

**COMMERCIAL MOTORCYCLES AND INSECURITY IN NAKURU COUNTY,
KENYA**

BY

JOHN I. M. CHEPKILIM

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DECLARATION

This Project is my original work and has not been presented for a degree in any other university.

Date_____

JOHN I. M. CHEPKILIM

I confirm that this Project was carried out under my supervision as the university appointed supervisor.

.....

Date.....

Dr. Calvin Kayi

Kenyatta University

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DEDICATION

This work is dedicated to God almighty and my family for the immense support throughout this study. You are my inspiration and the reason for my hard work.

ABSTRACT

Crime is a challenge and potential impairment to national development. It also affects spiritual and material welfare, compromising human self-worth while creating an atmosphere of anxiety and violence. Studies have shown that insecurity have both direct and indirect cost implication on economic growth especially when it is linked with transport system. This study sought to examine the link between commercial motorcycles and insecurity in Nakuru County. The study was guided by routine activities theory and Merton Anomie theory which explain crime and its link to environment. Descriptive research design was used to evaluate the objective of this study. Multi-stage sampling technique was used to determine the respondents to be included in the study for business and motorcycles operators. The study recruited a sample of 241 commercial motorcyclist and 390 pillions. Structured self-administered questionnaires were used for primary data collection targeting pillions and interview schedule targeting Bodaboda SACCO officials and Nakuru county officials. Data was entered in Ms excel for analysis. The study found that commercial motorcycles engaged in criminal activities against their customers. Crimes committed by commercial motorcycles against their customers were armed robbery and snatching of valuables. The study concludes that the rise in number of commercial motorcycles in Nakuru contributed to the rise of crime. These crimes mainly targeted male adults and was more caused by financial problems and greed among the commercial motorcyclists. The study therefore recommends control of operating hours for commercial motorcyclists; this can be enforced by police, police patrol and use community policing. The study also recommends government to strive to improve relationship between police and the public (pillion and motorcyclists)

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LIST OF ACRONYMS AND ABBREVIATIONS

CCTV:	Closed Circuit Television
CMO:	Commercial motorcycles operators
CMs:	Commercial Motorcycles
EC:	European Commission
KDHS:	Kenya Demographic Health Survey
KNBS:	Kenya National Bureau of Statistics.
NACOSTI	National Commission for Science, Technology and Innovation
PSV:	Public transport Vehicles
SPSS:	Statistical Package for Social Science
TLB:	Transport licensing Board
UN:	United Nations
UNDP:	United nation Development Programme

OPERATIONAL DEFINITION OF TERMS

- Crime:** Crime is an act in violation of a law in which there is injury to the public or a member of the public.
- Bodaboda:** Boda boda are bicycle & motorcycle taxis commonly found in East Africa.
- Security agencies:** A security agencies are governmental organizations which conducts intelligence activities for the internal security of a nation.
- Matatu:** A lightly controlled and very common form of public means of transport in Kenya, usually a minibus or converted truck.
- Taxi:** A taxi is a vehicle driven by an individual whose business is to take people where they want to go in exchange with money.
- Pillion:** A person who uses a Commercial motorcycle as a means of transport.

CHAPTER ONE

INTRODUCTION

1.1. Background of the Study

United Nations Report (1992) considers crime as challenge that impedes general development of nations, undermines spiritual and material welfare, compromising human self-worth leading to rise of an atmosphere of anxiety and violence. This impairs personal security and wearing away the quality of life. Augmented occurrences of crime interrupt safety and create and provoke a situation of insecurity. Insecurity has both direct and indirect cost implication on growth of economy of a nation (European Commission, 2010). For instance, a study conducted by Peri (2004) found that crime had statistically significant impact on reducing both per capita income growth and employment growth.

The effects of crime do not only affect individuals directly but also indirectly affect the economy of entire nation impeding national growth. A study by World Bank (2006), which utilized data acquired from 43 countries for 1975-2000 suggested strong negative effects of crime on economic growth. Similar findings were observed from Cárdenas (2007) study which noted a significant negative association between crime and per-capita output growth of 65 countries using homicides data for 1971-1999 and a country-fixed specification.

Understanding and preventing crime on public transport is very important due to its role in providing access to facilities such as work, health, leisure, and employment (Newton, 2014). A study carried in Great Britain in 2011 by National Travel Survey, reported that approximately one quarter of the households had no access to cars hence relied on public transport (Melbourne, 2012). Studies have shown the growth of private means of transport has been fuelled by fear of crime involved in public means of transport. Yavuz and Welch

(2010), found out that the factors affecting fear of crime in public transport were not entirely dependent on those associated with fear of crime outside of the transport network, and the dynamics of exposure on public transport include ethnicity, age, gender variation, familiarity with, and levels of public transport usage. Smith and Cornish (2006) observed that the criminal antisocial behaviour that is associated with public transport is mainly theft, robbery, offences along the route, causing delay, and client's assault.

A study by Okache (2010) in Nigeria observed that commercial motorcyclist were accused of indulging in crime such as murder, theft, snatching of client's and pedestrian's handbags and cell phones, rape, kidnapping and ritual killings. In addition Nsa, (2007) observed that some motorcyclist refused to drop pillions at their destination and instead dropped pillions at place of their choice.

However the growth in commercial motorcycle brought a big relief to the predominant transport and joblessness challenges with other benefits such as reducing loss of cost-effective working hour, increasing time used to arrive at work, and minimizing of other problems related to traffic congestion, the challenges related with its operations are massive. Akogun (2008) noted that the challenge associated with commercial motorists are deeper than irresponsibility and non-adherence to transportation guidelines, but that many of them have been blamed of involving in unlawful acts.

The study by Matheka, Omar, Kipsaina and Witte, (2015), on riders of commercial motorcycles in Thika observed that most of motorcyclists involved in accidents were aged below 18 years. A good number of injuries were due to negligent riding while not wearing Helmet. The alarming rate of motorcycles involvement in crime and failure of the law enforcing bodies to stop and regulate commercial motorcycles is a major concern to most governments (Ukwayi, Agba, & Michael, 2013). In attempt to address these challenges, the

Nigerian government in some urban part of country abolished commercial motorcycles. The implication of this is that it rendered many people jobless. There was need to address the crime-related activities attributed to commercial motorcyclists. It is against this background that the current study set out to assess the emergence of commercial motorcycles and insecurity and possible link between crime and commercial motorcycles in Nakuru County.

1.2. Statement of the Problem

In Kenya many people use commercial motorcycles as a means of transport to their homes, work places and businesses without really taking into consideration the danger they are exposing themselves to especially those using them at night. The regular incidence of crime has turned out to be a key source of concern not only to the government, but also to the general masses globally (Van Brakel, & De Hert, 2011)

The question of commercial motorcycles involvement into crime has received attention of various scholars. For instances, Ojedoku and Chinwokwu (2013) studied eradication of commercial motorbikes and its implication on transportation and criminality in Calabar Metropolis. Ukwai, Agba and Michael, (2013), studied public perception of the involvement of commercial motorcyclists in crime in South Nigeria. Wachira (2012) examined integration of commercial motorcycles in urban planning with reference Thika superhighway while Mbugua (2011), analysed the influence of the motorbike transportation uprising on the economic growth of Kenya.

Despite the growing public concern on commercial motorcycle involvement in criminal activities in various parts of the country, there are no studies linking increase of commercial motorcycle in Kenya to insecurity. This study set out to establish the link between commercial motorcycles and insecurity in Nakuru County.

1.3. Purpose of the Study

The purpose of this study was to examine the link between commercial motorcycles and insecurity in Nakuru County in an attempt to establish whether or not a significant relationship exists between the two.

1.4. Objectives of the Study

- i. To establish the registration trend of commercial motorcycles in Nakuru County.
- ii. To examine the insecurity trends in Nakuru County.
- iii. To establish the extent to which commercial motorcycles contribute to insecurity issues in Nakuru County
- iv. To determine the challenges faced by the security agencies in handling commercial motorcycle related crimes.

1.5 Research Questions

- i. What is the registration trend of commercial motorcycles' in Nakuru County?
- ii. What is the trend of insecurity in Nakuru County?
- iii. What is the extent to which commercial motorcycles contribute to insecurity in Nakuru County?
- iv. What challenges are faced by the Security agencies in handling these crimes?

1.6 Significance of the Study

Security and transport are the backbone of economic and social development of any country (European Commission, 2010). Secure environment facilitates growth in business by allowing free integration between people and movement from one place to another. Security in the commercial motorcycles implication on economic growth cannot be underestimated.

The findings of the study may also be used by commercial motorcycles owners/operators to offer an insight of the vulnerability of commercial motorcycles and their involvement in

crime. The groups operating commercial motorcycles can use the findings of this study in training their members and public as well as putting mechanism to addresses insecurity cases associated with commercial motorcycles.

The Government and Policy makers can also use the outcomes from this research in the design and improvement of an outline to help in improvement of motorcycle transport in Kenya while controlling adverse effects on the economy and employment opportunities. Finally, the findings of the study may add substantial literature gap on the study area. It is expected that the findings of the study may make valuable additions to the literature in the field of public transport and promotion of security.

1.7 Scope of the Study

The study covered issues of insecurity related to commercial motorcycles. The researcher interviewed security officers, general public and commercial motorcyclists for primary data. Secondary data concerning the number commercial motorcycle related crimes were obtained from police stations in Nakuru County. On the Geographical scope the study covered Nakuru County.

1.8 Limitation of the Study

One key limitation that was faced in this study is the failure of some respondents to answer the questions asked on criminal incidents related to commercial motorcycles and challenges faced in tackling this insecurity. To address these challenges, respondents were assured that data obtained would be treated confidentially. Respondents were also not be compelled to give the information; response to the questionnaire was voluntary. Finally the respondents were not required to indicate the identity in the questionnaire.

1.9 Assumptions of the Study

The study was based on assumption that all respondents would give truthful and precise information upon which the study drew objective conclusions. The study also assumed commercial motorcycles in Nakuru are linked with criminal activities. Finally the study assumed the magnitude of crime associated with commercial motorcycle can be determined.

CHAPTER TWO

LITERATURE REVIEW

2.1. Introduction

This chapter discusses the literature on commercial motorcycles and insecurity. It reviews findings of other scholars on commercial motorcycles, insecurity, and involvement of commercial motorcycles in crime. The chapter also provides a summary of the findings of other researchers on the subject. The theories supporting the topic of the study have also been reviewed. The chapter is organized based on the objectives of the study, theories that support the study and finally the conceptual framework of the study.

2.2. Empirical Review

2.2.1. Public Transport in Kenya and Commercial Motorcycles

The use of Matatus in Kenya dates back to the 1950's. Upon Kenyan independence in 1963, there was major rural-urban movement to look for employment (Macharia, 2003). Due to economic status of people, daily transport to and fro the city prompted rise of minibus taxis that offered this service at cost. The business grew over time becoming lucrative attracting operators in urban centres. The Matatus sector, however, began as a pirate. It was an unlawful profitable body. In 1973, Kenya's first president; Mzee Jomo Kenyatta gave out an announcement declaring Matatu as a lawful mean of transportation. Originally, they were giving services illegally. Nevertheless, they did not involve a Transportation Permitting Board (TLB) and Public Service Vehicle (PSV) permit. According to Mzee Kenyatta, they were a sacred sign to the economy of Kenya as they created jobs and the Matatu workers were careful Kenyans who made valuable addition to the development of a young state. Later, the exchequer found that millions that untrained in the sector in terms of income and familiarised the PSV Permitting.

Inadequate traditional forms of commercial urban transport network and infrastructure in most of the cities of the Third World countries were substituted with other transport modes such as motorcycle taxis. Commercial motorcycle as a means of public transportation continued to prevail in most cities of developing nations due to its affordability (Cervero, 2000). Before 2006, the only place in Africa that was known for motorcycle taxi business was Nigeria, Okada was the commercial motorcycle taxi name in the country (Ambuli, 2008). Originally in the 1960s and 1970s there were bicycle taxis in East Africa, also called 'Bodaboda' which came from the English word 'border-border. By then it had spread from its origin on the Kenyan-Ugandan border to other regions. However, motorcycle taxis have taken over the place of bicycles because it is faster, convenient and one does not have to wait for other passengers as the motorbike only has the capacity of one or two persons (Ambuli, 2008). Motorcycles in Kenya were very expensive to buy and maintain however, the coming of the new makes of motorcycles changed things upside down completely (Cervero, 2000).

2.2.2. Commercial Motorcycles

According to Cervero (2000), emergence of motorcycle can be linked to insufficient customary types of urban transport systems. Cervero record that in most urban of Third World Nations, transport was typically substituted with other creative transport modes, for example, cruiser taxis. Therefore, motorcycle transportation became most preferable in most urban communities because of its cheaper to individuals in separate societal financial status. Another study by Fasakin (2001) investigated the utilization of commercial motorcycles as method for open transportation in Akure in Nigeria, the study was centred around the components influencing the day by day benefits of commercial motorcycles administrators, another study Olubomehin (2012), focused on commercial motorcycles

(Okada) as a method for open transportation and its effect on the economy and society with specific reference to Lagos, Nigeria.

In Sub-Saharan Africa, Kenya was one of the main nations to understand that high duties on the import of bikes were harming the interests of common individuals. Import duty on motor bikes in Kenya were logically decreased from 80% down to the present level of 10%. The outcome was a surge in bike use. The number of registered motorcycle increased by 2324.87% in 2009 from about 3,759 units in 2005 (KNBS, 2010). In 2010, nearly 9,000 motorcycles were introduced into the transport sector every month amounting to 200,000 registered motorcycles by December 2010, from 91,151 in December 2009 (KNBS, 2010).

As a means of transport, the use of bicycles in Kenya can be traced back to the 1960's where bicycle taxis transported people and smuggled goods across the Kenya-Uganda border. Since 1990's there has been gradual replacement of bicycles with light engine motorcycle (50-80cc) (Odero, 2009). This began in the southern fringe crossing town of Busia (Kenya/Uganda) and rapidly spread toward the northern border town of Malaba Kenya (Karema, Irandu, & Moronge, 2017). The utilization of bodaboda initially extended to other neighbouring towns like Kitale, Bungoma, Kakamega, Nakuru, Kisumu and Ahero (Cleven, 2013).

2.2.3. Insecurity

According to UNDP Report (1994), there are seven measurements of human security: monetary, nourishment, wellbeing, ecological, individual, group and political security. With the increase in globalization, relationships turned out to be increasingly interlinked, in this regard the UN Security Council progressively changed the assessment of dangers, war outbreaks and the perspective of worldwide peace and security.

The possibility of human security is unequivocally taking into account the view of interrelatedness. Human security is a youngster who did not kick the bucket, an ailment that did not spread, an occupation that was not cut, an ethnic pressure that did not blast in brutality, a dissenter who was not hushed. Human Security is not a worry with weapons it is a worry with human life and poise" (UNDP 1994; 22-23). Essentially, the thought additionally infers another point of view: whilst conventional considering security was as a matter of first importance worried with the insurance of the country express, the idea of human security is laid out all the more extensively and contends that the reference article ought to be the individual (UNDP 1994; 22-23).

2.2.4. Crime Associated With Commercial Motorcycles

Understanding and prevention of crime in public means of transport is important for many reasons. Firstly, public transport plays a main role in reduction of social segregation, by enabling access to various services which includes; labour, health services, relaxation, and work. In Great Britain, for instance, the 2011 National Travel Survey found one quarter of families to lack access to a car (Melbourne, 2012), a case which is likely to be even large in developing countries like Kenya. This implies that use of public transportation as a mode of travel is likely to develop over time as opposed to decrease. Previous studies have recognised that fear of criminality and individual safety is a key impeding factor to the usage of public transportation. Newton (2004), suggests that upon reduction of fear of crime, patronage would increase by three per cent at peak and ten per cent at off peak times, Yavuz and Welch (2010) observed that the causes of concerns over individual safekeeping on public transportation are not completely related to fear of law-breaking outside of the transportation sector, and the forces at work of exposure on public transport include distinction by sexual category, ethnicity, age, awareness, and usage of public transport.

Newton (2004) argues that the existence of little information concerning public transport crime may be attributed to; the multiple organizations responsible for sustaining the operation of several systems, the lack of dependable reporting and capturing of crime record and disorder on public transport sector, problems in analysing the existing data, and the diverse controlling and safety activities in place through the network, and the possible levels of underreporting on the organisation. According to Smith and Cornish (2006) there are six classes of crime that are normally marked on the public transport sector, these being disruptive behaviour; crimes committed to pillions including robbery, stealing, and stabbing; crimes against employees including stabbing and theft; destruction and graffiti; and road crimes which are crimes along roads that cause delay or affect security.

Inyang (2004) found that crimes against an individual are the second most prevalent crimes. According to Obioha (2004) this kind of crimes can be denoted as non-property crimes. Commercial motorcyclists have been involved occasionally in diverse offences that are threat against individuals. These crimes are mainly damage or physical hurt committed to other persons, hence instigating pain and agony to other persons. According to Pius (2009), in certain town centres, crimes linked to commercial motorcyclist are frequently committed against individual. Pius recognized some of the offences include; abduction, rape, assassination, armed robbery and the criminal possession of dangerous arms.

Another form of offences associated with commercial motorcycles is property offence. Nwankwo, Okorie and Onyekachi (2008) purport that certain commercial motorcycle operators have participated in kidnapping or abduction of both their pillions and other innocent persons for either economic and/or political gain. Effah (2005) notes that politician could contract commercial motor riders to steal ballot boxes and other election material to facilitate rigging in election. Effah argues that, some politicians use commercial motorcyclists to seizure election materials because it is easy to escape with motorbike than

motor vehicle. In Nigeria, for instance, offences against property are generally the most dominant offences, these offences include handbag, purse, and phone snatching; vehicle theft, pick pocketing, and robbery (Bassey, 2008).

Other offences can be termed as crimes that breach or infringe the laws approved by the national government and local government system concerning community order, as well as surroundings (Igbo, 2007). These crimes can be described as falsehood, or false accusations, on Oath, escape or release from legal custody, corruption and bribery besides traffic crimes. Among these offences destruction of traffic rules and guidelines are common amongst public motorcyclist. Akwaowo (2009) suggests that in nearly all town centres, commercial motorbikes riders are known to violate traffic regulations with impunity. Akwaowo also observes that a notable number of motorcycle riders are said to have disrupted the state regulation on day-today activity.

One monstrous element of the CMO is the negative gathering conduct called pack beating, whenever an incident or an accident occurs involving a motorcycle and vehicle, motorcyclists gang up and whip vehicle drivers regardless of whether to motorcycle rider was at fault or not (Adekunbi, 2013).

Another adverse impact of the utilization of motorcycles for business transport is its utilization for criminal acts (Olubomehin, 2012). Olubomehin observed that more than seventy per cent of wrongdoings submitted in Lagos are traceable to a syndicate of criminals working with motorcycles. Such criminal exercises incorporate grabbing of belongings like sacks, telephones; snatching and executing including assaulting of individuals.

At the point when a pillion stops a commercial motorcycle rider, a rider with a criminal mind may take the traveller to spots where he/she could be assaulted or looted (Nwaorgu,

2013). Nwaorgu noted such criminal exercises were generally sustained in the early hours of the morning or late around evening time. This was the reason why in Lagos commercial motorcycles were banned in certain spots between 08:00 pm and 06:00 am (Nwarogu, 2013)

The growing concerns on insecurity as a result of commercial motorcycles lead to development of various mitigating measures. Michael, Ojedoku and Chinwokwu, (2013), noted that abolition of commercial motorcycles as mitigation measure ended up causing more insecurity. The abolition accelerated the rate of unlawful activities such as armed robbery, pick-pocketing, stealing and grabbing of valuables. Michael, Ojedoku and Chinwokwu, (2013), also pointed out that the eradication of commercial motorcycles lead to increased demand on the few buses available, this lead to increase fare charges and fight amongst passengers as they scramble for limited transport vehicles. Subsequently

2.3. Theoretical Framework

This study was based on the following theories; Routine activities theory and Merton's Anomie theory. These theories attempt to describe the occurrence of crime and its link to an environment. These theories provide a theoretical basis from which the link between commercial motorcycles and insecurity in Nakuru County is explained.

2.3.1 Anomie Theory

The Anomie theory states that deviance in the society results from the culture and structure of society itself (Merton 1968; Haralambos, Holborn and Heald 2004). Merton noted that members in the same society share the same values while enjoying different positions in socio-structure and perception on shared values which leads to deviance. He observed that the societies are divided into classes, opportunities increase as you ascend at the top. He also pointed out that in these social classes opportunities are not equally distributed, the few at the top get more while those belonging to the lower class barely get anything. According

to his analysis, there are two important elements in any society; first the goals that people believe are worth striving for and institutionalized means to attain the desired end. For a stable society, the two elements are reasonably well incorporated. Inequality between goals and means cultivate frustration that causes strain.

Merton (1968) accentuated the facts that individuals in disadvantage situations cultivated by the social structure adjust in various ways. Conforming is the common mode of adaptation. The conformists adjust to both the goals and prearranged means for attaining the goals. Persons who choose to adapt to society's goals but have few genuine ways of achieving them devise their own ways of attaining the goals. Thus one may result to robbery, mobile phone and handbag snatching. Some people adopt by ritualism, they discard the goals that they once held to be within reach and resign themselves to their present standard of living. Others chose retreat as a form of adaptation; this is exercised by people who leave both the goals and the means and retreat into the world of drug addiction. They internalize the value system, thus succumbing to internal pressure of lack of innovation (Adler, Mueller and Laufer, 1995).

2.3.2. Routine Activities Theory (RAT)

The Routine Activities Theory (RAT) was developed by Cohen and Felson in 1979. This theory forms one of the theories of environmental criminology. Routine activities theory states that for a criminal event to occur there must be a convergence in time and space of three factors. These factors include; 1) the presence of a motivated offender, 2) the absence of a capable guardian and 3) the presence of a suitable target (person or object). Convergence or coinciding of these components is a function of the repetitive activities (day-to-day movement) of prospective targets and criminals. According to Newton (2004), we can describe commercial motorcycle transport in inclusion as part of the predictable

activities of criminals, appropriate target, (pillions, and materials) and absenteeism of proficient protectors (such as police officers, security control, close circuit television (CCTV) cameras or a public member).

Day to day people activities such as attending workplace, regeneration and successively attending to errands facilitates contacts between criminals with appropriate victims and object. In this case, the criminal may be the commercial motorbike ride; the suitable target may be individuals, objects or place whereas the protector may be police patrols, security watches, vigilant control, associates, fellow citizen or CCTV system being observed.

The growth of commercial motorcycles from Cohen and Felson (2003) theoretical enterprise implies that the occurrence of offense by commercial motorist is as a result of the accessibility of object which is likely be the pillions and/or things that are eye-catching to the prospective criminal and the lack of protector for example the police or other persons to enforcement law to stop the crime from happening. These conditions drives commercial motorcycle riders to enter in unlawful practices such as theft, grabbing of phones, kidnapping and grabbing of handbags etc.

2.4. Conceptual Framework

According to Orodho (2009) a conceptual framework describes the association between the study variables. Jabareen (2009) argues that a variable is a quantifiable feature that accepts diverse values among subjects. An independent variable is that variable that is supposed to influence dependent variable (Jabareen, 2009). A dependent variable is a factor reliant on other variables such as independent variable. In this case, commercial motorcycles are our independent variable while insecurity in Nakuru forms our dependent variable.

Conceptual framework can also be described as a researcher's own point on the problem that gives course to the study (Kaplan, 2002). A Conceptual frame work is a theorized

model classifying the ideas of the study and their associations. Mugenda and Mugenda (2012) argues conceptual framework purpose is to assist the reader to fast see the anticipated association between the study variables (Dependent and independent variables)

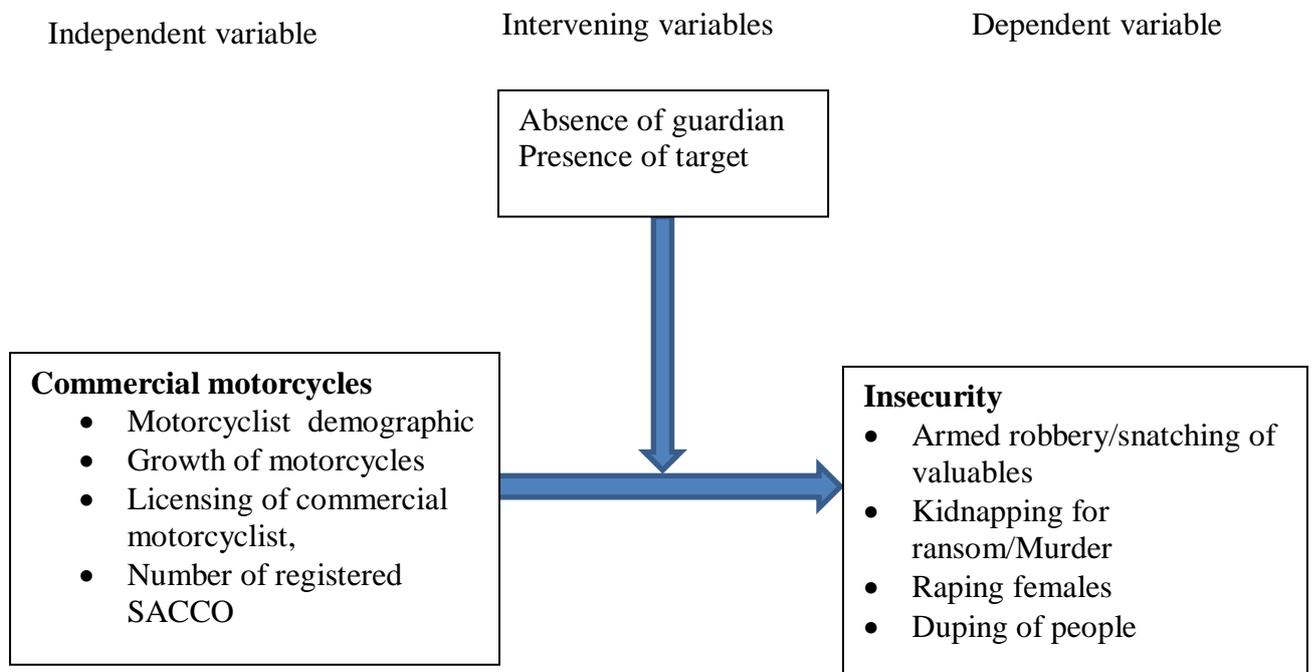


Figure 2. 1: Conceptual framework for analysis of commercial motorcycles and insecurity

Source: Cohen and Felson (2003)

CHAPTER THREE

RESEARCH METHODOLOGY

3.1. Introduction

This chapter outlines the strategies used in conducting the study. This sections discuss the methodologies used in evaluating the objectives of the study. The sections outlines study design used, area where study was conducted, the population targeted, tools used in data collection, analysis of the data and ethical and logistics considerations observed.

3.2. Research Design

Kothari (2008) describes a research design as a logical model that permits the researcher to draw inferences regarding casual relationships between variables under examination. The study adopted a descriptive research design to describe the link between commercial motorcycles in Nakuru as well as cases of insecurity associated with commercial motorcycles in Nakuru County. The independent variable was increase in commercial motorcycles and dependent variable insecurity.

3.3. Location of the Study

The study was conducted in Nakuru town. Nakuru town is the fourth largest in Kenya and is located in Nakuru County about 150 kilometres northwest of Nairobi. Nakuru town is a town in Nakuru County which is one of 47 Kenyan Counties birthed by Kenyan 2010 constitution. It is located in Rift Valley region. It shelters an area of 7,495.1 Km² and is situated between Longitude 35 ° 28` and 35° 36` East and Latitude 0 ° 13 and 1° 10` south. it has its headquarter is Nakuru town which was formerly the headquarters of Rift Valley Province which was created by old constitution that changed giving birth to counties in 2010 (Nakuru County 2013).

Nakuru is one of the Kenyan counties with the highest percentage of all ethnic groups in represented, and it is a multicultural county, whose population is drawn from all the major communities of Kenya (Nakuru county business portal, 2018). The Kikuyu and the Kalenjin are the leading people in Nakuru, accounting for over seventy percent of the people residing in the County. Other tribes such as Luo, Luhya, Kamba, Meru and Kisii are also accounted for in the residence of Nakuru County.

Nakuru county is further preferred for these study because after the disputed general elections and subsequent post-election violence in 2007/2008 there was a sudden increase in population. The population increase brought a lot challenges one of them being unemployment. The youth population among the displaced had to look for source of livelihood and many of them ended up as Bodaboda operators (Nakuru County 2013). Also Nakuru being the fourth largest town in Kenya experiences a lot of activities at night raising which increases the need and use of Bodaboda. Additionally, In the recent past night clubs have sprout in Nakuru town and revellers who stay late at night prefer using Bodaboda because it's a cheaper option (Nakuru County 2013).

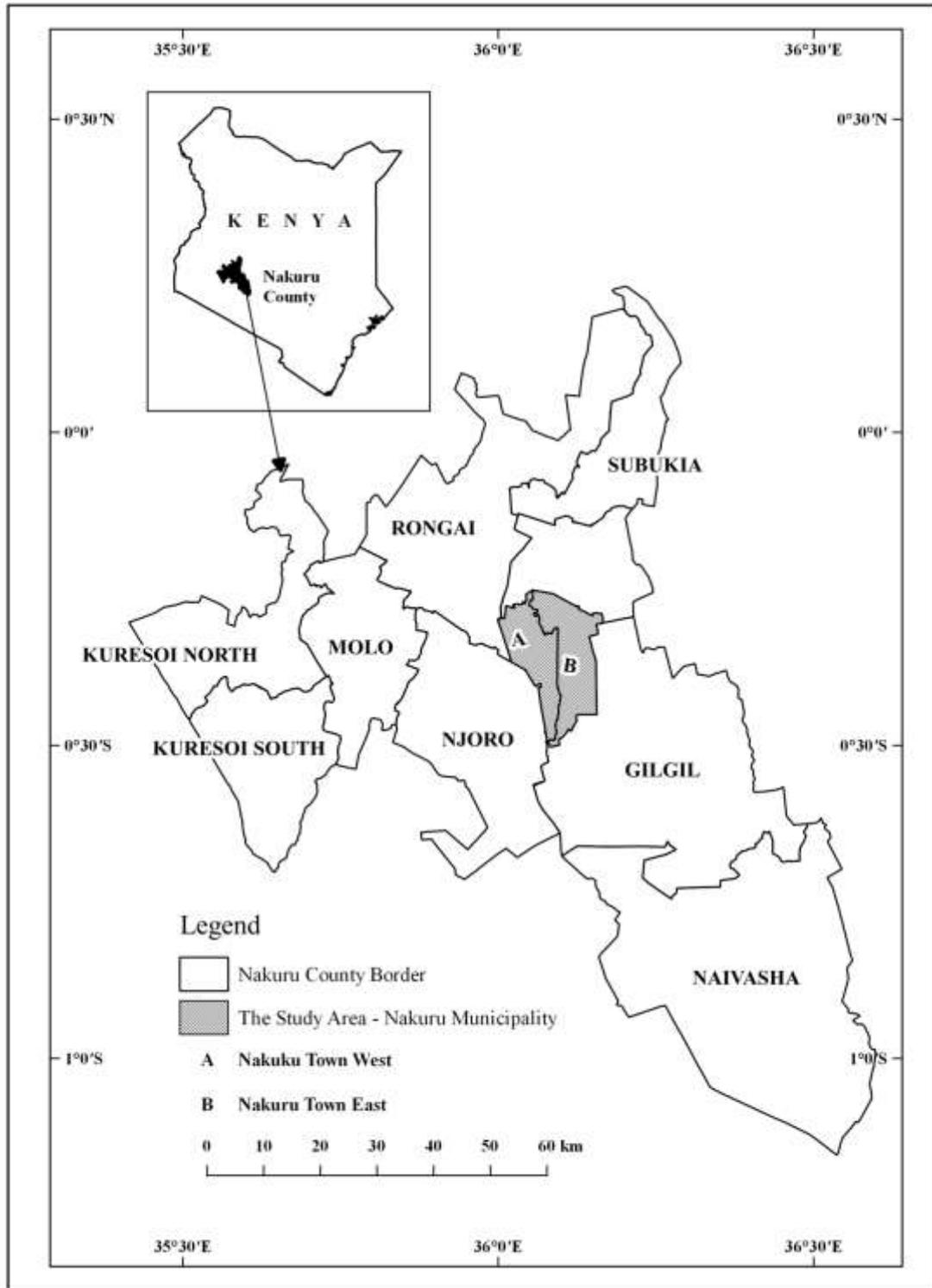


Figure 3. 1: Map of Nakuru County (IEBC, 2012)

3.4 Target Population

According to Kothari (2008), population is the entire number of objects from which data is obtained. According to Mbwesa (2008), target population is described as complete group of persons, events or objects that the investigator intends to study. The study targeted Police stations criminal records, Bodaboda Saccos, Bodaboda operators and small scale businesses within Nakuru municipality. This target population provided adequate information for the study. Nakuru municipality has 20 police stations and posts, 17 registered Bodaboda Sacco's, and 5000 registered commercial motorcycles as at (Kenya police, 2014).

Out of the eleven (11) sub-counties in Nakuru County, Nakuru municipality was selected as an area of the study because Nakuru town has the police headquarters and also the population represents the face of Kenya in terms of diversity. The researcher employed purposive sampling method to identify Nakuru central police station because it is a Police headquarter where all information converges, Milimani police post was considered because it is a wealthy suburb, Kiamunyi police post which is Middle income suburb and free area which is a slum setting. The target population comprise of 2403 commercial motorcycles operators and 15314 number of small scale businesses (Nakuru city council, 2017).

3.5. Sampling Techniques and Sample Size

3.5.1 Sampling Techniques

Sampling involves procedures of selecting sub-sections of a population to represent the whole population to aid in acquiring data regarding the subject matter (Kerlinger & Lee, 2000). A sample therefore denotes a group that represents the entire population. This study used both probability and non-probability sampling to recruit the respondents to participate in this study. The study employed use of probability sampling to select respondents for this study. To be precise, multi-stage sampling technique was used to sample from commercial

motorcycle operators and business where a kth motor cycle operator were recruited in the study (where k = 5th i.e. 1,2,3,4, "5")

3.5.2 Sample Size

Sample size determination is of great importance (Kothari, 2009). Therefore the sample must be ideal to achieve the obligation, effective, representative, dependability and elasticity. A sample is a sub-group gotten from the desired population (Mugenda and Mugenda, 2012). This subgroup is carefully chosen represent the whole population with the appropriate features. The sample size for this study for bodaboda operators and pillions were determined as shown below.

Bodaboda Operators

According to Mugenda and Mugenda (2012), for a population which is normally distributed and exceeding 1000, a sample of 10-30% can be drawn to represent the study population. In this study, 10% of commercial motorcyclist was chosen to represent the study population.

$$N = 10/100 * 2403$$

$$= 240.3$$

$$= 241$$

Pillion's Sample Determination

Slovin's formula (1960) was used to determine the sample size pillions. Slovin's formula (1960) is appropriate formula for determining sample size where the population size is known. The formula is stated as shown below:

$$n = N / (1 + N * e^2)$$

$$n = \frac{15314}{1 + (15314 * 0.05^2)}$$

$$= 389.82$$

$$= 390$$

3.6. Research Instruments

The study used both structure questionnaire and interview schedule as tool for data collection in this study. The study choose structured questionnaire because they are to administer, analyse and time saving. The questionnaire was design from careful analysis of in-depth literature. The questionnaire had some open-ended sections to obtain respondents' opinion. The concepts generated from literature were used to develop the study questionnaire.

Questionnaires

The use of questionnaires in this research was important in obtaining data from Bodabodas and businesses. Questionnaires make provision for ease in collecting a large amount of data in a realistically short time; the questions can also be quickly analysed (Orodho and Kombo, 2002).

Interview Schedules

An interview guide was administered to key informants. According to Mugenda and Mugenda (2012), the interview schedule marks it ease to acquire essential data to address specific study objectives. The interview schedule was used to collect data from the police officers. The police in charge was interviewed from each police station. Data collected from the police was used to supplement the data obtained from pillion and commercial motorcyclists.

3.7. Pilot Study

According to Mugenda (2003) Pilot testing involves performing a preliminary test of data collection instrument and processes to detect and remove problems, permitting programs to make corrective amendments to the study tool and procedures for data collection to make sure that the data was obtained was consistent and useable.

Piloting also aids in establishing how the tool will assist investigator to draw up coding sheet for unstructured questions (Orodho, 2009). During the Pilot study, questionnaires were administered in the same twice within an interval of two weeks. The pilot study targeted 10 respondents from Kericho town. Their responses were used to adjust the questionnaires so as to ensure that they contained the required data to answer the particular questions so as to address the research problem.

3.8. Reliability and Validity of Research Instruments.

3.8.1. Reliability of the Research instrument.

Reliability of the study tool was determined by correlation of data collected using same tool at different interval of time. The questionnaires were administered twice to the same respondents within a time lapse of four hours. The study thereafter used Pearson product moment correlation to obtain a correlation coefficient which was used to establish the magnitude of consistency in responses.

Reliability is the degree of consistent outcomes obtained from a study tool (Kothari, 2004). The research adopted Cronbach α coefficient to test the reliability of the study instruments. Cronbach α coefficient is a frequently used technique of determining reliability of study tool. Cronbach's alpha reliability coefficient ranges between 0 and 1. an alpha of $>.70$ was

considered is sufficient to conclude that the tool is reliable(Hinton, McMurray, and Brownlow, 2014)

$$\alpha = \frac{k}{k - 1} \left(1 - \frac{1}{s_T^2} \sum_{i=1}^k s_i^2 \right)$$

Where k is the number of questions, s_i^2 the variance for item i , and s_T^2 the variance for the sum of all k item scores. The Cronbach's alpha was used in determining the reliability and the internal consistency was 0.778 indicating high internal consistency (Hair, Tahtam, Anderson & Black, 1998).

3.8.2. Validity of the Research Instrument.

A validity is the degree of accuracy in capturing the intend information (Mbwesa, 2008). The researcher assessed the construct validity of the questionnaire. This test links between the measures and underlying theory. Construct validity is evaded by presence of correlation between the measurements and the in related areas. According to Lawshe (1975), the expression for computing content validity can be written as shown below;

$$CVR = (n_e - N/2)/(N/2)$$

Where CVR: Content Validity ratio

n_e : number of experts indicating the question is essential.

N : Total number of experts presented to rate the tool

The CVR is in the ratio of +1 to -1. The positive value indicates the at least half of experts rated the question to be essential. The content validity of the question was determined by

examining the average CVR across all questions in the questionnaire subjects to experts in the field of the study.

3.9. Data Organization and Analysis

3.9.1 Data Organization

After data collection, data cleaning was done. Data cleaning involved identification of partial or erroneous responses and corrected to increase the value of the data. The responses were then summarized and coded using Statistical Package for Social Sciences (SPSS).

3.9.2 Data Analysis

Open-ended responses were coded to enable ease of data entry. Data was thereafter verified for completeness and transferred to a Statistical Package for Social Science (SPSS) ready for statistical analysis. SPSS Version 20 was used in analysis of quantitative data due to its flexibility and ability to transform data into various layouts. Master Dataset was reserved before any data transformation for future reference. The study data was analyzed using both qualitative and quantitative techniques. Quantitative data was analyzed using Exel while qualitative data was analyzed using thematic methods. Responses were grouped using similar themes.

In the initial analysis stage, the research used exploratory data analysis (EDA) techniques understand data structure, identify outlier values. The study used descriptive statistics to summarize continuous variables and frequency distribution to summarize categorical data.

3.10. Logistical and Ethical Considerations

3.10.1 Logistical Considerations

The researcher first obtained a letter from the dean of Graduate School (Kenya University) addressed to the County Government of Nakuru seeking Authority to conduct an Educational research. Upon getting permission from the County Government of Nakuru the researcher proceeded to Nakuru.

3.10.2 Ethical Considerations

Resnik (2011) describes legal and ethical considerations as a measure for conduct that recognizes and distinguishes acceptable and unacceptable behaviour. Prior to conducting the study, the researcher obtained written permission to conduct the study from Kenya University and NACOSTI. Secondly, respondent as a part should be informed of their basic rights and needs to be protected during the study. The purpose of the research was also communicated to everyone involved directly or indirectly in this study. The respondents were informed of any positive and negative significances of their involvement in the study (Nachmias & Nachmias, 1996). After explanation was made, respondents were asked to give consent of their willingness to take part to this research. The researcher sought the informed consent of participants which was verbal in nature. The researcher ensured that no participant was compelled to give information.

**CHAPTER FOUR:
DATA ANALYSIS AND DISCUSSION**

4.1. Introduction

This chapter offers data analysis and discusses the findings of the study. Frequencies and charts are used to present findings. Discussion of the outcome based on the respondents' data. All questionnaires were filled and returned for data analysis.

4.2. Social-Economic Characteristics of the Respondents

This section provides a profile of the respondents. This information is presented on a number of basic characteristics, including age at the time of the study, gender, level and form of education. This information gives a general overview about the target group. these variables offers the socioeconomic situation within which other subsequent study variables are determined.

Table 4. 1: Respondents Social-Economic Characteristics

			n	%
Gender	Motorcyclist	Male	227	94.2
		Female	14	5.8
		Total	241	100.0
	Pillion	Male	169	44.0
		Female	215	56.0
		Total	384	100.0
Age Category	Motorcyclist	20-29 Years	149	61.8
		30-39 Years	49	20.3
		40-49 Years	43	17.8
		Total	241	100.0
	Pillion	20-29 Years	205	53.4
		30-49 years	102	26.6
		50-59 Years	51	13.3
		60 Years and above	26	6.8
		Total	384	100.0
Marital Status	Motorcyclist	Single	78	33.8
		Married	153	66.2

		Total	231	100.0
	Pillions	single	121	31.5
		Married	237	61.7
		Separated	26	6.8
		Total	384	100.0
Highest level of Education Attained	Motorcyclist	Primary	49	20.4
		Secondary	143	59.6
		Tertiary	46	19.2
		Postgraduate	2	0.8
		Total	240	100.0
	Pillion	Primary	6	1.6
		Secondary	194	51.1
		Tertiary	169	44.5
		Postgraduate	11	2.9
		Total	380	100.0

According to Kenya Demographic Health Survey (KDHS) (2008), socio-demographic factors are important factors as they form basis for subsequent study variables. The table above summarizes the gender, marital status, age and highest education levels of the respondents. Majority (94.2%) of motorcyclists were men aged 20-29 years of age. Nearly 80% of the motorist had attained up to secondary level of education. The study found that 66.2% of these motorcyclists were married. On the other hand, Majority (53.4%) of business owners were aged 20-29 years and were mainly females (56.0%). The study found that more than 90% of these respondents had completed at least secondary school level, however, there was a slightly larger proportion of those who had completed tertiary level of education among the business people as compared to the motorcyclists.

A study by Khan, Ahmed, Nawaz and Zaman (2015) found that social-economic characteristics of individuals influence involvement in crime. According to their study, low education level and unemployment contributed to crime in Pakistan. Buonanno and Montolio (2008). Also noted social characteristics such as age and gender may affect individual's propensity to commit crimes.

Table 4. 2: Respondents religion affiliation

			n	%
Religion	Motorcyclist	Christian	229	95.0
		Islamic	12	5.0
		Total	241	100.00
	Pillion	Christian	333	86.7
		Islamic	51	13.3
		Total	384	100.0

Religion affects various aspects of day-day to human moral behaviour. According to Brent, Benda and Corwyn (2001), more religious communities lowers rate of crime. The study examined the religion composition of the respondents sampled for this study. The residence of Nakuru belonged to only two groups which are Muslims and Christians. The study found that 95.0% of motorist and 86.7% of the business people were Christians. There was a small proportion of Muslims in Nakuru during the study period. Drawing from Brent, Benda and Corwyn findings, contrary to case in Nakuru town, we could expect lower rates of crime.

The study also sought to examine the occupation of the respondents in Nakuru town. Ninety two percent of the motorcyclist stated that were full time Bodaboda operators while 7.8% said they were farmers or civil servants and part time Bodaboda operators. According to Khan *et al* (2015), unemployment is attributed to increased rate of crime in a locality. Describing motorcyclist business in sub-Saharan Africa, Olvera, Guézéré, Plat, and Pochet, (2016) argue that motorcyclist is only able the to earn much for day to day expense and therefore terming occupation as temporal while Karema (2015) found that motorcyclist contributed to economy of Lakipia county by 10 percent.

The members of the public interviewed were mainly traders/ business people (64.1%), 20.6% were farmers, 6.1% law enforcers while 3.7% constituted the rest group such as private security personnel and private sector employees as shown in the chart above.

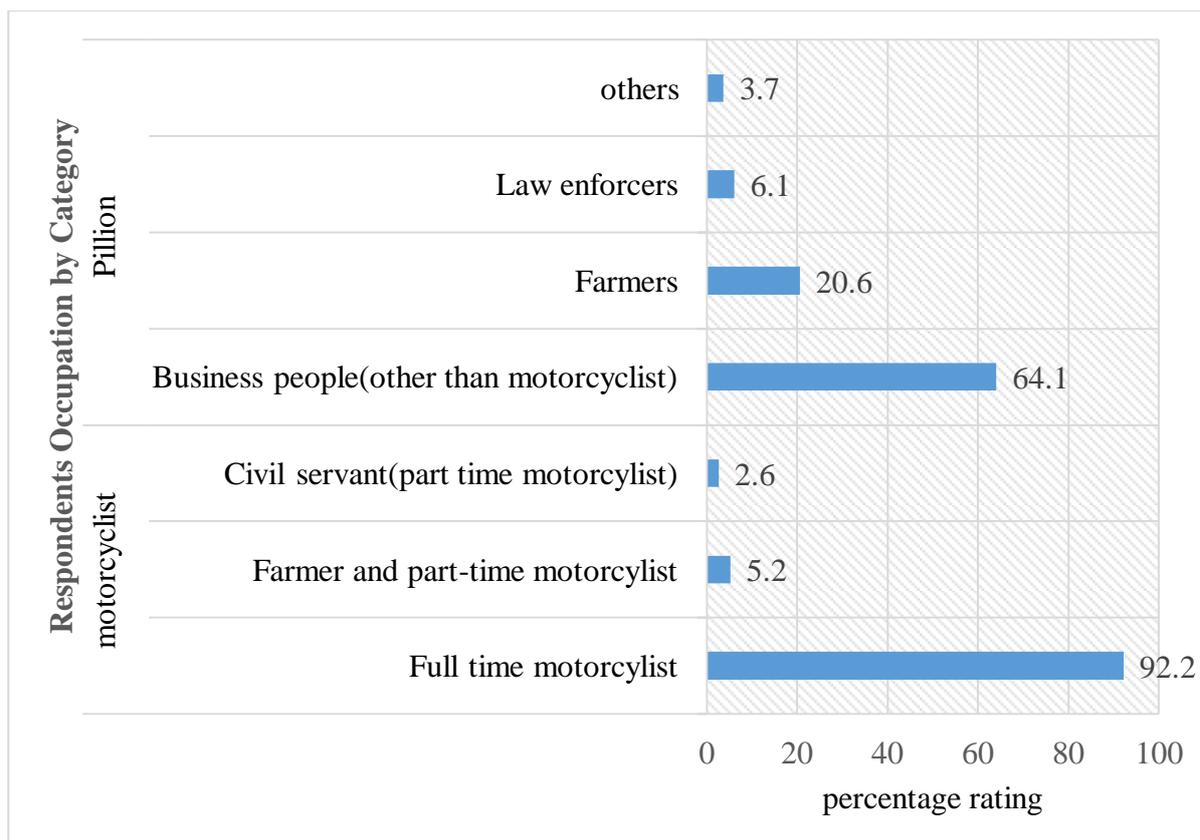


Figure 4. 1: Respondents Occupation by Category (Motorcyclists & Pillions)

On assessing the status of the motorcycles on basis of insurance cover and registration to a Sacco, most motorcyclist (85.3%) reported that their motorcycles were insured with 73.1% reporting that their motorcycles were affiliated to a Sacco. Although it can be perceived that motorcyclist affiliated to a Sacco would not engage in criminal activities, there was no clear association between criminal motorcyclist and those who do not belong to a Sacco.

Table 4. 3: Motorcycle Insurance status & Sacco Membership

		n	%
Motorbike insured	Yes	185	85.3
	No	32	14.7
	Total	217	100.0
Belonging to a registered Sacco	Yes	141	73.1
	No	52	26.9
	Total	193	100.0

4.2. Growth of Commercial Motorcycles in Nakuru Town

One of the objectives of the study was to assess the growth of commercial motorcycles in Nakuru town. The study used structured data schedule to collect secondary data of motorcycles licensed by Nakuru County government. The study found that the number of new motorcycles that were licensed by Nakuru County were on increase each year from 2012-2016 with 2014 recording a decrease in registration of motorcycles though the number was higher than that of 2012. The total number of motorcycle registered to operate in Nakuru was 5,046 as shown in figure 4.2 below. The general trend could be described as upward trend that shows that the motorcycles registration were on increase from 2012 to 2016 in Nakuru county where most of them operated within town and its environs. Cumulatively the number of motorcycles increased each year; 349 motorcycles were registered in the year 2012, 1,475 by 2013, 2,253 by 2014, 3619 by 2015 and 5046 by the end of the year 2016. Apart from Nakuru, motorcycle have been experiencing rapid growth over the last decade due to factors such poor road infrastructure, low-income levels, unemployment, lack of law enforcement (Chepchieng, 2011). According to Chepchieng this growth may give rise problem associated with commercial motorcycle and therefore there is a need to develop a framework to include them as a mean of transport. The growth of motorcycles in Nakuru urban may also been propagated by rise in population and urbanization lacking a consistent or balanced growth of the transport sector created a void for the commercial motorbikes to fill (Udoh, 2000; Sule, 2007).

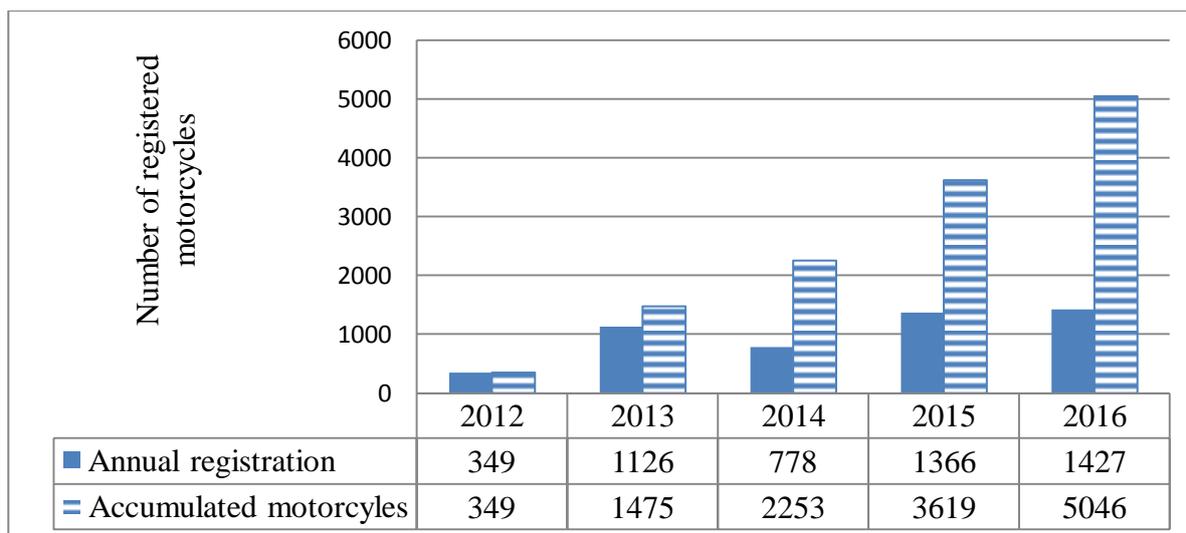


Figure 4. 2: Growth of commercial motorcycles in Nakuru town

4.3. Trend of Crimes Associated With Commercial Motorcyclist in Nakuru Town

The study also assessed the trend of crimes associated to commercial motorcycles in Nakuru town. The study also sought to assess the trend of crimes associated with commercial motorcycles in Nakuru town. Four police stations were subjected to study where data collection schedule was presented and annual estimates of crimes recorded. The data was summarized in years and trends computed as shown Figure 4.3 below. The study found that crimes were higher in the year 2016 which was a steep increase from the year 2015. In the same period between 2015 and 2016, there were reported criminal activities across the country including terrorism threats (US embassy report, 2016). The growth in crime reported may be attributed to improved police citizen relationship. There is notion that most crime goes unreported, however, the trend may suggest change of citizen perception on police thus leading to more crime reporting (KNBs, 2016). This supports the findings of Adeboye, 2008; Aborisade, 2010 in Nigeria that found crimes associated with commercial motorcyclists increased with increase in motorcycles.

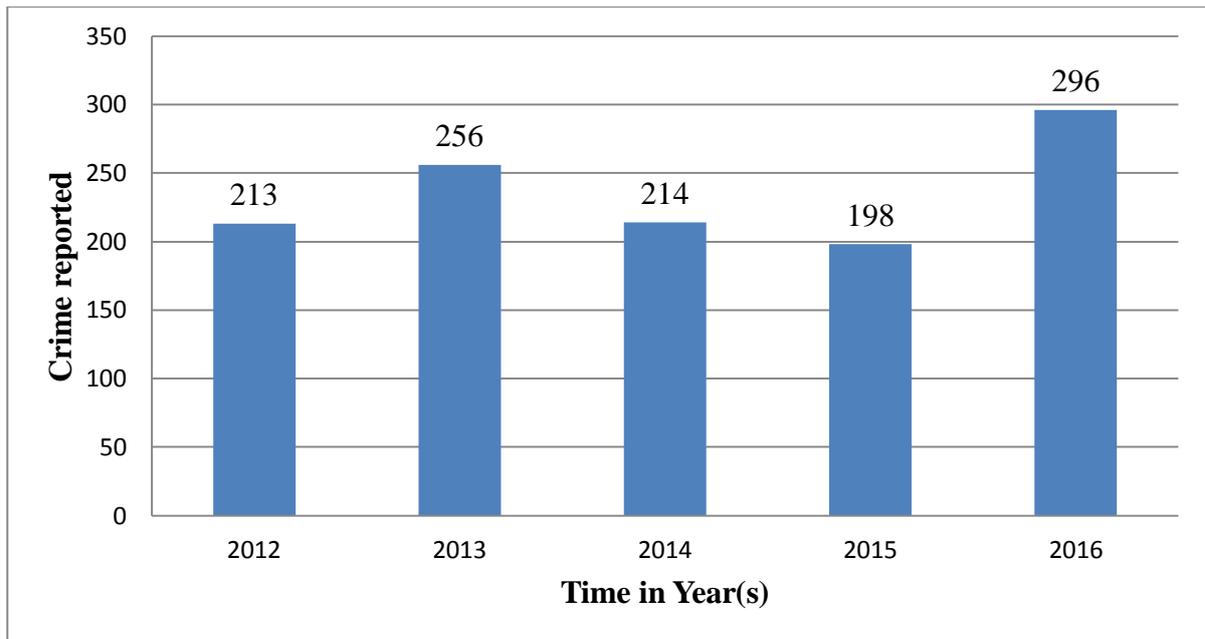


Figure 4. 3: Trend of Crimes Associated to Commercial Motorcycles in Nakuru Town

4.4. Respondent’s Perception on Commercial Motorcycles and Crime

The main objective of the study was to examine the possible involvement of commercial motorcyclist in criminal activities. Majority of pillions (60.0%) reported that they had either experienced or heard a commercial motorcyclist involving in criminal activities. On the other hand fifty percent of the commercial motorcyclists reported to have heard of other commercial motorcyclists committing a crime against their clients. On self-reporting, none of commercial motorcyclist reported to have ever engaged in criminal act against their clients. According to Ukwayi et al (2013) government should put more importance on the preparation of pleasant socioeconomic strategies that address the severe and unfavourable economic situations which evident in the high level of joblessness and poverty.

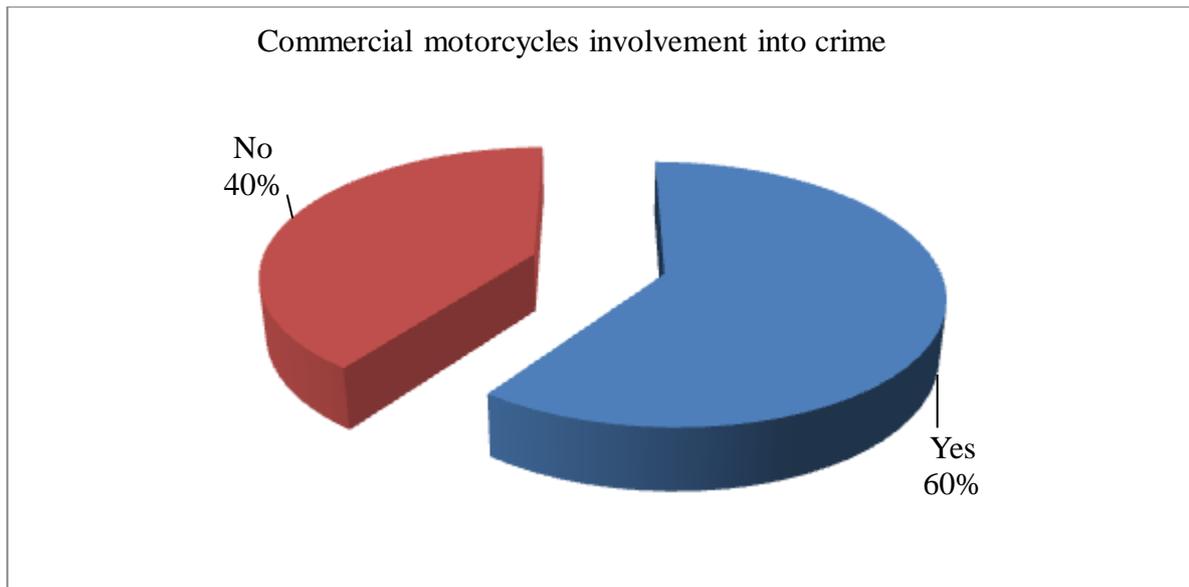


Figure 4. 4: Pillions reporting on Commercial motorcycles involvement into crime

Table 4.4 below presents the motorcyclists perception on their involvement in crime. The study found that the majority (72.9%) of the crimes committed were Armed Robberies/Snatching of valuables while kidnapping for ransom and duping accounted for 21.8% of crimes committed by commercial motorcyclist. The study found that adult males were mostly (36.3%) affected by these crimes which was closely followed by crimes against adult's females (27.4%). Financial problems were seen as the main (45.8%) factor that contributed to criminal practices among the motorcycles riders. Sixteen point seven percent was due to unemployment while 37.5% blamed the criminal behaviour over materialism greed. These findings of this study are in agreements with the findings of Ghani, (2017) that found unemployment and poverty levels to be the main causes of crime committed by commercial motorcyclist in Nigeria and Malaysia. According Ghani lack of employment and absence of poverty among the urban is associated to crime. Through use of secondary data Ghani found 54% of youths from Nigeria were unemployed in 2012 and in early 2016 about 80% of Nigerian youths were unemployed. In Malysisia Ghani found out the rate of unemployment to be 46.5% in 2012 and 63.7% in 2016 and it was expected to increase.

Ghani further noted crime index increased with increase in level of unemployment in both Countries. the impact can cause psychological trauma associated with such encounter, loss of lives and properties, some passengers and pedestrians had sustained injuries that have held them down for several months and years, resulting in loss of economic man hours (Igwe, 2008;Uyi, 2010).

According to data obtained from police in Nakuru town police stations, the most common crime committed by commercial motorcyclists was armed robbery and snatching of valuables. Others crimes such as dumping and motorcyclists engaging sexual affairs with students were common in the area.

Table 4. 4: Motorcyclist self-reporting on involvement in crime

		n	%
Have you seen motorcyclist getting involved in a crime	Yes	197	82.1
	No	43	17.9
	Total	240	100.0
Common types of crime that motorcyclist involve themselves in	Armed Robbery/Snatching of valuables	124	72.9
	Kidnapping for Ransom/murder	37	21.8
	Duping of people	9	5.3
	Total	170	100.0
Victims of crimes committed by motorcyclist	Adult Male	81	36.3
	Teenagers females	23	10.3
	Adult females	61	27.4
	Teenager male	58	26.0
	Total	223	100.0
Factors compelling motorcyclist to engage in crime	Unemployment	28	16.7
	Financial problems	77	45.8
	Greedy for materialism	63	37.5
	Total	168	100.0

Table 4.5 presents pillion perception on commercial motorcyclist involvement in crime. Offences committed by commercial motorcyclist normally involve destruction or physical injury imposed against other people, thus causing them to suffer pain and agony. Pius

(2009) observes that in some urban centres, crimes involving commercial motorcyclists are often against person, he observed some of the crimes to be abduction, rape, manslaughter, armed robbery and the illegal possession weapons. According to finding of this study, armed robbery/snatching of valuables was perceived by majority (83%) of pillion as the most common type crimes committed by commercial motorcyclist against their clients according to police records. These crimes mainly targeted adult males (41.2%), 24.4 % targeted adult females while 27.0% targeted female teenagers; this is consistent with findings of Okorie, Onwuchekwe, Ugwu, Ikenga (2017) who found there crime committed by commercial motorcyclist varied depending on the gender of the victims.

Regarding factors compelling motorcyclist to engage in crime the financial problems and greed were the major contributors to these crimes at 57.3% while other factors represented twenty one point five percent (21.5%).

Table 4.5: pillion perception on Commercial Motorcyclist Involvement in Crime

		n	%
Common types of crime that motorcyclist involve themselves in	Armed robbery/snatching of valuables	318	83.0
	Duping of people	65	17.0
	Total	383	100.0
Victims of crimes committed by motorcyclist	Adult male	128	41.2
	Adult female	76	24.4
	Teenager females	84	27.0
	Teenager male	23	7.4
	Total	311	100.0
Factors compelling motorcyclist to engage in crime	Unemployment	26	7.3
	Financial problems	205	57.3
	Greedy for materialism	77	21.5
	Ineffective security	51	14.2
	Total	358	100.0

4.5. Challenges faced by the security agencies in handling commercial motorcycle related crimes.

The last objective of this study was to determine the challenges faced by the security agencies in handling commercial motorcycle related crimes.

Table 4.6 below presents motorcyclists and Pillion perception on relationship between police and residence. Strong relationships of mutual trust between police agencies and the communities they serve are critical to maintaining public safety and effective policing. Police officers rely on the cooperation of community members to provide information about crime in their neighbourhoods, and to work with the police to devise solutions to crime and disorder problems. Similarly community members' willingness to trust the police depends on whether they believe that police actions reflect community values and incorporate the principles of procedural justice and legitimacy. Therefore the study examined the relationship between police and pillion. The study found different gender perceived relationship between police and resident differently. Though most motorcyclists perceived police to be very unfriendly (38.9%), more female proportion (50%) than male (38.2%). The study also found pillion perception concerning relationship between police and resident was more positive than motorcyclists; more proportion of male (55.6%) than female (30.2%) considered police relationship with community to be very friendly. However, 43.4% reported that the relationship between the police and community was very friendly. Despite the importance of police community relations (Sahapattana & Cobkit, 2016), the relations between the police and the residents was not found to be sufficient. This can be enhanced by implementation of community policing (Chaskin, 2001). To strengthen the cohesion between community and police, the police department should create special programme that could bring police and public to interact informally.

Table 4.6. Motorcyclist & Pillion perception on relationship between police and residents by gender

		Very unfriendly		Fairly unfriendly		Fairly friendly		Very friendly		Total	
		n	%	n	%	n	%	n	%	n	%
Motorcyclist	Male	83	38.2	71	32.7	45	20.7	18	8.3	217	100.0
	Female	6	50.0	2	16.7	4	33.3	0	0.0	12	100.0
	Total	89	38.9	73	31.9	49	21.4	18	7.9	229	100.0
Pillion	Male	14	8.8	36	22.5	21	13.1	89	55.6	160	100.0
	Female	7	4.7	36	24.2	61	40.9	45	30.2	149	100.0
	Total	21	6.8	72	23.3	82	26.5	134	43.4	309	100.0

The studying shows that police faced various challenges in response and addressing crime. These include poor infrastructure especially poor roads and lack of appropriate technology. Corruption in the police sector, these ranged from lack of proper maintaining of operation vehicles, misuse of fuel meant for operations thus leading to lack of efficiency in response. Respondent reported that sometimes police could take bribes from the motorcyclist and deny the justice to the offended. The number of polices to attend to challenges facing the people in the town were reported to be inadequate making it difficult to attend to all cases adequately.

Other challenges faced by security agencies as perceived by pillions include; lack of reporting crime to the police and/or lack of sufficient evidence to prosecute the offender. Fee of victimization also affected crime reporting thus affecting efficiency in addressing the crime in the area.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1. Summary

The findings of the study can be summarized in three sections according to the objectives of the study which were; to establish the registration trend of commercial motorcycles in Nakuru County; examine the insecurity trends in Nakuru County; establish the extent to which commercial motorcycles contribute to insecurity in Nakuru County and to determine the challenges faced by the security agencies in handling commercial motorcycle related crimes. This was done to establish the link between commercial motorcycles and insecurity in Nakuru County. To address this, the study attempted to establish the trend of commercial motorcycles licensing within Nakuru County, the crimes trends as results of commercial motorcycles and to examine the involvement of commercial motorcyclist involvement in criminal activities and challenges faced by police in addressing these crimes.

The study targeted the commercial motorcyclist to offer self-reporting and the pillions to give their perception and experience with criminal activities related to motorcycles in Nakuru. The study also gathered data from the police relating to growth of criminal activities in the area; the study observed a general increase in motorcycles registration with council in Nakuru town. The study also observed a general increase in crime committed by commercial motorcyclist in the area between 2012-2016. Concerning the commercial motorcycles involvement in crime, respondents argued that some commercial motorcyclist engaged in criminal activities such as armed robbery/snatching of valuables which was rampant in the area. Despite this challenge, respondents felt that the relationship between the police and the community hampered crime prevention as most of them felt that the relationship was unfriendly.

5.2. Conclusions

From the findings of the study, i conclude that there has been a growth of motorcycle commercial licensing in Nakuru. In addition, the crime reports that are associated with commercial motorcycles have been on the rise in Nakuru town. Based on the primary data collected from the field, it was noted both motorcyclist and Pillion associated commercial motorcycle with crime in Nakuru. Thus we conclude that according to motorcyclists and residents the rise in number of commercial motorcycles is linked to rise of crime in the area.

5.3. Recommendations

Based on the findings of the study we recommend the following:

The government needs to adopt different measures towards addressing crime associated with commercial motorcyclists. These measures should include police patrols, and implementation of community policing.

Government should put more concern on the development of appropriate socio-economic strategies that are meant at addressing the severe and hostile socio-economic situations which is demonstrated by high numbers of joblessness and poverty exhibited in Nakuru. This will help in the creation of employment prospects for the youth which was considered a reason for involvement in crime among youths.

The government should provide opportunity for youth to gain skills. Since majority of commercial motorcyclist involved in criminal activities are unemployed youth, skills obtained will help youth to practices economically viable ventures that will boast their economic status thus reducing the crime. The government should also enhance mechanism to improve relationship between pillion, motorcyclist and security agencies

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Appendix 1: Pillion questionnaire

PART A. GENERAL INFORMATION (*Tick as appropriate*)

1. Gender: i) Male ii) Female
2. Age: i) 20-29 ii) 30-40 iii). 41-50 iv) 51-60
v) Above 60
3. What is your marital status? i) Married ii) Single iii) Separated
iv) Widow/widower.
4. What is the maximum level of your education? i) Primary ii) Secondary
iii) Tertiary iv) Undergraduate level iv) Others.....
5. What is your occupation? I) Trader ii) farmer iii) civil servant [
]
iv) Law enforcement officer
6. What is your religion? I) Christian ii) Islamic iii)
others.....

PART B. INVOLVEMENT OF COMMERCIAL MOTORCYCLISTS IN CRIME

7. Do you think commercial motorcyclists involve in crime? i) Yes ii) No
8. Have you seen any commercial motorcyclist arrested for crime? i) Yes ii) No
9. What types of crime commonly committed by commercial motorcyclist in your area?
i). Armed robbery/snatching of Valuables. ii).Kidnapping for ransom/Murder.
iii). Raping of females iv) Duping of people
10. Who is mainly the victim of crimes committed by commercial motorcyclist in your area?

i) Adult male [] ii) Adults females' [] iii) Teenagers females []

iv). Teenagers male [] iii). Children []

11. What do you think is the reason why commercial motorcyclists engage in crime in your area?

i) Unemployment [] ii) Financial problems [] iii) Greedy for materialism []

iv). Ineffective security []

PART D: CHALLENGES FACED BY THE SECURITY AGENCIES IN HANDLING COMMERCIAL MOTORCYCLE RELATED CRIMES

12. How would rate the relationship between the police and residence of Nakuru county in addressing crime?

i) Very friendly ii) fairly friendly iii) Friendly

iv). Fairly unfriendly v) Very unfriendly

13. In your opinion, what challenges do police face in handling crimes committed by motorcycle operators?

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15. What measures have the police put in place to manage confidential information and intelligence obtained from the residents?

- i.
- ii.
- iii.
- iv.

Appendix II: Commercial Motorcycle operators' questionnaire

PART A. GENERAL INFORMATION (*Tick as appropriate*)

1. Gender: i) Male ii) Female
2. Age i). Below 18 years ii) 18-29 iii) 30-39 iv) 40-49
v) 50 and above
3. What is your marital status? i) Married ii) Single
iii). Separated iv). Widow/widower
4. What is the maximum level of your education? i) Primary
ii) Secondary iii) Tertiary iv) Undergraduate level. v) Others.....
5. What is your religion? I) Christian ii) Islamic iii)
others.....
6. Do you have driving license? i) Yes ii) No
7. Is your motorcycle insured? i) Yes ii) No
8. Are you a registered member of any bodaboda SACCO? i) Yes ii) No

PART B. INVOLVEMENT OF COMMERCIAL MOTORCYCLISTS IN CRIME

9. Do you think commercial motorcyclists are involved in crime?
i) Yes ii) No
10. Have you seen any commercial motorcyclist arrested for crime?
i) Yes ii) No
11. What types of crime are commonly committed by commercial motorcyclist in your area?
 - i. Armed robbery/snatching of Valuables
 - ii. Kidnapping for ransom/Murder
 - iii. Raping of females
 - iv. Duping of people

12. Who is mainly the victim of crimes committed by commercial motorcyclist in your area?

- i) Adult male
- ii) Adults female
- iii) Teenagers females
- iv) Teenagers males
- v) Children

13. What do you think is the reason why commercial motorcyclists engage in crime in your area?

- i). Unemployment
- ii). Financial problems
- iii) Greedy for materialism
- iv). Ineffective security

14. Have you ever been involved in any criminal activities as a commercial motorcyclist?

- i) Yes
- ii) No

PART D: CHALLENGES FACED BY THE SECURITY AGENCIES IN HANDLING COMMERCIAL MOTORCYCLE RELATED CRIMES

15. How would rate the relationship between the police and residence of Nakuru county in addressing crime?

- i) Very friendly
- ii) fairly friendly
- iii) Friendly
- iv) Fairly unfriendly
- v) Very unfriendly

16. In your opinion, what challenges do police face in handling crimes committed by motorcycle operators?

17. What measures have the police put in place to manage confidential information and intelligence obtained from the residents?

- v.
- vi.
- vii.
- viii.

Appendix III: Police station data collection Interview Schedule

1. What is your position in police department.....
2. How frequently do you receive crime activities related to commercial motorcycles in your station?
 - i). Very frequent []
 - ii) Frequent []
 - iii) Rarely []
 - iv). Not at all []

3. Kindly fill the following table.

Year	Before 2010	2011	2012	2013	2014	2015	2016
Number of crime related to commercial motorcycles							

4. What are crime reported against commercial motorcyclists in Nakuru County
 - i. Armed robbery/snatching of Valuables []
 - ii. Kidnapping for ransom/Murder []
 - iii. Raping of females []
 - iv. Duping of people []
5. In your own opinion what is the percentage of crimes committed by commercial motorcyclist are reported to police?.....Percentage (%)
6. What do think makes some victims of commercial motorcyclists shy away from reporting crimes committed to them by commercial motorcyclists in Nakuru County?
 - i.
 - ii.
 - iii.
 - iv.
7. What mitigating measures have been adopted by your police station to addressing crimes committed by commercial motorcycles in Nakuru County?
 - i.
 - ii.
 - iii.
 - iv.
8. What challenges do police encounter in handling crime in your area?
 - i.
 - ii.
 - iii.
 - iv.

Appendix IV: Trend of Motorcycles Data collection Schedule

Trend of Commercial motorcycles in Nakuru County

1. When was the first commercial motorcycle licensed by Nakuru Municipal/ county Council(Year)
2. Briefly describe how they used to operate (*Route, number of pillions and charges*).
.....
.....
3. Kindly fill the following table.

Year	Before 2010	2011	2012	2013	2014	2015	2016
Number of motorcycles licensed in the city							
Number of registered motorcycle SACCOs							
Number of Licensed commercial motorcyclists							

4. What four key challenges do Nakuru council licensing face in controlling number commercial motorcycle in Nakuru city?
 - a.
 - b.
 - c.
 - d.