1972, the US Bureau of census began collecting information about rates of victimization by asking random samples of the population to recall crimes committed against them in the past years. In 1982, Britain followed this lead with its own BCS. However, in both the USA and Britain, it has been consistently revealed that only about 50 percent of crime is in fact reported to the police.

2.2.2 Victimization surveys

Victimization surveys provide information not only about criminal incidents that have occurred but also about the individuals who are most at risk of falling victim to crime and where and when they are most likely to be victimized (Siegel, 2011, p. 32). It involves asking large number of people whether they have been criminalized within some specific timeframe regardless of whether they reported the incident to police (Mayhew, 1985). The US National Crime Victimization Survey (NCVS) and the United Kingdom's BCS are examples of the most widely used victimization surveys.

The NCVS survey, administered annually by the US Census Bureau, begun in 1973 to address the non-reporting issues prevalent in the UCR (Siegel, 2011). It measures rates of victimization by questioning a randomly selected sample of the population about their experience as victims of selected crimes. The crimes recorded are rape, robbery, assault, personal theft, household theft, burglary, and motor vehicle theft; the NCVS does not measure murder rate because the victims cannot be surveyed. Because it employs a national survey, the NCVS do not break down data by state or locality. NCVS is more accurate than

the UCR as it can capture crimes not reported to police; it is fairly a good measure for individual victims and for the crimes covered. NCVS is also useful in assessing whether any increase or decrease of crime that is reflected in official crime statistics (UCR) are genuine or whether they arise because people are reporting the incidents in an increasing or decreasing number of cases.

Like the NCVS, the BCS, first used in 1982, measures the amount of criminality in the UK by interviewing sampled respondents, over 16 years of age, about the crimes they have experienced in the past year (Williams, 1997). Since, it reports on crimes that may have not been reported to the police, the BCS is used alongside the police recorded crime figures to provide information about people's perception of crime and show an accurate picture of the level of crime in the UK.

A virtue of crime surveys is that most of them do not only count crimes, but also collect additional information about crimes, the victim and the police. NCVS can record both reported crime, unreported crime, and discern the differences between them and suggest why some offences are not reported to the police. Victim survey can look at public attitudes to the police and the police capacity in preventing and dealing with crimes. It, also study special areas such as crime committed against workers, or such special groups as ethnic minority or the young in these and other ways therefore crime surveys are a very valuable tool. The British crime survey show that there are many more crimes committed in the community than are expected in the official statistics. The BSC is best known for concluding that only about one in four incidents find their way into police records (Mayhew and Hough, 1988:158).

2.2.3 Self-report surveys

The self-report technique is one of the major ways of measuring involvement in delinquent and criminal behavior. It involves asking participants, juveniles and youths, to describe in detail, their recent and lifetime participation in criminal activity (Siegel, 2011). They are commonly used to collect measures of crime perpetration and victimization. The self-report method began with the contribution of Porterfield (1943, 1946) and Wallenstein and Wylie (1947) Short and Nye (1957, 1958) and changed how the discipline thought about delinquent behaviour itself (Hinderlang et al, 1981). Short and Nye's research is distinguished from previous self-report measures in its attention to methodological issues, such as scale construction, reliability and validity, and sampling, and their explicit focus on the substantive relationship between social class and delinquent behavior. Short and Nye did not find social class to be inversely related to delinquent based on their self-report scale. Other studies in the late 1950s and early 1960s also used self-reports to examine the relationship between social status and delinquent behavior (e.g. Reiss and Rhodes, 1959; Clark and Wenninger, 1962; Aker, 1964; Empey and Erickson 1966; Gold, 1966; Voss, 1966). With few exceptions, these studies supported the general conclusion that if there were any statistically significant relationships between measures of social status and self-report delinquent behavior, they were weak and clearly did not mirror the findings of studies using official data sources. The failure to find a relationship between social status and delinquency served to question extant theories such as anomie theory (Merton, 1938) and social disorganization theory (Shaw and McKay, 1942) that were built on the assumption that crime was most prevalent among the lower class. It is the first clear example of how the self-report method changed the theoretical landscape. The absence of a relationship between class and delinquency, especially when

compared to the strength of the relationship using official data, raises fundamental questions about the operations of the juvenile and criminal justice systems. Later, researchers such as Nye and Olso(1985), Voss (1964) and Gold (1970) began to recognize the true potential of self-report methodology when studying theoretical issues concerning the family. Equally, peers and the school (Pork, 1969; Gold, 1970; Kully, 1974) emerged as the central focus of self- report studies. The results of these studies led to a shift in emphasis in theoretical criminology, away from Macro-level explanations for crime to more individual and family-based theories. It was used both to develop and test social control theory. (Hirschi, 1969; Hinderlang, 1973; Longer, 1976).

Since then introduction of the self-report method by Short and Nye (1957), considerable attention has been paid to the development of the psychometric Properties of self-report measures of delinquent behavior. The most sophisticated and influential work was done by Elliot and his colleagues (Elliot and Ageton, 1980; Elliott et al, 1985; Huizenga and Elliott, 1986) and by Hinterland et al (1979, 1981). From their work, a set of characteristics for acceptable, that is, reasonably valid and reliable; self-report scales has emerged. These include:

The domain of crime covers a wide range of behaviors, from petty theft to aggravated assault and homicide. If the general domain of delinquent and criminal behaviors is to be represented in a self-report scale, it is necessary for the scale to cover that same wide array of human activity. Simply asking about a handful of these behaviors does not accurately represent the theoretical construct of crime. In particular, it is essential that a general self-report delinquency index tap serious as well as less serious behaviors. With the increased concern

for surveying adolescent, at risk for serious and violent delinquency (Thornberry and Krohn, 2003) more serious offenders could be included. Failure to include serious offences misrepresent the full domain of delinquency, contaminates comparisons with other data sources, and impeded the testing of many delinquency theories that set out to explain serious, chronic delinquency.

Many early self-report studies relied on response sets with a relatively small number of categorical that tend to censor high-frequency responses. For example, Short and Nye (1957) used a four point response with the highest category being "often" Aggravated over many items, the use of limited response sets had the consequence of lumping together occasional and high-rate delinquents rather than discriminating between these behaviorally different groups. Taking into account the full range of responses had implications for the relationship between demographic factors and delinquency (Elliot and Ageton, 1980) and in turn, theories in which such factors play a significant role.

Self-report questions have a tendency to elicit reports of trivial acts that are very unlikely to elicit official reactions and even acts that are not violation of the law. This not only occurs more frequently with less serious offences but also affects responses to serious offences. These strategies are available to address this issue. First, one can ask a series of follow-up questions designed to elicit more information about the event, such as the value of the property stolen, the extend of injury to the victim, and the like. Second, one can ask an open-ended question asking the respondent to describe the event and then probe to obtain information necessary to classify the act. Both strategies have been used with some success.

With increasing emphasis on the study of crime across the entire life course, self-report surveys have had to be developed to take into account both the deviant behavior of very young children and the criminal behavior of older adults. For the very young children, measures have been developed that are administered to parents to assess antisocial behavior such as noncompliance, disobedience, and aggression (Achenbach, 1992). For the school age child, Loeber et al (1993) have developed a checklist that expands the range of antisocial behavior to include such behaviors as stubbornness, lying, bullying and other externalizing problems. Unfortunately, there has not been as much developed of instruments targeted specifically at adults (WheitekampjT989), and many studies simply use an upward extension of adolescent instruments.

The most significant development in the application of the self-report methodology is its use on following the same subjects over time in order to account for changes in their behavior. This has enabled researchers to examine the effects of age of onset, to track the careers of offenders, to study desistance, and to apply developmental theories to study both the causes and the consequences of criminal behavior over life course. In addition to the concern over construct continuity in applying the techniques to different aged respondents, the researcher needs to attend to the possibility of panel or testing effects in which the number of prior interviews can influence the individual's responses at the current interview (Laustson, 1998).

By adopting all or some of these five measurement characteristics, more recently self-report studies have been able to provide a better picture of involvement in criminal behavior. These characteristics can also improve validity and the reliability of self-report indexes since they

improve ability to identify delinquents and to discriminate among different types of delinquents.

2.3 Strengths and Weaknesses of Sources of Crime Data

Each source of crime data has strengths and weakness. Official crime statistics provide data on the number and characteristics of people arrested that other sources lacks. It provides meaningful measure of the level of criminal activity in a particular neighborhood environment that other data sources cannot provide. It also a source of information on particular crimes such as murder that cannot be measured by survey data (Siegel, 2011). However, official crime data omits the many crimes that victims chose not to report to police and it is subject to the reporting practices of police departments (Mushanga, 1988; Siegel, 2011).

While victimization surveys include unreported crime and important information on the personal characteristics of victims that are not included in official crime statistics, they only consist of estimates made from relatively made samples of the national population. They also rely on personal recollections that may be inaccurate. In addition, victimization surveys do not include data on important crime patterns such as murder (Siegel, 2011).

Self-report surveys can provide information on the personal characteristics of offenders (such as their attitudes, values and psychological profiles) that is unavailable from any other source (Siegel, 2011, p. 36). Despite this unmatched strength, self-report rely on honesty of criminal offenders and drug abusers, who rarely provide accurate information (Maguire, 1997; Siegel, 2011).

2.4 Challenges Associated with Measurement of Crime

The challenges associated with crime measurements include technology, reporting techniques and expertise of the personnel. Advancing technology in particular has created vast new opportunities for criminals, and has led to an increase in cross-boundary criminal activities. Similarly, victims to police and therefore do not become part of the documented crime statistics do not report many serious crimes. Hence, the measurement is only a rough guide of the actual number of crimes committed (Bottomley and Pease, 1996).

2.4.1 Technological changes

The growth in the number and variety of technology-related crimes, particularly computer-related crimes, echoes the exponential increase in the number of Internet users and the expansion of e-commerce globally. Organized crime groups are broadening their exploitation of technological vulnerabilities by targeting individuals and businesses that rely on technology, e-commerce and the on-line storage of valuable personal, financial and intellectual property data.

The scope and extent of technology and crime within Kenya or globally is difficult to determine, partly due to chronic non- or under-reporting. Compounding the complexity of technology-related crime is the lack of standard definitions, globally. The criminal activities are often under-reported and require investigator expertise, as well as sophisticated tools to identify, gather and evaluate evidence.

Members of the public do not report technology related offences (cyber crime) to the police or to other national authorities. It might be the case that members of public are not

accustomed to reporting cyber crime to law enforcers because events in the internet are perceived to be outside the jurisdiction of the local police agency (Ferwerda et al. 2010).

2.4.2 Training and development of the officers

The quality of the human resource of an organization is essential to its success. Thus, every organization must seek to improve the quality of its workforce. One way of achieving this is through training and development. The importance of training can only be appreciated with a clear understanding of its direct impact on employee performance (crime measurement). An improvement in employee performance also leads to an improvement in the police performance. The training program requires consistent evaluation to ensure its compatibility with global changes and changes within the security industry. Besides, misinterpretation and/or erroneous classification of crime by the recording law enforcing officers may occur as a result of inadequate training, inefficiency or outright corruption by the recorder. Police units may also opt to doctor and report recorded crimes selectively. This may affect the validity of the police recorded and reported criminal and delinquent activities.

2.4.3 Organizational culture

Culture is a set of assumptions that members of an organization share in common (shared beliefs and values). Organizational culture helps in nurturing and dissemination of core values. Weihrich & Koontz (1993) look at culture as the general pattern of behavior, shared beliefs and values that members have in common. Culture can be inferred from what people may do and think within an organization setting. It involves the learning and transmitting of knowledge, beliefs and patterns of behavior over time. This means organizational culture is stable and does not change fast. It sets the tone for the organization and establishes rules on

how people should behave. The top managers create a climate for the organizations and their values influence the direction of the organization. Therefore, for crime measurement to be effective there should be a fit between the new changes and the organization's culture.

2.4.4 Public perception

The police image can be categorized into three general categories: overall image, outcomes, and process (Mastrofski, 1998). The overall (or general) image of police is diffuse and reflects perceptions, feelings, and evaluations that ask about the police in general, without regard to any particular characteristic or criterion. This includes confidence in the police, satisfaction with the police, trust in the police, respect for the police, support for the police and Police performance in general. The benefit of such general descriptions is that they reflect an overall orientation of the public to the police. They give a general sense of how positive or negative the public is toward the police. They are limited, however, in that they provide no indication of what it is about the police that pleases or displeases them. Police are expected to achieve a variety of outcomes, some of which have long been characterized as part of the police mission, and others of which have been more recently embraced under the fabric of community policing (reducing crime and disorder, reducing the fear of crime, solving neighborhood problems and improving the quality of life, and developing greater community cohesion).

Police are also expected to adhere to a wide variety of process-oriented standards. These include the following: integrity, fairness, civility, responsiveness, police presence, appropriate use of force and competence. Public confidence in police service in Kenya has dropped to low level, this is due to lack of cooperation between the police and public. For

instance, the reliability index on police service by the public fell from 3.8 in 2008 to 3.5 in 2009, out of best 7 points. This compared to Botswana, UK and Sweden, which scored 4.9, 5.4 and 6.2 in 2009 out of possible score of 7 points respectively (Global Competitive Report, 2009). This shows that Kenya lags far behind. Therefore, there is need to have public confidence in the police restored so that the public would again be willing to pass on information about crime without fear that confidential information would find its way back to the criminals. This would contribute to a partnership that could be enhanced by the role of concept of community policing, which cannot develop without a relationship of trust between the police and the public. This would greatly contribute to the reduction and control of crime at local level (National Task Force Report on Police Reform, 2008). Measurements of crime rest initially and critically on the extent to which the public perceives and interprets behavior as criminal (Walker, 1983).

2.4.5 Reporting and recording practices

Crime statistics are based on those crimes reported to and subsequently recorded by the police. However, some offences may not be reported because of ignorance that a crime has been committed (for example tax evasion, computer frauds) or where there is no apparent victim (for example certain drugs offences, prostitution, sexual offences between consenting adults, illegal abortion). This is also the case when the victim is powerless (example child abuse), there is an ambivalence towards or distrust of the police, or the offense is considered trivial (for example, theft from work, vandalism minor shoplifting, brawls). The victim may be concerned that the offence will not be taken seriously or the victim has no faith that the police will act to protect his or her interest (for example racial intimidation and harassment).

Not all offences reported are recorded as such by the police. The amount of resources available to the police and courts is limited and thus subjective and administrative decisions are made concerning which crimes to act against. It is only recorded crime which enters the official statistics. Walker (1983, p.286) notes that although the police have a statutory obligation to record crimes, considerable discretion remains about whether it is considered sufficiently serious to warrant police attention. Violent disputes between neighbours or members of a family may for example be classified as domestic – advice given and the alleged offence not recorded.

Similarly, how a recorded offence is classified by the police as ‘theft from a person’ or ‘robbery’ as burglary, no loss or ‘vandalism’ as ‘wounding’ or ‘common assault’ for example – will affect the rate at which certain crimes appear to be committed. Problems inherent in recording and variations due to police ‘targeting’ will also affect understanding of the extent of particular crimes (Williams, 1997).

Besides, misinterpretation and/or erroneous classification of crime by the recording law enforcing officers may occur because of inadequate training, inefficiency or outright corruption by the recorder. Police units may also opt to doctor and report recorded crimes selectively. This may affect the validity of the police recorded and reported criminal and delinquent activities. Changes in police practices, priorities and politics will also have a dramatic effect on such headline statistics as crime recorded by the police. What is remarkable for example about long-term historical trends in crime rates in England and Wales is their consistently low level during the nineteenth and early twentieth century followed by a consistent doubling in every decade (except the 1950's) until the 1990s. By

examining police inspectorate and committee reports at the time, Taylor (1998) argues that the increases in crime, between 1914 and 1960 can be largely accounted for by senior police officers playing the crime card in order to improve their establishment by recording large numbers of minor property offences which were traditionally 'cuffed' (not recorded). Chief constables were able to persuade their police authorities to increase funding. The crime rate is then more a reflection of police lobbying and politics than of criminal behavior.

A wide range of personal and social factors is likely to affect both whether an incident is perceived as criminal and whether the observer then decides to report incident to the police. Box includes that: 'an offence was more likely to be reported to the police if the suspect apprehended by the complainant was a member of the less privileged section of the society; the closer the psychological and social identification of the complainant and the suspect, the less likely the former was to report the offence' (Box; 1981, p.176). Similarly, Stevens and Willis (1979) and Shah and Pease (1992) note that ethnic factors help to determine both the victim's decision to report a crime and the police decision to record it. In particular, they suggest that, in assaults when no injury is affected, the incident is more likely to be reported if it was committed by a non-white rather than a white suspect. Such discrepancies once more undermine the proposition that measurements of crime rest initially and critically on the extent to which the public perceives and interprets behavior as 'criminal' (Walker, 1983).

2.5 Theoretical Framework

Labeling, conflict, and social learning theory provide a theoretical context to the study.

2.5.1 Labeling theory

Labeling theory, advanced by Howard Becker (1963), stipulates that what constitute deviant or criminal act in a given society is defined by a section (the section in power) or by the whole of the society (Haralambos and Holborn, 2008; Williams, 2001). The content and shape of criminal law is thus defined by values of those who rule and is not an objective standard of moral conduct (Siegel, 2011). Because crime is the product of subjective definitions, arrests and conviction rates reflects the interests of the powerful groups in society. Labeling theory holds that society is reluctant to define actions performed by the powerful as criminal, or even if the activity is illegal, it may be defined as an administrative infraction rather than a crime. This is often reflected in corporate or white-collar crime, where very often morally reprehensible and damaging activity is not defined as criminal (Williams, 2001, p. 415). Abadinsky (2003) observes that much of police street work and culture is based on stereotyping targeting particular race or ethnic groups that are considered deviant. Since the police have discretionally decision to determine whether a person will enter the CJS, many of these groups as well as the poor are often arrested. Hence, police crime data tend to reflect crimes committed by the poor and the powerless; it is not an accurate measure of criminality in society.

The theory provides understandings on the identification of categories of crime data and the basis in which some crimes tend to be depicted more in official crime statistics than others.

However, it does not explain the training of crime recorders and analysts and the challenges they face in their work.

2.5.2 Conflict theory

Conflict theory, largely based on the works of George Vold, Georg Simmel, Richard Quinney, Thorsten Sellin, Ralf Dahrendorf and Williem Bonger, explain crime within economic and social contexts and to express connections between social class, crime, and social control (Winfree and Abadinsky, 2003; Williams, 2001). Conflict theorists argue that crime is a function of power relations and inevitable result of social conflict and that the rich and powerful define what acts and omissions constitute crime in society. They view the CJS as a mechanism for controlling the lower class and maintaining the status quo, rather than a means of dispensing fair and even handed justice (Haralambos and Holborn, 2008; Williams, 2001).

According to conflict theorists, the police are more likely to record crimes committed by the poor than those committed by the rich and powerful since the latter group controls the CJS. In Kenya for example, police crime data have always depicted an annual increase in property crimes such as theft and robberies, which are attributed to increasing levels of poverty, whereas white-collar crimes and corruption related offenses (often committed by affluent members of the society) are fewer (Kenya Police, 2008, 2010). This attests to conflict theorist assertion that justice in society is skewed to those who deserve to be punished the most (wealthy people whose crimes cost society millions of shillings) who are actually punished the least, while those whose crimes are relatively minor and committed out of economic necessity (petty crimes) given harsh sanctions. Indeed, Georg Vold and Ralf Dahrendorf observed in the late 1960s that self-report studies were yielding data suggesting

that crime and delinquency were more evenly distributed through the social structures than had been indicated in official statistics. They therefore noted that middle-class participation in crime was going unrecorded whereas lower class was the subject of CJS discriminatory law enforcement practices (Williams, 2001).

Apart from demonstrating that police crime data depicts crimes committed by the poor than the rich, conflict theory also provides insights on the classification of crimes in police crime data. According to Vold's group theory, groups in positions of authority are less likely to criminalize their behavior because they have values woven into the law to protect that which they hold dear (Winfrey and Abadinsky, 2003, p. 242). Generally, the rules for recording of crimes by the police are set by police internal regulations developed by senior police officers (Williams, 2001). The rules are therefore subject to change to reflect the interests of political elites and changing policing objectives. Senior police officers may instruct their juniors to record particular crimes and at the same time omit others. This is likely to happen in situations where the police and political elites want to contain public perception on increasing levels of criminality in society.

In sum, conflict theory provides understandings on how the police derive the categories for recording crime data and partly the challenges crime recorders experience when compiling the data. However, it cannot explain how crime recorders are trained to record crime. This gap is filled by social learning theory.

2.5.3 Social learning theory

Developed by Robert L. Burgess and Ronald L. Akers in 1966 and given prominence by the works of Albert Bandura, social learning theory maintains that human actions are developed

through learning experiences; people alter their behavior in accordance with response it elicits from others (Siegel, 2011). The theory postulates that individuals learn to engage in a behavior (both criminal and non-criminal behavior) through three mechanisms: differential reinforcement, beliefs, and modeling or imitation.

In reference to differential reinforcement, the theory asserts that individuals can teach others to engage in behavior by reinforcing and punishing certain behaviors. Consequently, a behavior is more likely to occur when it: (1) is frequently reinforced and infrequently punished; (2) results in large amounts of reinforcement (such as money, social approval, or pleasure) and little punishment and; (3) is more likely to be reinforced than alternative behaviors (Siegel, 2011). Since police crime data is a measure of police performance, police managers who often report on decreasing levels of criminality in their jurisdictions are often considered for promotions whereas those reporting increasing levels are transferred to other jurisdictions, in most cases those that are less lucrative or in hardship areas (*Daily Nation*, 4 November, 2013). Such police practices therefore forces police officers who are after promotions or be deployed to lucrative and non-hardship areas to under-report on crimes in their jurisdictions to portray that they are performing well. Similarly, senior officers may direct their junior officers to doctor the data to portray that crime is low or contained in their jurisdictions and junior officers who do not comply with such directives are punished through transfers to less lucrative areas. In fact, Winfree and Abadinsky (2003) observe that police practices such as corruption are often linked to pressures emanating from peers and the need for group solidarity; officers who refuse to “play along” may be ostracized or worse.

On top of reinforcing behavior, social learning theorists point out that other individuals can also teach a person beliefs that are favorable to the behavior. For example, police code of conduct many define that falsifying evidence/data is wrong, however, senior police officers may say that it is justified if the data to be disseminated will portray the organization (the police) negatively.

Besides beliefs and reinforcements or punishments that individuals receive, social learning theorists also state that behavior is a product of the behavior of those around us (Siegel, 2011). In the same way, crime analysts and recorders may model or imitate the behavior of others, especially if it is someone they look up to or admire. For example, an a junior crime analyst who witnesses his/her senior doctoring crime data, who is then reinforced through promotion for distorting the data, is then more likely to distort crime data him/herself. Imitation is also important in the initial training of crime recorders and analysts: they imitate the actions of their instructors or more experienced officers. The theory is thus helpful in understanding how crime analysts and recorders learnt how to perform their duties and the challenges they are experiencing when doing the same.

2.6 Conceptual Framework

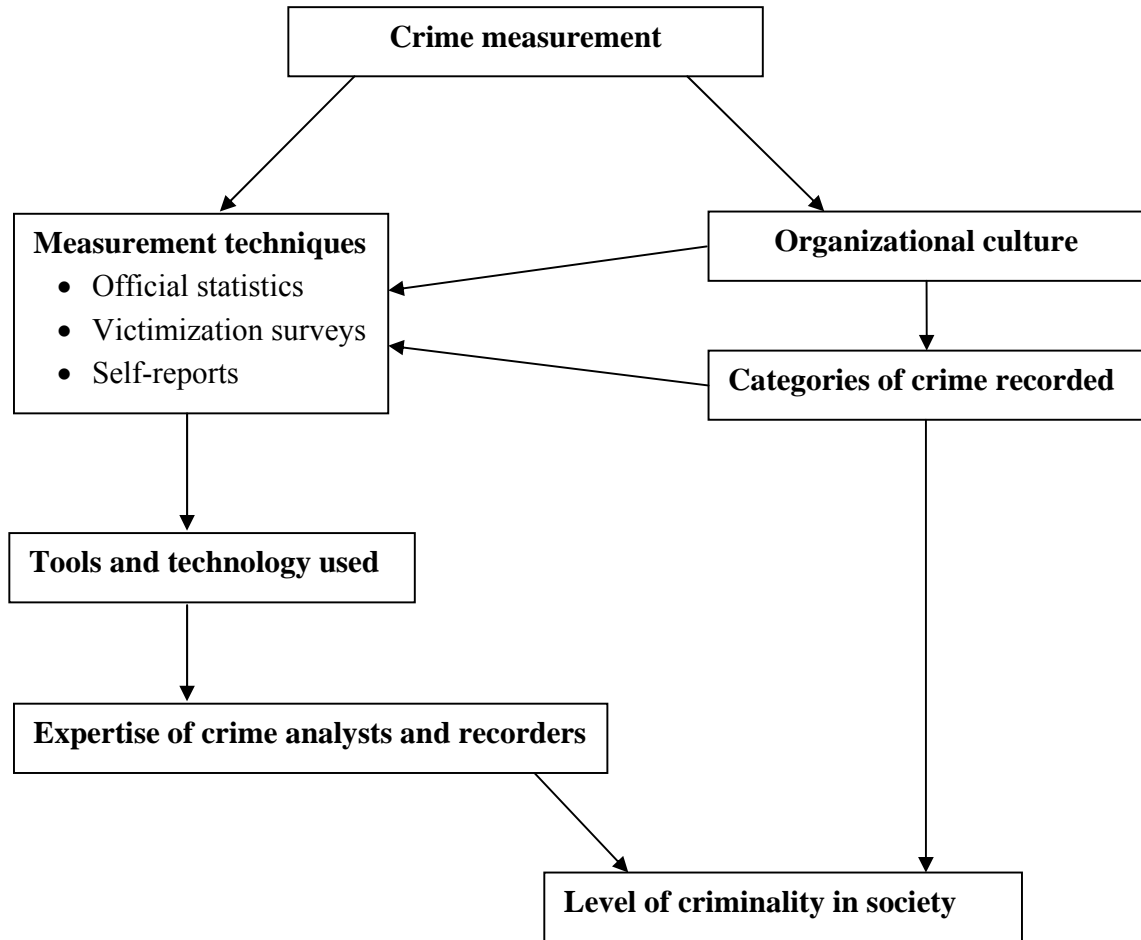
A conceptual framework is a research tool intended to assist a researcher develop an awareness and understanding of the situation under scrutiny as well as communicate the relationship among interlinked concepts (Kombo and Tromp (2006). In the current study, the conceptual framework entailed an illustration of the relationship between crime measurement and factors affecting its reliability and validity. These factors include measurement

techniques, organizational culture, tools and techniques used, and expertise of crime recorders and analysts.

Generally, senior police officers, through internal police procedures, define categories of crime recorded and depicted in police crime data. They may also influence the analysis of crime data to ensure that the disseminated analyzed data addresses public perception, to denote a decrease or stable crime levels in society. Although this may be misleading, junior officers are obliged to follow the directions of their seniors or else risk being labeled indiscipline and punished. Manipulation of crime data to address police organizational culture may thus become a norm.

The categories of crime to be recorded determine the tools and techniques to be used in measuring crime. For instance, official statistics is obtained from records of reported crimes to the police whereas victimization indices are realized through surveys. The validity of official statistics, victimization surveys and self-reports in providing an accurate measure of the level of criminality or victimization in society is, however, dependent on the expertise and training of crime recorders and analysts. If crime recorders and analysts have poor educational attainments, have not been adequately trained, or not availed with requisite recording and analysis resources (such as stationeries, computers, and relevant software e.t.c) they cannot effectively record and analyze crime. Figure 2.1 depicts the conceptual framework.

Figure 2.1: Conceptual Framework



CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Introduction

This Chapter describes the research site, study design, target population as well as the sampling technique employed in the study. It also provides the sources of data, data collection instruments, data analysis techniques and ethical consideration.

3.2 Site Selection and Description

The study was carried out in Nairobi County. Nairobi is the one of the 47 counties in Kenya. It is also the capital city of Kenya. It has an area of 69,359 square kilometers. The city lies at the edge of Kenya highlands at a height of 1,700m above sea level. The area of study serves as political administrative, regional and international centres. As an industrial and commercial city, it attracts people from all over Kenya and beyond. Nairobi County has 10 Police Divisions namely, Central, BuruBuru, Kayole, Gigiri, Makadara, Embakasi, Kilimani, Starehe, Dagoretti and Langata Police Division. There are 67 police stations in the County and numerous police posts as well as the KPS and CID headquarters.

Like all other police establishments in the country, police crime data is compiled at the station level from incidents that are entered in the occurrence book and registers such as serious crime, register, petty crime register, traffic crime register, inquest crime register which is kept in the crime branch. The data from the above registers is usually summarized and submitted to the Crime and Intelligence Section at police headquarters through the OCPDs and PPOs. Crime and intelligence section then analyze the crime data and compile it as either operational or strategic crime data.

Figure 3.1: Sample size

Strata	Target population	Sample size
High crime rate		
High - Central	36	21
Middle - Kilimani	33	19
Low - Makadara	33	19
Medium		
High - Kasarani	33	19
Low - Langata	33	19
Low		
Low - Gigiri	33	19
Total	200	116

3.3 Study Design

According to Yin (1990), the main purpose of a research design is to avoid a situation where evidence does not address the initial research question. The study employed a descriptive study design. The design aims at gathering data without any manipulation of the research context. It is non-intrusive and deals with naturally occurring phenomena, where the research has got no control over the variables (Mugenda and Mugenda, 2003).

3.4 Target Population

The target population for a study was the entire set of units for which the study data were to be used to make inferences. In the study, the target population consisted of 200 Police Officers; 116 police officer attached to report office and 20 headquarters based crime analysts.

3.5 Unit of Analysis and Observation

According to Babbie (1994), a unit of analysis is the object of attention. The unit of analysis is the major entity that is being analyzed in the study. It is the 'what' or 'whom' that is being studied. In this study the unit of analysis was the techniques/methods of crime measurement used at the Nairobi police area and the attendant constraints. The unit of observation is the subject, item, or entity which measures the characteristics or obtained data required in the research study (Mugenda and Mugenda, 2003). It also refers to the unit upon which one collects or analyzes data. The information was obtained from an individual person but the results obtained from the analysis relates to composite unit. The unit of observation in this study was; crime recorders at police stations and headquarter based crime analysts.

3.6 Sampling Procedure

The target population of the study consisted of 220 Kenya Police Officers. The sampling procedure to be adopted was stratified, proportionate and simple random. First stratification was classified in terms of crime level, to stratify the ten police divisions into high, medium and low crime rate.

High crime rate is made up of five divisions, that is, Central, Kilimani, Starehe, Makadara and BuruBuru. Medium crime rate is made up of three divisions, that is, Kasarani, Embakasi and Langata and low crime rate is made up of two divisions, that is, Gigiri and Dagoretti. Using the stratus, high crime rate the study picked three divisions, that is, the divisions with the highest crime rate, medium crime rate and low crime rate. In the medium crime rate category, the study picked two divisions, that is, highest and lowest crime rate division. In the low crime rate division, the study picked the division with the lowest crime rate. This gives a sample size of six divisions.

According to Berlett, Kotrlik and Higgus (1990) a population of 200 for categorical data can be represented by a sample size of 116 respondents. This translates to 19 respondents from each division. Using proportionate sample method, the sample size was as shown in table 3.1 above. The respondent from each police station was picked randomly. Simple random sample is appropriate for this study since the population is homogeneous, it also saves time and cost. For 20 Kenya Police Service headquarter based crime data analyst were also randomly sampled. This ensured information obtained from a sample was representative of the population, a factor that allowed for the computation of the sampling error.

Figure 3.2: Sample size

Rank	Target population	Sample size	Sampling method
Report office personnel	200	116	Stratified random sampling
Crime data analysts at KPS headquarters	20	6	Simple random
Total	220	122	

3.7 Sources of Data

Primary data was generated to meet the specific requirement of the study at hand and (help solve the problem at hand). Primary data was collected from the key informants comprising of 6 crime data analysts attached to crime headquarters through questionnaires and interview guide.

Secondary sources of data consisted of relevant books, articles, statistics from government department (Annual police crime data, courts and prison crime statistics), Police website and the internet.

3.7.1 Data Collection Techniques

3.7.1.1 Interviews

In-depth interviews was used to further probe and collect data on the measurement method employed by the Kenya Police Service to gauge the incidence of crime in the country. Interviews were used to capture the perceptions and competence of the police officers who were involved in the documentation of crime and evidential materials.

3.7.1.2 Interview schedule

An interview guide was used to guide the in-depth interviews conducted amongst crime data analysts at the police headquarters. The questions were asked orally and responses were recorded or written down by the researcher. Key issues probed through the interview included; training in crime recording, data analysis, analyzed familiarity with crime measurement method and Problems associated with crime reporting and document.

3.7.1.3 Questionnaire

The questionnaires contained both open-ended and closed ended questions. This was because open ended question allows respondents to include more information including feelings, attitudes and understanding of the subject. It also provides the respondents with an opportunity to couch responses in their own words. The questionnaires were administered to crime recorders and scene of crime personnel. The questionnaires were self-administered to reduce the level of bias. Essentially closed-ended questions were be used so that information can be quantified and used in marginal tabulation.

3.8 Data Analysis

The data collected were categorized into two; that is, quantitative and qualitative data. The study used descriptive statistics to analyse and present quantitative data which contained numerical information. This technique was concerned with determining how likely it is for the results obtained from the sample to be similar to the results obtained from the entire population. (Mugenda and Mugenda, 2003). Data were coded and analyzed using statistical package for social science (SPSS) software and Microsoft excel. Analysis was done using frequency; standard deviation, mean and cross tabulation to show emerging relationship and the results were presented in tables and pie charts.

For qualitative data collected through key informant's interview were categorized and summarized into themes. This was undertaken to reduce the data to a more manageable and intelligible set of observations. An analysis of the emerging patterns, themes and relations was done to reduce information and the meaning they convey in a more organized manner.

3.9 Ethical Considerations

The researcher sort authority to collect data from the Kenya Police Service authority (heads of police stations) as well as got a letter of introduction from the University of Nairobi. The researcher adhered to the principle of voluntary participation of respondents. Confidentiality was observed while undertaking the study, that is, both junior and senior officers were assured of confidentiality and were informed of the aims of the study.

CHAPTER FOUR: DATA ANALYSIS, PRESENTATION AND DISCUSSION

4.1: Introduction

This chapter presents the analysis and findings with regard to the objectives and discussion of the same. The data was collected from the population of 220 Kenya Police Officers. The findings are presented in percentages, frequencies, mean, standard deviations, pie charts and tables.

The research objectives were: to establish the basic items of crime which are recorded by the Kenya Police Officers in Nairobi County; assess whether crime recorders in Nairobi County have received any specialized training on crime measurement; to find out whether crime recorders are familiar with the different methods of measuring crime in society; and to establish the challenges experienced by crime recorders in Nairobi County when compiling crime data.

4.2: Questionnaire Response Rate

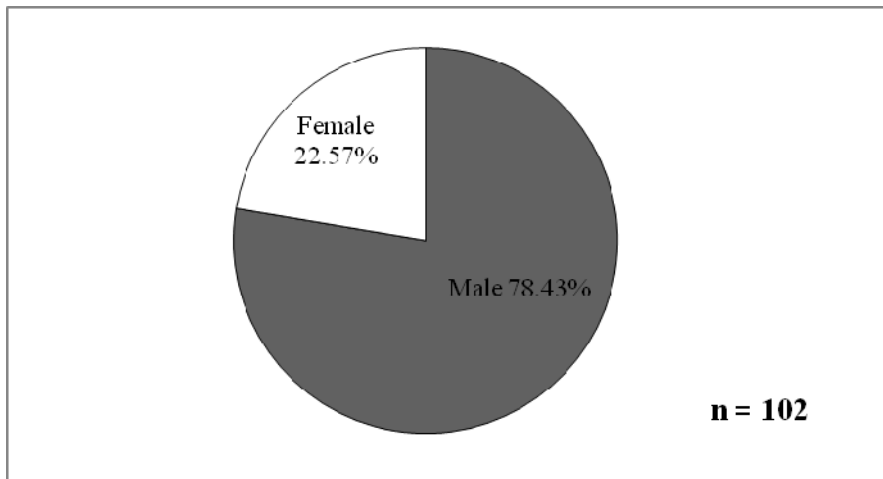
One hundred and sixteen questionnaires were administered to the respondents out of which 102 were returned – a response rate of 87.9 percent. The response rate was therefore considered very adequate for analysis. The completed questionnaires were edited for completeness and consistency.

4.3: Demographic Characteristics of Respondents

4.3.1: Distribution of Respondents by Gender

As shown in Figure 4.1, the majority (78.4%) of the respondents male whereas 22.6 percent were female. This means that more male police officers were deployed to crime recording than females possibly because there more males serving in the police than females.

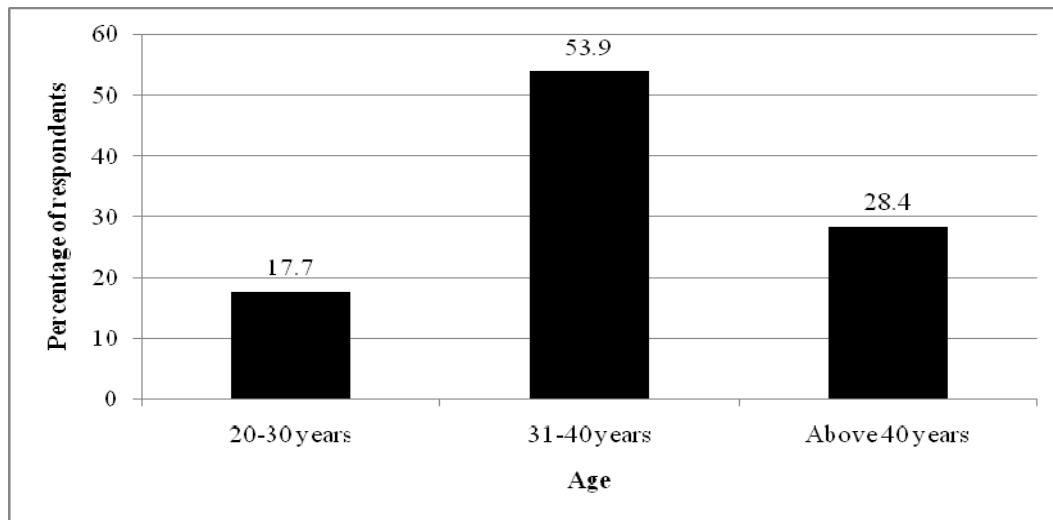
Figure 4.1: Gender Composition



4.3.2: Distribution of Respondents by Age

The findings presented in figure 4.2 show that 54% of the respondents were aged between 31-40 years, 28% were over 40 years and 18% were between 20-30 years old. Generally, a majority of the respondents were above 31 years.

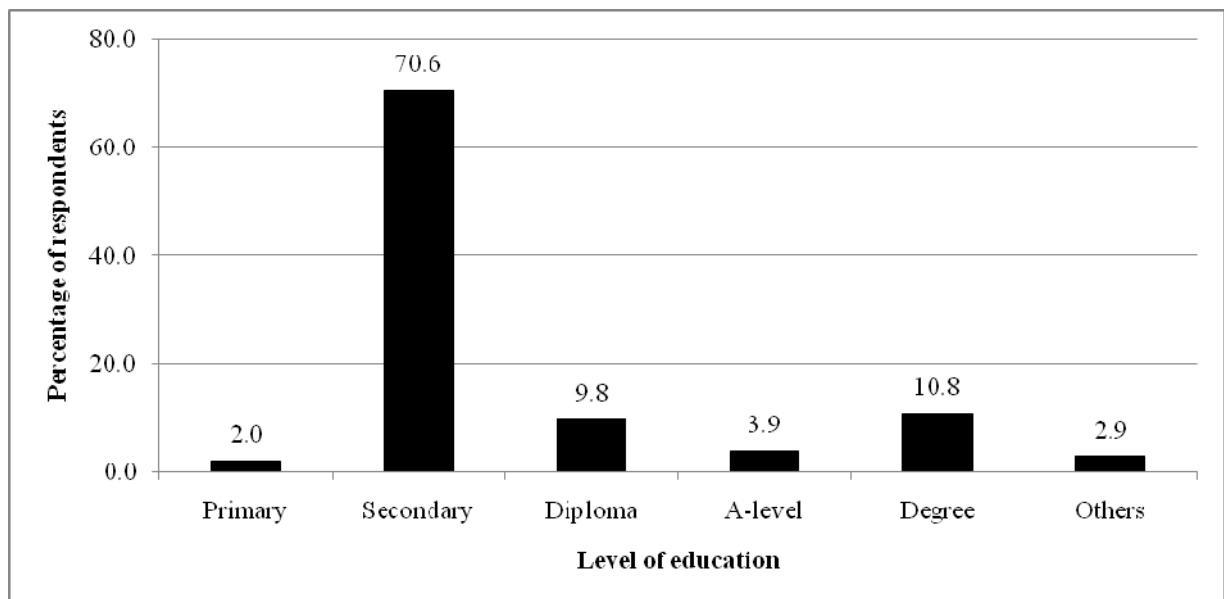
Figure 4.2: Distribution of Respondents by Age



4.3.3: Distribution of Respondents by Highest Level of Education

Inconsistent with other studies carried elsewhere (Mushanga, 1988), the majority (70%) of respondents deployed to crime recording and analysis had secondary school education whereas a significant proportion (11%) had university education. In addition, a small proportion (10%) was diploma holders. This imply that police officers with good education qualifications were deployed to crime recording because of the technicalities involved in compilation and analysis crime statistics. Figure 4.3 summarizes respondents' educational level.

Figure 4.3: Distribution of Respondents by Highest Level of Education



4.4: Training and Experience

This section covers findings from the specific questions posed to the respondent's on experience and training. The results are presented in form of cross tabulation and narratives obtained from the open ended questions.

4.4.1: Training institution where respondents received their initial training

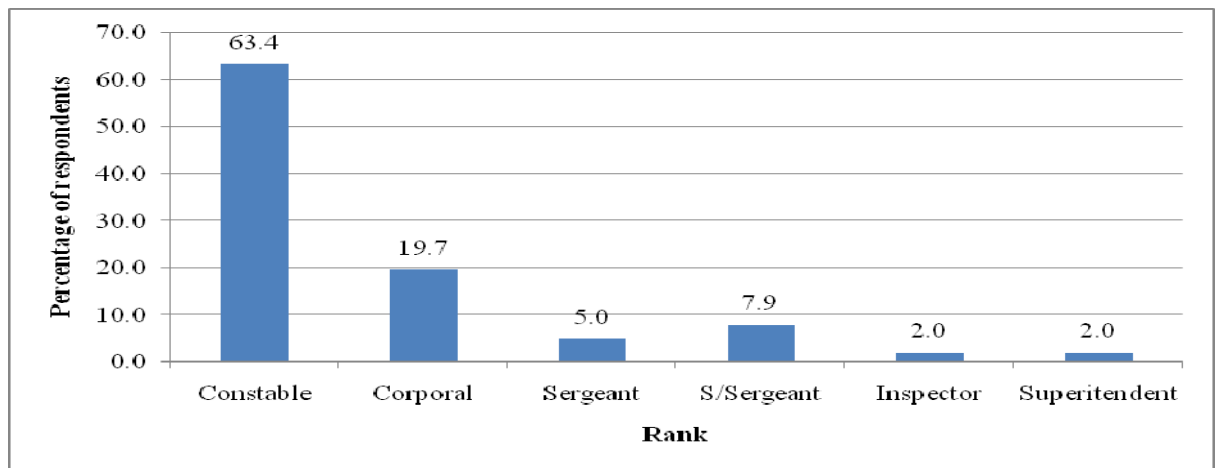
A majority (84.2%) of the respondents received their initial training at KPC-Kiganjo whereas 15.8 percent from GSU Training School. This implies that the majority of respondents had undergone a similar or uniform training and thus preformed their duties in a standard way.

4.4.2: Distribution of the Respondents by Rank in the Kenya Police

In overall, 63.4% of the respondents were PC, 19.8% were CPL, 7.9% were S/SGT, 5% were SGT and 2% were in the ranks of IP and SP. The respondents were drawn from all the ranks proposed in the study thus the information obtained cuts across the Kenya police service

fraternity. PC was majority of the respondents since their duties entail reporting of crimes and investigations followed by CPL who are the PC immediate supervisors.

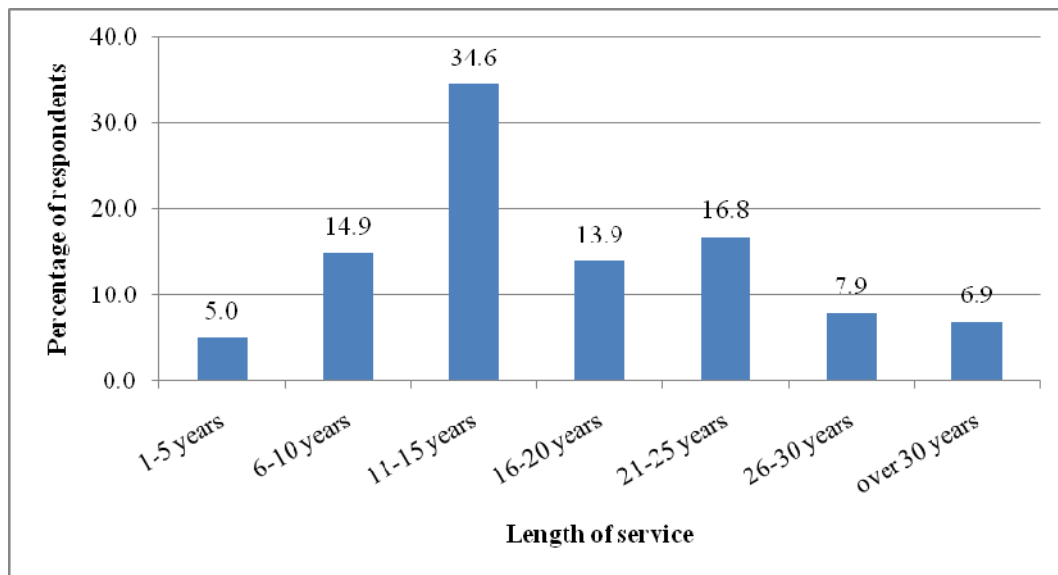
Figure 4.4: Present Rank in the Kenya Police Service



4.4.3: Length of Service in the Kenya Police Service

The results presented in figure 4.6 shows that the number of years of service in the Kenya police services by the respondents varied from a period of 1 year to over 30 years. Thirty-five percent of the respondents had served for 11-15 years, 16.8% had worked for a period of 21-25 years, 14.9% had worked for a period of 6-10 years and only 5.0% had served for 1-5 years. Majority of officers had served in the service for long period of time, an indication that there is low staff turnover in the Kenya police service. This also indicates that officers posted to crime reporting office must have been in the service for longer period to gain experience. Significantly were 5% of officers in this section who had been in the service for less than 5 years.

Figure 4.5: Years of Service in the Kenya Police



4.4.4: Length of Service in the Report Office (years)

Data in table 4.1 shows that most of the respondents 76.2% had been attached to the report office for more than 5 years, 20.4 % had been in the reporting office for 1 to 5 years and only 3.4% had been in the office for less than one year. High number of years in the report officer can be attached to the sensitivity of the issues attached to the office as well as the improvement of performance of officers acquired from on the job experience. It also shows the integrity of the officers and the value they attach to their duties.

Table 4.1: Length of Service in the Report Office

Period	Frequency	Percentage
Less than 1 year	3	3.4
1-5 years	21	20.4
More than 5 years	77	76.2
Total	101	100.0

4.4.5: Special reason for deployment to crime recoding duties

When asked to state whether there were special reasons for one to be deployed to crime recording duties, the respondents were of different opinion in that some of the respondents were of the opinion that there was no special qualification for deployment to crime recording duties since it is just part of police duties while on the other hand some officers were of the opinion that there were special reasons for one deployment to crime recording duties. These reasons included literacy, training on investigation and having attended basic crime investigation courses. Special reasons given emphasis on the quality of the job expected from the officer to ensure that justice is done to both the offender and victims.

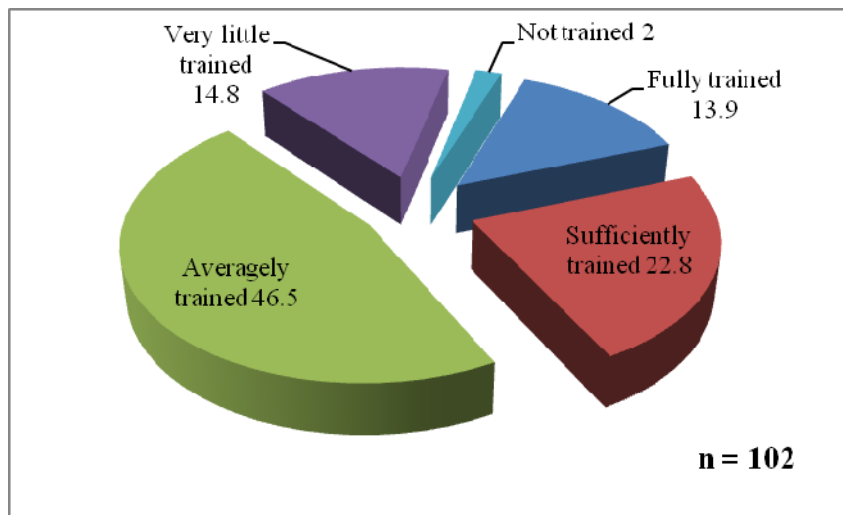
4.4.6: Training in Crime Recording

Respondents stated that the process of crime recording were learnt through lessons at Kenya Police College, through fellow officers, listening and analysis cases based on evidence, investigation of cases and experience gained during day to day police work in particular in the crime office. On the job training and learning from experience makes the officers more realistic to the situations at hand than depending on the theoretical knowledge obtained from seminars or classroom set up.

4.4.7: Training on Records Maintenance

As shown in figure 4.7, (46.5%) of respondents indicated that they were not well trained on records maintenance. Only 14 percent of respondents were trained on records maintenance while 2 percent had not received any training. This suggests that many crime recorders in Nairobi County require training in records maintenance.

Figure 4.6: Rating Training On Maintenance of Police Records



4.4.8: Extent of Training on How to Handle Incapacitated Reporters

The results in table 4.2 confirms that majority of officers were ill prepared to handle incapacitated reporters, that is, only 24.2% were fully trained to handle incapacitated reporters, 15.2% to a great extent and the rest 60.6% were either trained to some extent (28.3%), trained to small extend (17.2) and no training a tall (15.2%) to handle incapacitated reporters. Incapacitated reporters form a special case, that is, persons with disability. They are people who needs special attention hence the officers must be trained on who to handle

them emotional, psychologically and mentality. It is therefore important for the department to train the officer on how to incapacitate reporters.

Table 4.2: Respondents' training on handling incapacitated reporters

	Frequency	Percent	Cumulative Percent
Fully	24	24.2	24.2
To a great extent	15	15.2	39.4
To some extend	28	28.3	67.7
Small extend	17	17.2	84.8
None	15	15.2	100.0
Total	99	100.0	

4.4.9: Qualities for effective crime recording incidents

When asked to state what one needs to be effective in recording crime incidents, the respondents were of the opinion that one needs to be patient, understanding, have listening skills, being conversant with the law, undergoing training in specific fields, listening to the reporters first before recoding the crime, know the victim of the incident, know the place where the incident took place and the nature of the offence and embrace new technologies.

4.5: Basic Items Recorded By Crime Recorders

This section covers findings from the specific questions posed to the respondent's on basic items recorded by crime recorders. The results are presented in form of cross tabulation and narratives obtained from the open ended questions.

4.5.1: Items recorded in the occurrence book

The respondents indicated that in their occurrence book they normally record incidences reported such as general incidents reported to stations by members of the public, specific

reports required to be taken care of by police, booking officers reporting on and off duty, visits by senior officers, alarms, occurrence book and daily occurrences within the station area. The respondents listed all the main items required to be recorded in the occurrence book. It therefore means that all cases recorded conform to the requirements hence high quality in the work.

4.5.2: Criteria used in classifying the recorded crimes

The respondent indicated that crimes recorded were classified on the basis of; offences (murder, robbery, assaults), crime data, nature of the crime, place and gravity of the offence. Classifications used by the officers were in line with the Kenya police service requirements.

4.5.3: Elements Captured When Recording Crime Incidents in the Occurrence Book

It was noted that when recording crime incidents in the occurrence book, the officer normally capture the where, when, whom and why of the crime, differentiate whether the crime is civil or criminal offence, gravity of the offence, impact of the incident and criminal elements for investigation. The officers did not captured issues such as value of the property involved, circumstances of the offence and hence there is need for training on what to capture when recording crime since this information forms the basis of investigation.

4.5.4: Recording of All Crime Incidents Reported at the Station

When asked to state whether they record all crime incidents reported at the station 85.3% were of the opinion that all crime incidents reported at the station were reported while a significant 14.7% felt that not all crime incidents reported at the station were reported. Of those who did not record all the crimes, the reasons for not doing so were; some cases are not to be reported so they just advice the reporter on what to do, civil cases should be referred.

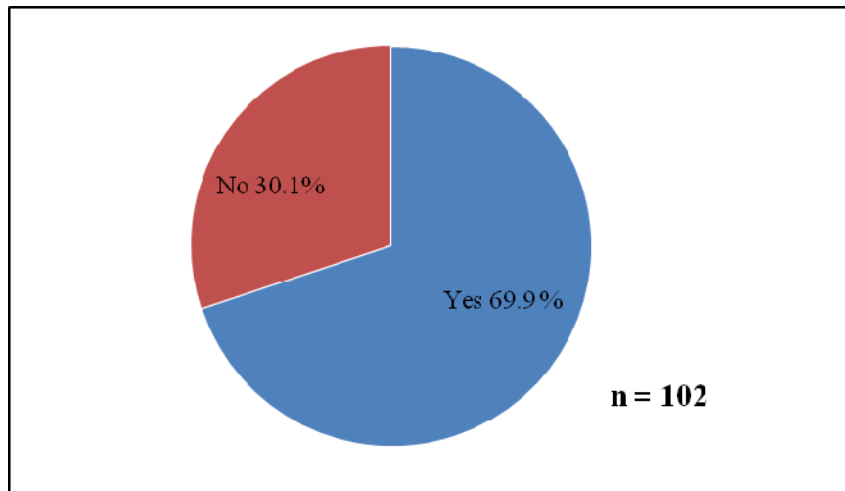
Table 4.3: Do you record all crime incidents reported at the station

	Frequency	Percent	Cumulative Percent
Yes	81	85.3	85.3
No	14	14.7	100.0
Total	95	100.0	

4.5.5: Existence of Guidelines for Recording Crime in the Station

As shown in Figure 4.5, (70%) proportion of respondents reported that there were guidelines in their stations for recording crime. The guidelines include date, time of offence, name and age of the person who committed the offence, nature of the offence, name and signature of the person recording the offence, map reference of the area, information should move from the report office occurrence book up to the OCS. (30%) proportion of respondents however indicated that there were no guidelines for recording crime in their stations implying that they were following guidelines learnt in training or from colleagues.

Figure 4.7: Use of guidelines when recording crime by respondents



4.5.6: Main Tasks in the Report Office

The main tasks respondents performed at the report office included directing clients to the relevant officers, handling of prisoners and their properties, keeping records, receive reports from the public and record them in the occurrence book, keep and maintain order within the office, acting as a public relations office/giving the force good image and hosting of flag. This conforms to the Kenya Police Service guideline on running of report office.

4.5.7: Existence of Influence/Directive When Recording Crime Incident

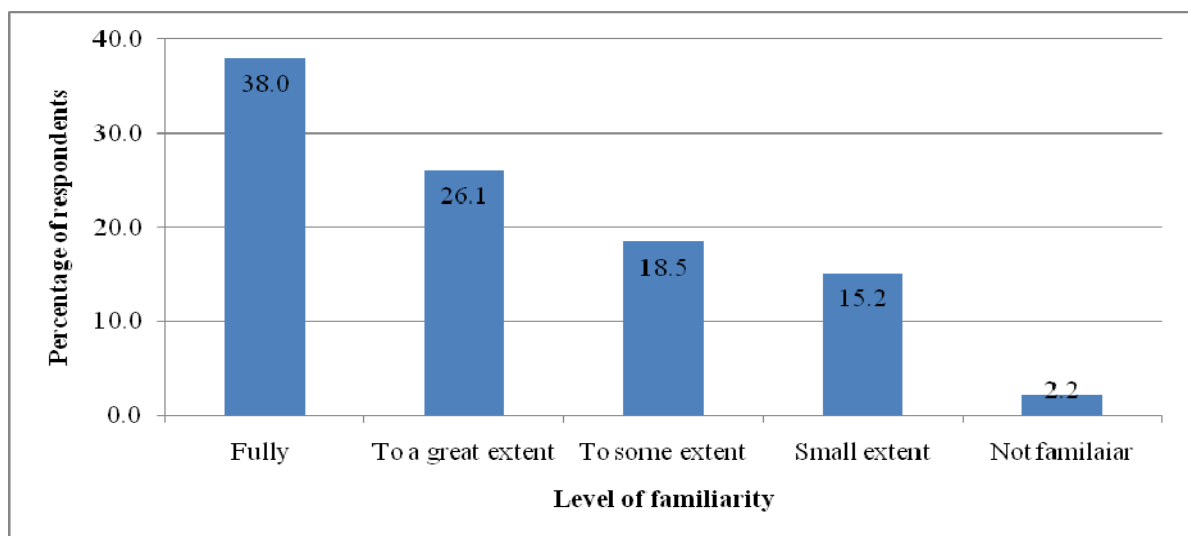
Officers recording crime incidents are expected to act and record the reports as it is without any external influence or personal influence. As indicated in figure 4.9, 93.4% of the officers normally records crime incidents without influence or directive while a significant 6.6% works under directives when recording crime incidents. In cases where officers' works under directives, the final say normally comes from officer in charge of the police station. It is therefore important to sensitive officers on the danger of this influence on the investigation

and prosecution of the case which includes the case lacking merit and being thrown out by the magistrate. This creates a bad name for the service amongst the citizens.

4.5.8: Level of Familiarity with Recording of Sexual Offences

It is expected the crime scene officers are familiar with recording of most crime cases if not all. This can be achieved by continues training of officers on the environmental challenges posed by changes in technology and social behaviors of people. Sexual offences have been on the rise in the recent past and officers are expected to know how to handle both the victim and the offender when recording. As shown in figure 4.10 below majority of the officers were familiar with recording of sexual offences, that is, 38% were fully familiar, 26.1% were to a great extent familiar and 18.5% were familiar with recording of sexual offences to some extent. Notably were 2.2% of the officers who were not familiar at all with recording of sexual offences. Based on the challenges of reporting this kind of crime, officers should be trained continuously on how to handle the situation as well as the players and the public.

Figure 4.8: Familiarity of respondents with Recording of Sexual Offences



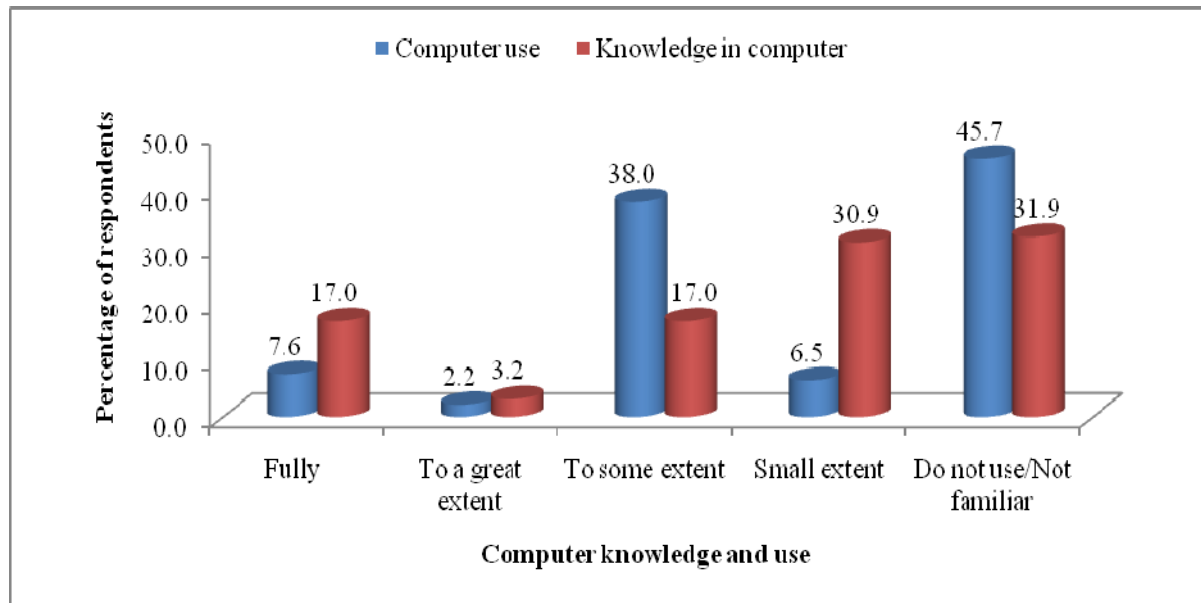
4.5: Challenges Experienced By Crime Recorders

This section covers findings from the specific questions posed to the respondent's on challenges experienced by crime recorders. The results are presented in form of cross tabulation and narratives obtained from the open ended questions

4.5.1 Extent of Computers Use When Recording Crime Incidents

Computers are tools used for efficiency and effectiveness irrespective of the sector. It is a requirement in this era that officers embrace technology in their day to day work. Computers would assist crime recording officers in data storage and retrievals. When asked to state the extent to which they use computers when recording crime incidents, 7.6% fully use it when recording crime, 2.2% use it to a great extent, 38% used it to some extent, 6.5% used it to small extent and 45.7% did not use computers at all when recording crime. This shows that crime recording officers have not embraced technology in their work. Equally notable is that a small (16%) proportion of the respondents indicated that they were fully familiar with usage of computers suggesting that few crime recorders have received training on the same.

Figure 4.9: Computer knowledge and use among respondents



4.5.2: To What Extent Are You Familiar with Usage of Computers?

As shown in figure 4.12, familiarity with usage of computers was low amongst the officers. More specific, 31.9% are not familiar with usage of computers at all, 30.9% had small knowledge on the use of computers and 17% to a small extent had small knowledge on the use of computers. On the other hand only 20.2% (fully at 17% and to a great extent at 3.2%) were competent in the use of computers. There is an urgent need to train officers on the use and benefits of computers to their work.

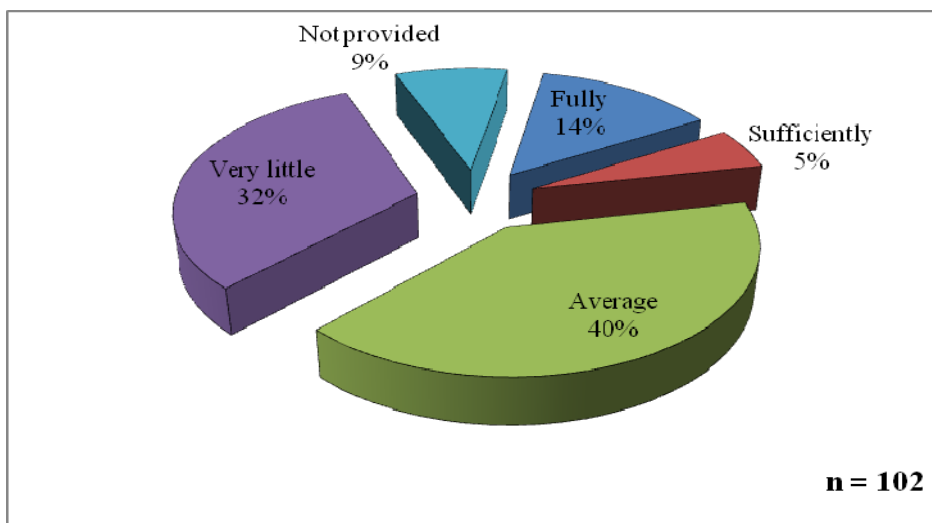
4.5.3: Tools used in recording crime

The respondents identified the following as tools used during crime recording; pens, rulers, paper, interrogation, guideline for crime recording, visiting the scene of crime, note books, observation book, compass direction and files as the guideline of Kenya police service hence there is conformity to the requirements.

4.5.4: Extent to which respondents were provided with police records to facilitate effective recording of crime incidents

When asked to state the extent to which they were provided with police records to facilitate effective recording of crime incidents, 40.4% stated to an average extent, 31.9% indicated to a very little extent, 13.8% and 8.5% were not provided with police records to facilitate effective recording of crime incidents at all. On the other hand only 19.1% (fully at 13.8% and 5.3% sufficiently) of the officers were fully/sufficiently provided police records to facilitate effective recording of crime incidents. There is need for Kenya Police Service to supply promptly relevant documents so as facilitate effective recording of crime incidents.

Figure 4.10: Extent to which respondents were provided With Police Records to Facilitate Effective Recording of Crime Incidents



4.5.5: Problems encountered when recording incidents of crime

Problems encountered during recoding incidents of crime varied from one scene to another. More specifically amongst the problems faced by the recorders were; complainant reporting

civil case which they need to seek civil remedy, language barrier, space/privacy, lack of equipment, lack of cooperation from the reporter, lack of support personnel, recording crime incident from sizable persons/mentally impaired persons, shortage of stationery, ignorance of law by reporters and inaccurate reporting.

4.5.6: Police procedures as an hindrance to efficiency and effectiveness of recording crime incidents

This section covers findings from the specific questions posed to the respondent's to determine the extent to which Police procedures causes hindrance to efficiency and effectiveness of recording crime incidents. The range was 'fully' (1) to 'no effect' (5). The scores of fully and great extent have been taken to present a variable which had an impact to a large extent (L.E) (equivalent to mean score of 0 to 2.5 on the continuous Likert scale ;($0 \leq L.E < 2.5$). The scores of 'moderate extent have been taken to represent a variable that had an impact to a moderate extent (M.E.) (equivalent to a mean score of 2.5 to 3.4 pm the continuous Likert scale ($2.5 \leq M.E. < 3.4$). The score of both small extent and no effect have been taken to represent a variable which had an impact to a small extent (S.E.) (equivalent to a mean score of 3.5 to 5.0 on a continuous Likert scale; $3.5 \leq L.E. < 5.0$).

The findings in table 4.4 below show that to a great extent; chain of command (mean of 2.3310), training of officers on crime recording (mean of 2.3737), availability of facilities and equipments (mean of 2.4333) and availability of police records (mean of 2.4475 as police procedures hinders efficiency and effectiveness of recording crime incidents

On a moderate extent: Availability of tools (mean of 2.9167), Availability of funds (mean of 2.9398), Police service standing order (mean of 3.0122) Police public relation (mean of

3.1585) and Police integrity and accountability (mean of 3.2738) as police procedures hinders efficiency and effectiveness of recording crime incidents.

Table 4.4: Police procedures as a hindrance to efficiency and effectiveness of recording crime incidents

	Mean		Std. Dev
	Statistic	Std. Error	Statistic
Chain of command	2.3310	.13841	1.26852
Training of officers on crime recording	2.3737	.14534	1.30809
Availability of facilities and equipments	2.4333	.13318	1.22064
Availability of police records	2.4475	.11992	1.07260
Availability of tools	2.9167	.13032	1.19445
Availability of funds	2.9398	.15837	1.44281
Police service standing order	3.0122	.14775	1.33790
Police public relation	3.1585	.14147	1.28110
Police integrity and accountability	3.2738	.13266	1.21587

4.6: Methods of Measuring Crimes

This section covers findings from the specific questions posed to the respondent's on methods of measuring crimes. The results are presented in form of cross tabulation and narratives obtained from the open ended questions

4.6.1: Awareness of any method of measuring crime

The respondents unanimously agreed that they were all aware of methods of measuring crimes as indicated in table 4.5 below. The respondents further identified household surveys, hospital/insurance records, and compilations by police and other law enforcement agencies,

observation, crime chart, following crime rate wave, uniform crime report, self report studies/survey, crime victimization surveys, national incident based reporting system as the methods they were aware of.

Table 4.5: Awareness of respondents on methods of measuring crime

Response	Frequency	Percentage
Yes	101	100.0
Not	0	0.0
Total	101	100.0

4.6.2: Respondents' training on crime measurements

When asked to state whether they have been trained on how to measure incidences of crime in your station, 91.1% of the respondents indicated that they had been trained on how to measure incidences of crime in their station, while 8.9% were of the opinion that they had not been trained on how to measure incidences of crime in their station. Of those who had not been trained on how to measure incidences of crime, they mostly really on observation and self report survey as methods of measuring crime in their stations.

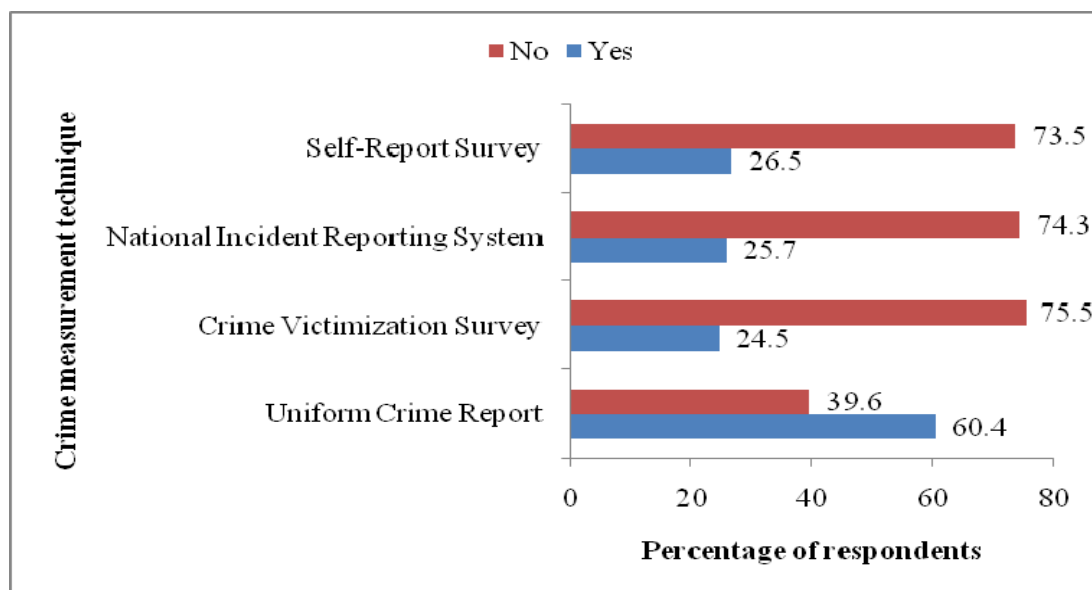
Table 4.6: Respondents' training on crime measurement

Response	Frequency	Percentage
Yes	92	91.1
Not	9	8.9
Total	101	100.0

4.6.3: Respondents' awareness on methods of measuring crime

When asked to state whether they were aware of some predetermined crime measuring method, 60.4% indicated that they were aware of uniform crime report method, 24.5% were aware of Crime Victimization Survey, 25.7% were aware of National Incident Based Reporting System and 26.5% were aware of Self Report Survey. This shows that very few of the officers were aware of all the four predetermined crime measurement methods. It therefore means that officers must be trained on these predetermined crime measuring method in order to improve their performance beyond the borders of the country.

Figure 4.11: Familiarity of respondents on crime measurement techniques



4.6.4: Extent of Familiarity with the Strength of Methods of Measuring Crime

Strength of the method of measuring crime is an added advantage to the user of the method. The results in figure 4.18 below shows that, 30.1% of the respondents fully/to a great extent know the strength of Uniform Crime Report methods, 11.1% of the respondents fully/to a

great extent know the strength of Crime Victimization Survey method, 20.7% of the respondents fully/to a great extent know the strength of National Incident Based Reporting System method and 11.1% of the respondents fully/to a great extent know the strength of Self Report Survey method. It is important for training department to organize course on Uniform Crime Report methods, Crime Victimization Survey method, Self Report Survey method and National Incident Based Reporting System method so as to make officers fully aware of them.

4.6.5: Extent of Familiarity with the weaknesses of the Methods of Measuring Crime

The results in figure 4.19 below indicate that majority of the respondents did not understand this method of measuring crime hence they could not pinpoint its weaknesses, that is 18.8% hardly while 34.4% never noticed the weakness. It is therefore important to consider the 32.8% of the respondents who fully/to a great extent know the weaknesses of the method. In line with training on the strength of the systems the training should also capture the weakness of the same methods.

4.6.6: Requirements for one to improve the ability in measuring crime incidence

When asked to state what is needed to improve police ability to measure crime, the respondents were of the opinion that one needs; training and practice, invest in research work, going through thorough training in crime detections and prevention skills, train officers on the modern methods of measuring crime, introduce the use of computers in crime management, improve on initial police training, motivation of officers and improvement of work environment.

4.7: Validity of the crime data

This section covers findings from the specific questions posed to the crime data analyst (police headquarters) on training received for purposes of crime analysis, sources of crime data, tools used in data analysis, dissemination of analyzed data, problems encountered in compiling data from the source, quality of the outcomes and how to improve quality of the outcome.

4.7.1: Training of respondents on crime analysis

In order to analyse data one is expected to be conversant with statistical data analysis tools. The findings on training on crime analysis indicated that majority of the analysts received training on basic statistical package for social scientist, database management course and basis crime and statistics analysis thus they had been equipped with the skills necessary to carry out their duties.

4.7.2: Sources of crime data

In line with the Kenya police service guideline the crime data used by crime analyst were obtained from the relevant sources, that is, various police divisions across the country (submitted by the provincial commander), police stations, operation centers, counties and signals.

4.7.3: Tools respondents used in analyzing crime

The respondents indicated that the tools used in crime data analysis were; excel, ArcGIS, Ms-Excel, SPSS, observations, Ms-Access, Ms-Word and office computers equipped with crime database and spread sheets. These tools enables analyst to present their findings in statistical way which are easier to interpret.

4.7.4: Means of disseminating analyzed data

Once the data is analyzed the analysts disseminate this information to the police divisions, stations, outposts and unit bases through respective provincial/county commanders, through postal and electronic means, through Securicor's (hard copies) marked confidential reports. All the relevant authorities were given reports. The methods used are a bit slow due to the network connectivity challenges across the country. It is therefore necessary for the service to network all its stations so as to improve on speed, accuracy and confidentiality.

4.7.5: Problems respondents encountered in compiling crime data

The respondents unanimously agreed that they do encounter problems in compiling crime data from the source. The problems encountered were; inaccuracies, timelines, Unstandardized methods of data recording, data sent as hard copies and inconsistency. These problems can be addressed through automation of the operations of the Kenya police service.

4.7.6: Quality of crime data analyzed by respondents

When asked to give their opinion on the quality of data analysis in terms of meeting the demand of crime control in the country 90 percent were of the opinion that data analysis met the demand of crime control in the country while 10 percent felt otherwise.

4.7.7: Suggestions of respondents towards improving the quality of crime data

The respondents indicated that crime data could be improved by creating independency, allocating more funds, training analysts and data collectors, investing in equipment, embracing integrity, providing capacity building courses for officers attached to crime investigation offices and Ops in all counties, submitting information in real time and indicating specific areas where the crime occurred.

The respondents further indicated that quality of data analysis could be improved by focusing on accuracies of the data from the source, training of data collection personnel, carry out crime mapping, carry out spatial distribution of crimes, standardization of data completion method and achievement of timelines.

CHAPTER FIVE: FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter provides the summary of the study findings, conclusions and recommendations. It also identifies areas that require further research. The general objective of the study was to establish challenges associated with measurement of crime by Kenya Police Officers deployed in Nairobi County. The specific were to establish the basic items of crime recorded by crime recorders; assess whether crime recorders have received any specialized training on crime measurement; to find out whether crime recorders are familiar with the different techniques of measuring crime in society; and to establish the challenges crime recorders experience when compiling crime data.

5.2 Summary of Findings

This section presents the summary of the findings of the study. The summary is presented along the study objectives.

5.2.1 Basic items of crime recorded by the crime recorders

The study established that the basic items of crime recorded by police were nature of the reported crime (and the nature of the crime (e.g. murder, rape, robbery etc), place and time it was committed, particulars (age, sex, residence, contact, race/tribe and occupation) of the complainant and suspect– if known; and the motive behind the crime.

5.2.2: Level of training of crime recorders and analyst on crime measurement

The study found out that whereas the vast majority (97%) of crime analyst had received specialized training on crime analysis, none of the crime recorders had received any

specialized training on crime recording. Crime recorders were thus relying on the training they received during initial course upon their recruitment into the Police Service, experience and learning from colleagues.

5.2.3: Familiarity of crime recorders on different techniques of measuring crime

The majority (53%) of respondents were conversant on the use of Uniform Crime Reports in measuring crime while less than half were conversant on the use of Crime Victimization Survey, National Incident Based Reporting System, and Self-Report Surveys. A significant proportion (34%) of respondents was not aware of the strengths and weaknesses of the stated techniques. Respondents indicated that they apart from reported incidents, they relied on hospital and insurance records, observations, and crime charts to depict the trend and magnitude of in the County.

5.2.4: Challenges crime recorders and analyst experienced when measuring crime

The major challenges crime recorders experienced when measuring crime were inadequate computers and stationeries (records such as OB, registers, pens and photocopying papers), limited and sometime inexistent office space. They also experienced language barrier and poor cooperation from some members of public when receiving crime reports and they did not have a standardized method of recording data.

In addition to inadequate computers, stationeries and office space, crime analysts experienced delays in receiving recorded data from stations for analysis. They also received inaccurate and inconsistent data from the stations and the stations relayed data in hard copies thus making analysis tedious and time consuming.

5.3 Conclusions

The general objective of the study was to establish challenges associated with measurement of crime by the Kenya Police Officers deployed in Nairobi Police County. The study findings revealed that, chain of command, training of officers on crime recording, availability of facilities and equipments and availability of police records were the major challenges associated with measurement of crime by the Kenya Police Officers. Based on the findings of the study, it can be concluded that challenges associated with measurement of crime by the Kenya Police Officers are similar across the police stations in Nairobi Police County.

The study further concludes that the crime recording officers were not conversant with the modern methods of measuring crimes, that is, uniform crime report, self report studies/survey, crime victimization surveys and national incident based reporting system and as a result the reports given to crime analysts were not uniforms/ standard to facilitate data analysis.

5.4 Recommendations

The study made the following recommendations:

1. There is need for the KPS to develop a standardized training for crime recorders and train crime recorders and analysts on the various techniques of measuring crime in society and use of technology in measuring crime.
2. The KPS should embrace technology in its crime measurements. The Service should avail computers in all police stations that are networked to the national crime analysis center at Police headquarters to ease the relay, analysis and dissemination of crime data.

3. There is need for the KPS to provide adequate equipments and stationeries, and construct offices for crime recorders and analyst in all police stations in Nairobi County.

5.5 Areas for Further Research

The following areas require further research:

1. Since the current study was limited to Nairobi County, there is need to undertake a similar study that covering the whole country to understand the challenges experienced by crime recorders and analysts in all Counties and develop strategies of overcoming them.
2. There is need for a study to determine the influence of politics and corruption in crime measurements in the country.
3. A study focused on determining the shortcomings of crime data the KPS compile and disseminate quarterly and annually is also an interesting area for further study.

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APPENDICES

Appendix I: Questionnaire for Report Office Personnel (OB)

Personal and organization details

This questionnaire is administered to establish constraints associated with measurement methods employed by the Kenya Police Service to ascertain true level of crime in Nairobi Area. The information you will provide will be treated with confidence and shall not be used for any other purpose rather than for this research.

Section A: General Information

- 1) Name of police station _____

- 2) Gender
 - a) Male ☐
 - b) Female ☐

- 3) How old are you?
 - a) Under 20 years ☐
 - b) Between 20 and 30 years ☐
 - c) Between 31 and 40 years ☐
 - d) Above 40 years ☐

- 4) What is your highest level of education?
 - a) Degree holder ☐
 - b) A – level ☐
 - c) Diploma ☐
 - d) Secondary ☐
 - e) Primary ☐
 - g) Other (specify) _____

Section B: Experience and training

1) Where did you attend your initial training?

a) Kenya Police College, Kiganjo

☐

b) General Service Unit Training School

☐

2) Which year? _____

3) What was the duration? _____

4) What is your rank?

Rank	PC	CPL	SGT	S/SGT	IP	C.I	SP	SSP
Tick (✓)								

5) How many years have you served in the Kenya Police service?

Years	1 - 5	6 - 10	11 – 15	16 - 20	21 - 25	26 – 30	Over 30
Tick (✓)							

6) For how long have you been attached to report office? _____

7) Are there special reasons why you are deployed to crime recording duties?

8) What training have you received in crime recording?

9) How did you learn the process of crime recording?

10) How do you rate your training on maintenance of police records?

- a) Fully ☐
- b) Sufficiently ☐
- c) Average ☐
- d) Very Little ☐
- e) None ☐

11) To what extent have you been trained on how to handle incapacitated reporters?

- a) Fully ☐
- b) To a great extent ☐
- c) To some extent ☐
- d) Small extent ☐
- e) None ☐

12) In your opinion, what one needs to be effective in recording crime incidents?

Section C: Basic items recorded by crime recorders

1) What do you normally record in the Occurrence Book?

2) What criteria do you use to classify the recorded crimes?

3) What elements do you capture when recording crime incidents in the occurrence book?

4) Do you record all crime incidents reported at the station?

a) Yes ☐

b) No ☐

If no, which one are not recorded and why?

5) Are there guidelines for recording crime in your station?

a) Yes ☐

b) No ☐

If yes, kindly state them.

If no, how do you do it?

6) What determines which crime incident reported is recorded?

7) What are the main tasks in the report office?

8) Do you work under directive when recording crime incident?

a) Yes ☐

b) No ☐

Is yes, who have got the final say on what is to be recorded?

9) To what extent are you familiar with recording of sexual offences?

a) Fully ☐

b) To a great extend ☐

c) To some extend ☐

d) Small extend ☐

e) None ☐

Section D: Challenges experienced by crime recorders

1) To what extent do you use computers when recording crime incidents?

a) Fully ☐

b) To a great extend ☐

c) To the average ☐

d) Hardly ☐

e) Never ☐

2) To what extent are you familiar with usage of computers?

- a) Fully ☐
- b) To a great extend ☐
- c) To some extend ☐
- d) To a small extend ☐
- e) Not at all ☐

3) When recording crime, what tools do you use?

4) To what extent are you provided with police records to facilitate effective recording of crime incidents?

- a) Fully ☐
- b)Sufficiently ☐
- c) Average ☐
- d) Very Little ☐
- e) None ☐

5) What are the problem(s) you encounter when recording incidents of crime?

- 6) To what extent do the following police procedures hinder the efficiency and effectiveness of recording of crime incidents?

**1 – Fully 2- To a great extend 3 - To some extend 4 - To a small extend
5 - No effect**

	1	2	3	4	5
Chain of command					
Police integrity and accountability					
Police service standing order					
Police - public relation					
Availability of facilities and equipment					
Availability of tools					
Availability of police records					
Availability of funds					
Training of officers on crime recording					

Section E: Methods of measuring crime

- 1) Are you aware of any method of measuring crime in your station?

- a) Yes ☐
b) No ☐

If yes, state the method that you use

- 2) Have you been trained on how to measure incidences of crime in your station?

- a) Yes ☐
b) No ☐

If No, how do you measure crime?

3) Are you familiar with the following methods of measuring crime?

- a) Uniform Crime Report ☐
- b) Crime Victimization Surveys ☐
- c) National Incident based reporting System ☐
- d) Self report Survey ☐

If Yes, too what extend do you know the above methods of measuring crime?

(1) Fully (2) To a great extend (3) On the average (4) Hardly (5) Never

	1	2	3	4	5
Uniform Crime Report					
Crime Victimization Surveys					
National Incident based reporting System					
Self report Survey					

4) To what extend do you know the strengths of the following methods of measuring crime?

(1) Fully (2) To a great extend (3) On the average (4) Hardly (5) Never

	1	2	3	4	5
Uniform Crime Report					
Crime Victimization Surveys					
National Incident based reporting System					
Self report Survey					

- 5) To what extent do you know the weaknesses of the following methods of measuring crime?

(1) Fully (2) To a great extent (3) On the average (4) Hardly (5) Never

	1	2	3	4	5
Uniform Crime Report					
Crime Victimization Surveys					
National Incident based reporting System					
Self report Survey					

- 6) In your opinion, what does one need in order to improve the ability in measuring crime incidence ?

Appendix II: Interview schedule for crime data analyst (Police Headquarters)

This interview schedule is administered to establish constraints associated with measurement methods employed by Kenya Police Service to ascertain true level of crime in Nairobi Area and it is to be administered to the crime data analyst officers based in police headquarter. The officers targeted for this interview schedule are the ones who are responsible for analyzing crime data. The information you will provide will be treated with confidence and shall not be used for other purpose rather than for this project.

Section A: General Information

- 1) Names (optional) _____
- 2) Gender
 - a) Male ☐
 - b) Female ☐
- 3) How old are you?
 - a) Below 20 years ☐
 - b) Between 21 and 30 years ☐
 - c) Between 31 and 40 years ☐
 - d) Above 40 years ☐
- 4) What is your highest level of education?
 - a) Degree holder ☐
 - b) A – level ☐
 - c) Diploma ☐
 - d) Form Four ☐
 - e) Form two ☐
 - f) Standard eight ☐
 - g) Below standard seven ☐
- 5) Where did you attend your initial training?
 - a) Kenya Police College, Kiganjo ☐
 - b) General Service Unit Training School ☐

6) Which year did you attend your initial training? _____

7) What is your present rank in the Kenya Police?

Rank	PC	CPL	SGT	S/SGT	IP	C.I	SP	SSP
Tick (✓)								

8) How many years have you served in the Kenya Police?

Years	1 - 5	6 - 10	11 – 15	16 - 20	21 - 25	26 – 30	Over 30
Tick (✓)							

Section B

1) What training did you receive for the purpose of crime analysis?

2) What are your sources of crime data?

3) What tools do you employ in analyzing crime data?

4) How do you disseminate the analysed data?

5) Do you encounter any problem in compiling crime data from the source?

a) Yes ☐

b) No ☐

If yes, state them.

6) In your opinion, do you think the quality of outcomes of your data analysis meets the demand of crime control in the country?

a) Yes ☐

b) No ☐

If No, what do you think need to be done to improve the quality of crime data analysis?

7) In your opinion, what does one need to improve the quality of crime data?
