INFLUENCE OF INTELLIGENCE SHARING ON CRIME PREVENTION IN MOGADISHU CITY, SOMALIA

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DECLARATION

I declare that this document and the research that it describes are my original work and have not been presented in any other university for academic work.

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ABSTRACT

Intelligence sharing among security actors is central to success in crime prevention. In order to plan for and deter potential terrorist attacks and general crime around the world, there is a need for improved information-sharing practices at all levels of government. The study was motivated by increase in crimes in Mogadishu and inadequate contribution of intelligence sharing to prevent crimes in the city. This study aimed to establish the influence of intelligence sharing on crime prevention in Mogadishu City, Somalia. Specifically, the study sought to establish the influence of intelligence sharing, intelligence data collection, intelligence cooperation in investigations and intelligence in surveillance on crime prevention in Mogadishu City, Somalia. This study was anchored on Social control theory. This study employed descriptive research design. The target population of the study was 536 including Criminal Investigation Department officers, National Intelligence and Security Agency officers and police officers living in Mogadishu city Somalia. The sample size was 114. The study selected the respondents using stratified random sampling technique. Primary data was obtained using questionnaires. The questionnaires were self-administered using a drop-and-pick method. Statistical Package for Social Sciences was used to evaluate the data through descriptive and inferential statistics (SPSS Version 25.0). To facilitate data entry, all questionnaires received were referenced, and items in the questionnaire were coded. After cleaning the data, which included checking for entry errors, descriptive statistics such as frequencies, percentages, mean score, and standard deviation were calculated for all quantitative variables and information presented in tables. Content analysis was used to analyze qualitative data, which was then presented in prose. Ethical and legal issues were observed to the latter. The major findings are that the intelligence sharing influences crime prevention in Mogadishu city as shown by 94.4%. The study also found that intelligence sharing influences crime prevention in Mogadishu city to a great extent as shown by 38.1%. The study also found that intelligence data collection influences crime prevention in Mogadishu city as shown by 92.1% and that intelligence data collection influences crime prevention in Mogadishu city to a great extent as shown by 48.8%. The study concluded that intelligence sharing had the greatest influence on crime prevention in Mogadishu City, Somalia followed by utilization of intelligence in investigations, then intelligence in surveillance while intelligence data collection had the least influence on the crime prevention in Mogadishu City, Somalia. The study recommends that there is a need to establish procedures and mechanisms for sharing intelligence among the security officers. The study further suggests that all levels of law enforcement staff participating in the criminal intelligence process receive training. The study also suggests that law enforcement officers should use robot cameras to conduct intelligence surveillance. Policymakers in Somalia might be able to use the results of this study to establish and formulate a framework that will aid in the improvement of security in the region. The results of this study would also help government officials, especially CID, who would be able to use them to develop strategies for integrating intelligence into their investigations. As a result, crime in Mogadishu and even Somalia as a whole would be minimized.

ABBREVIATIONS/ACRONYMS

CCTV	:	Closed-Circuit Television
CID	:	Criminal Investigation Department
NISA	:	National Intelligence and Security Agency
OSINT	:	Open Source Intelligence
SPSS	:	Statistical Package for Social Sciences
UCR	:	Uniform Crime Reporting
NGOs	:	Non-Governmental Organizations
TAM	:	Technology Acceptance Model

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CHAPTER ONE

INTRODUCTION

1.1 Introduction

This study sought to establish the influence of intelligence sharing on crime prevention in Mogadishu city, Somalia. This chapter will be divided into various sections which include study background, problem statement, study purpose, study objectives, research questions, and study significance, study scope, study delimitation, study limitations, study assumptions, theoretical and conceptual frameworks.

1.2 Background of the Study

Crime prevention includes strategies and measures that seek to reduce the risk of crimes occurring, and their potential harmful effects on individuals and society, including fear of crime, by intervening to influence their multiple causes. These measures can be implemented by individuals, communities, businesses, nongovernment organizations and all levels of government, to target the various individual, social and environmental factors that increase the risk of crime, disorder and victimization. Crime prevention includes strategies and measures that seek to reduce the risk of crimes occurring, and their potential harmful effects on individuals and society, including fear of crime, by intervening to influence their multiple causes. These measures can be implemented by individuals, communities, businesses, nongovernment organizations and all levels of government, to target the various individual, social and environmental factors that increase the risk of crime, disorder and victimization. Crime prevalence in the today's world has caused a lot of problems in every nation. It erodes the sense of safety and security to destroy the social fabric. The consequences of crime on society are varying depending on the nature and

degree of crime (Camilleri, 2018). It poses a problem when its effect is so pervasive in society that it poses a threat to the protection of individuals, property, social order and solidarity. In recent years, numerous countries continue to suffer from high rates of insecurity both in urban and rural areas, despite progress in combating crime and terrorism (Smith & Malinowski, 2018). Citizens of various countries are having serious problems with higher levels of violence. Leaders in law enforcement agree that there are compelling reasons in their departments for changing their policies and the police activity. Such explanations form part of the past century's history of police and police study as social order has changed and crime is growing, which has an impact on these communities (Clark, 2018).

Across the globe, the police work faces a lot of difficulties like development and innovation of new strategies by the criminals in committing the crime. Hence, police and social scientists should also develop new police philosophies or patterns to address police needs in the twenty first century, in order to prevent and combat crime. The police should use a proactive rather than re-active method of policing in order to make steps in crime prevention (Mutemwa, Mtsweni & Mkhonto, 2017)

A number of the police officers have supported intelligence-led policing in Australia, which started in the late 1990s. It includes new local transparency mechanisms, expanded intelligence and investigation convergence and enhanced monitoring of day-to-day polices via intelligence distribution (Ratcliffe, 2016). In a variety of Australian jurisdictions, the output outcomes analysis, and more complex elements, has been used in different formats, including the operations and crime analysis. By creating an Official Security Fund established by Minister Jose Gregorio, the Federal Government of Brazil

has begun integrating the preventive elements which propose intervention on known causes of crime and violence. The national strategy on public safety, whose goal is to deter crime and violence, has been implemented in the Federal Government more recently since 2003. The reform of the National Public Safety Fund Act in particular opened the door to future local funding of preventive measures for violence. While the Department of Justice has yet to fully review the services, a database has been created for the collection, systematization and distribution of public experience (Beckley, 2018).

Regionally, In South Africa, Oke, Aigbavboa and Sepuru (2017) revealed that the main duties of the police were year by year to reduce the level of crime. In doing so, they have used the internet to ensure the safety of the society and to help them find solutions to crime (Oke, Aigbavboa & Sepuru, 2017). In Kenya, according to the National Police Service Act 2011, the National Police Service shall provide assistance to the public in need, the preservation of law and the law, the safeguarding of security, the protection of life and property, the investigation of offences, intelligence collection, crime prevention and detection, the prosecution and execution of all charges against offenders and the fulfillment of any other duties which may be assigned to the offenders (Karuri & Muna, 2019).

Locally, Somalia is one of the world's developing countries and has a history of waves of violence, illicit activities and different forms of delinquency. Since the 1990s, Somalia has been on the international crime map (Weldemichael, 2019). Such crimes include armed robbery, terrorism, shooting, murder, car theft, fraud, corruption, bribery, food and alcohol abuse, gambling, smuggling, trafficking in human beings, abduction, drug trafficking, money laundering, advanced fees and other illegal activities. It is absurd that any government in Somalia is hesitant and genuinely willing to rid society of criminal

patterns and demonstrations because people in leadership roles are themselves responsible for corruption and violence (Barrow, Alam & Mustafa, 2019).

Crime takes place daily in Somalia. The crimes that occur in the world and the crimes in Somalia are somehow related but also they have differences in the aspect causes. Somalia crimes were committed rationally most of the time (Muhammed, 2018). The aim of the intervention and the kinds of interventions carried out to achieve the desired outcomes varies in a number of different approaches to crime preventing. Police driven by intelligence is an ideal solution in the war against crime. The main focus of police intelligence is the exchange of intelligence information and the reaction to crimes by law enforcement officials who work together with the community. Somalia being a crime and terror prone country, intelligence cooperation is needed to help in preventing crimes (Omar & Miyonga, 2017). This was because there have been challenges in sharing intelligence.

1.3 Statement of the Problem

Intelligence-driven policing initiatives are coming to the fore in every nation across the globe. Somalia is one of the unindustrialized nations that have and is experiencing prevalence of rising waves of crime, intentions to commit crime as well as fluctuating degree of crimes (Muhammed, 2018). The crime statistics stood at 4.31% in 2015 and have been on the rise since then. The crimes involved terrorism, gun robbery, shooting, rape, stealing of cars, fraud, bribery, human trafficking, abduction, drug smuggling, money-laundering and internet fraud scam. Despite various strategies to prevent crime, most of the strategies have not been effective (Omar & Miyonga, 2017). According to Somali Police Service inadequate national intelligence officers to provide intelligence have made it impossible to establish how intelligence cooperation contributes to crime prevention. There

was also doubt on the ability of the police and other security forces in Somalia to use intelligence effectively to deter and monitor crime. Somalia's people have therefore lost confidence in safety agencies due to the continuing increase in the crime rate (Barrow, Alam & Mustafa, 2019).

Mogadishu being the residence of the most government officials including the president has been the target for crimes. Terror attacks coupled with other crimes have continued to thrive in Somalia's capital. 313 of the reported violent events in Mogadishu in 2017 were according to ACLED, attacks on military targets. The events include both attacks on government forces and skirmishes between government forces. Attacks, primarily by al-Shabaab, against government forces occur both by shooting and by the use of hand grenades and bombs. There has been inadequate enhancement of efforts for fighting crime especially through involvement of the intelligence officers (Hills, 2019).

Because the perpetrators are unknown, the motives also remain unknown. Muhammed (2018) notes that increasing corruption allegations as well as ineffectiveness in fighting crime have been continually levelled against the Intelligence officials. Many - perhaps most- crime prevention initiatives do not succeed because they do not share intelligence. It is rare for communities to conduct a detailed analysis of their problems before moving ahead with prevention programs. In addition to this, there is limited literature focusing on contribution of intelligence cooperation on crime prevention. Though, Omar and Miyonga (2017) examined determinants of crime prevention in Mogadishu, Somalia, the study did not expound on contribution of intelligence cooperation on crime prevention. Hence this study sought to bridge this gap by establishing the influence of intelligence sharing on crime prevention in Mogadishu City, Somalia.

1.4 Purpose of the Study

The purpose of the study was to examine the influence of intelligence sharing on crime prevention and how such cooperation could be used to strengthen the fight against crime and terrorism in Mogadishu.

1.5 Objectives of the Study

The objective of the study was to establish the influence of intelligence sharing on crime prevention in Mogadishu City, Somalia. The research was guided by the following specific objectives:

i. To determine the influence level of intelligence sharing on crime prevention in Mogadishu City, Somalia.
ii. To establish the significance of collection in intelligence data on crime prevention in Mogadishu City, Somalia.
iii. To assess the influence of use of intelligence in investigations on crime prevention in Mogadishu City, Somalia.
iv. To examine the influence of intelligence surveillance agencies on crime prevention in Mogadishu City, Somalia.

1.6 Research Questions

The study sought to answer the research questions

i. How does the level of intelligence sharing influence crime prevention in Mogadishu City, Somalia?
ii. What is the influence of significance of data in intelligence on crime prevention in Mogadishu City, Somalia?
iii. In which ways does use of intelligence in investigations influence crime prevention in Mogadishu City, Somalia?

iv. What is the influence of intelligence surveillance agencies on crime prevention in Mogadishu City, Somalia?

1.7 Significance of the Study

The importance of the study, as described in Regioniel (2015), provides the reader with details on how the research will contribute, such as the impact of the study and who will benefit from it. It also outlines the importance and potential benefits of the study. The policy makers in Somalia may use the findings from this research to formulate and develop a framework that would help in the improvement of security in Somalia. The security personnel's training and possible workshops improve community police capacity to use mobile application in crime prevention.

The findings of this study will also benefit the government officials' especially Criminal Investigation Department (CID) who may use them to come up with strategies of how to integrate intelligence in their investigations. This will in turn reduce crime in Mogadishu and even Somalia at large. The study will as well be significant to police since they will be aware of the effectiveness of intelligence sharing and realize where they need to improve.

The report would also benefit members of the community because the study's findings address the disparity between the police force and the community in order to strengthen citizens' commitment to information sharing between security services. This would dramatically increase the detection of illegal activity by residents and therefore deter crime.

The study findings are expected to contribute to and reinforce available literature in regard to influence of intelligence sharing on crime prevention. The literature will be useful to scholars and academicians as a reference for future studies on contribution of intelligence cooperation on crime prevention.

1.8 Scope of the Study

The scope of the study sets the limits for analysis in terms of investigative depth, content and sample size, location, time and theory (Creswell, 2002). The geographical scope of the study was Mogadishu city, Somalia.

The objectives of the study were to determine influence of intelligence sharing on crime prevention in Mogadishu City, Somalia, to establish the significance of collection of intelligence data on crime prevention in Mogadishu City, Somalia, to assess the influence of use of intelligence in investigations on crime prevention in Mogadishu City, Somalia and to examine the agencies of intelligence surveillance on crime prevention in Mogadishu City, Somalia. The sample size was 114 and data was collected using questionnaires.

1.9 Delimitation of the Study

According to Simon (2011), delimitations in research refers to identification of the limits/ boundaries of territorial coverage during the research process. The study was delimited 536 respondents including CID officers, NISA officers and police officers living in Mogadishu city Somalia. The study was delimited to studying level of intelligence sharing, significance of intelligence data collection, utilization of intelligence cooperation in investigations and relationship among agencies in surveillance as independent variables and crime prevention as dependent variable. The study did not cover the entire Somalia or the entire security sector but only focused on Mogadishu city and its security actors.

1.10 Limitations of the Study

According to Kothari (2009), limitations are bounds over which the investigator has no control. The study will be limited to Mogadishu city only. The respondents targeted in this study were reluctant to give any information that they fear could be used to intimidate or print a negative image of the information they are looking for. The researcher used introduction letter to assure the respondents that information they provide was processed with confidence and used purely for academic purposes. The researcher shall analyse the accuracy of the collected data and check their reliability. The study also encountered security risks and language barriers as the questionnaire was in English and most of the respondents could not comprehend English. The researcher engaged locals who are fluent in English and native language for assistance. The study also limited too little literature on the area of study. This was addressed by reading widely on the subject of the study.

1.11 Assumptions of the Study

Assumptions of the study are statements by the researcher that certain elements of the research are understood to be true. The study assumed that intelligence sharing promoted crime prevention. This study also assumed, in response to the research tools, that the respondents would be truthful, cooperative and impartial and that they could respond to the research tools in good time. The study also assumed that the sampled population was a representation of the entire target population.

1.12 Theoretical Framework

Theory is a collection of interrelated structures, concepts and ideas that systematically understand phenomena in order to explain and predict variables by describing relationships between variables (Kerlinger, 2008). This study will be anchored

on Social control theory which was advanced by Travis Hirschi in 1969 which states that individuals break the law due to a breakdown within the societal bond.

1.12.2 Social Control Theory

Control theory has been advanced by scholars such as Hirsch (1969) and Gottfredson (1990). The concern of control theory of crime is on why people conform. Control theorists argue that all people have needs and desires that are more easily satisfied through crime than through legal channels. For example, it is much easier to steal money than to work for it. So in the eyes of control theorists, crime requires no special explanation. It is often the most expedient way to get what one wants. Rather than explaining why people engage in crime, we need to explain why they do not.

According to control theorists, people do not engage in crime because of the controls or restraints placed on them. These controls may be viewed as barriers to crime referring to those factors that prevent them from engaging in crime. So control theory focuses on the factors that restrain the individual from engaging in crime. Control theory goes on to argue that people differ in their level of control or in the restraints they face to crime. These differences explain differences in crimes. Some people are freer to engage in crime than others.

Control theories describe the major types of social control or the major restraints to crime. An important component of the theory is direct control. When most people think of control they think of direct control, someone watching over people and sanctioning them for crime. Such control may be exercised by family members, school officials, co-workers, neighborhood residents, police, and others. Family members, however, are the major source of direct control given their intimate relationship with the person. Direct control has

three components: setting rules, monitoring behaviour, and sanctioning crime. Direct control is enhanced to the extent that family members and others provide the person with clearly defined rules that prohibit criminal behaviour and that limit the opportunities and temptations for crime. These rules may specify such things as whom the person may associate with and the activities in which they can and cannot engage in.

Direct control also involves direct and/or indirect monitoring the person's behaviour to ensure that they comply with these rules and do not engage in crime. In directmonitoring, the person is under the direct surveillance of a parent or other conventional "authority figure." In indirect monitoring, the parent or authority figure does not directly observe the person but makes an effort to keep tabs on what they are doing. The parent, forexample, may ask the juvenile where he or she is going, may periodically call the juvenile,and may ask others about the juvenile's behaviour. People obviously differ in the extent towhich their behavior is monitored. Finally, direct control involves effectively sanctioning crime when it occurs (Sillaber, Sauerwein, Mussmann & Breu, 2016).

Effective sanctions are consistent, fair, and not overly harsh. Control theory of crime is relevant to the study on borderland-related crimes and security threats. Agencies responsible for law enforcement and border management need to put in place security control measures which include monitoring of movements of people and goods along borders.

Social conflict theory encompasses barriers when communicating with outside organizations as a natural human tendency. According to Li and Xue (2019), the internal communication barriers to police communication include fear and suspicions, departmental status of individuals, officer attitude and behavior, etc. These barriers lead to problems in

communication throughout a police department. He noted the need for communication within police departments, but also recognized the difficulty in eliminating existing barriers (Tricco, Zarin & Straus, 2018).

Social conflict theory can be identified in current research displaying its influence on intelligence communication within law enforcement because resources have a tendency to maintain within its organization. Despite these efforts to increase communication, interaction remains scarce among agencies because of the parochialism that pervades law enforcement. Most recently, Jackson (2014) studied efforts being taken to share information, how information sharing has been evaluated, and the better ways of sharing information.

1.12.2 Gap Theory

Another theory to be used in the study was the gap theory of crime. This theory as postulated by Peter Lock conceptualizes what he calls the Drawdown Fiasco whereby, downsizing of security agencies both in terms of material and human capital results in the inability of the law enforcement agencies in addressing emerging crime. According to Peter Lock, mishandled drawdowns can misfire resulting in an increase in crime. This results in a spike in emerging crime as the law enforcement agencies concerned can no longer be able to asphyxiate intelligence nor securitize their security jurisdictions (Lock, 1998). Within the study, the theory was pivotal due to the fact that it will help explain the nexus of upsizing and crime reduction particularly on crime intelligence sourcing, gathering and analysis. Strategies include those which alter the physical environment to reduce crime opportunities (environmental approaches) and address and restrict motivated offenders' supply (social and structural approaches) and address the underlying social and economic

causes of crimes. Crime prevention can be consistently based on improving civil society institutions or addressing specific physical or social dimensions of crime induced (primary prevention) (Desmond Dawes & Davidson, 2019).

1.12.3 Broken Windows Theory

This study employed the broken windows theory to examine the impact of information technology on policing. Popularized by Wilson and Kellings (1982), the broken window theory operates on the backdrop of the fact that policing is influenced by the social environmental i.e., the societal measures in place in the society in question have a direct influence on patterns of offending has been taken up. In their theory, James Q. Wilson and George Kellings aptly demonstrate that certain signs of disorder (broken policing, decaying law enforcement institutions, broken windows, housing abandonment, litter and graffiti) will encourage criminality in communities.

The application of the theory to this study was informed by the core idea behind the theory, i.e., the 'crime prevention' approach which places an emphasis on an active approach to crime prevention through the intervention of the particular causal factors that lead to a criminal incident occurring. Since the 1990s, Somalia has been on the international crime map (Weldemichael, 2019). Such crimes include armed robbery, terrorism, shooting, murder, car theft, fraud, corruption, bribery, food and alcohol abuse, gambling, smuggling, trafficking in human beings, abduction, drug trafficking, money laundering, advanced fees and other illegal activities. It is ridiculous that any government is reluctant and sincerely determined in Somalia to rid society of criminal patterns and protests because people who are also responsible for corruption and crime in leadership positions (Barrow, Alam & Mustafa, 2019).

Its emphasis on the fact that crime and all its negative consequences can be prevented does not escape this study. This study thus seeks to find out if intelligence sharing leads to crime prevention.

1.13 Conceptual Framework

The conceptual framework as defined by Miles, Huberman (1994), is a written or visual presentation that explains either graphically or in narrative forms the main themes to be studied, for example, the key factors, concepts variables are pre-assumed relationship among them. The framework develops from the literature review and objective of the study. The study purpose is determining the levels of reliance of the dependent variable on independent variable. The conceptual framework is used to demonstrate how the research system informs and supports the research, its concepts, expectations, beliefs and assumptions as well as its fundamental part in research design. Figure 1.1 demonstrates how these variables are intertwined diagrammatically.

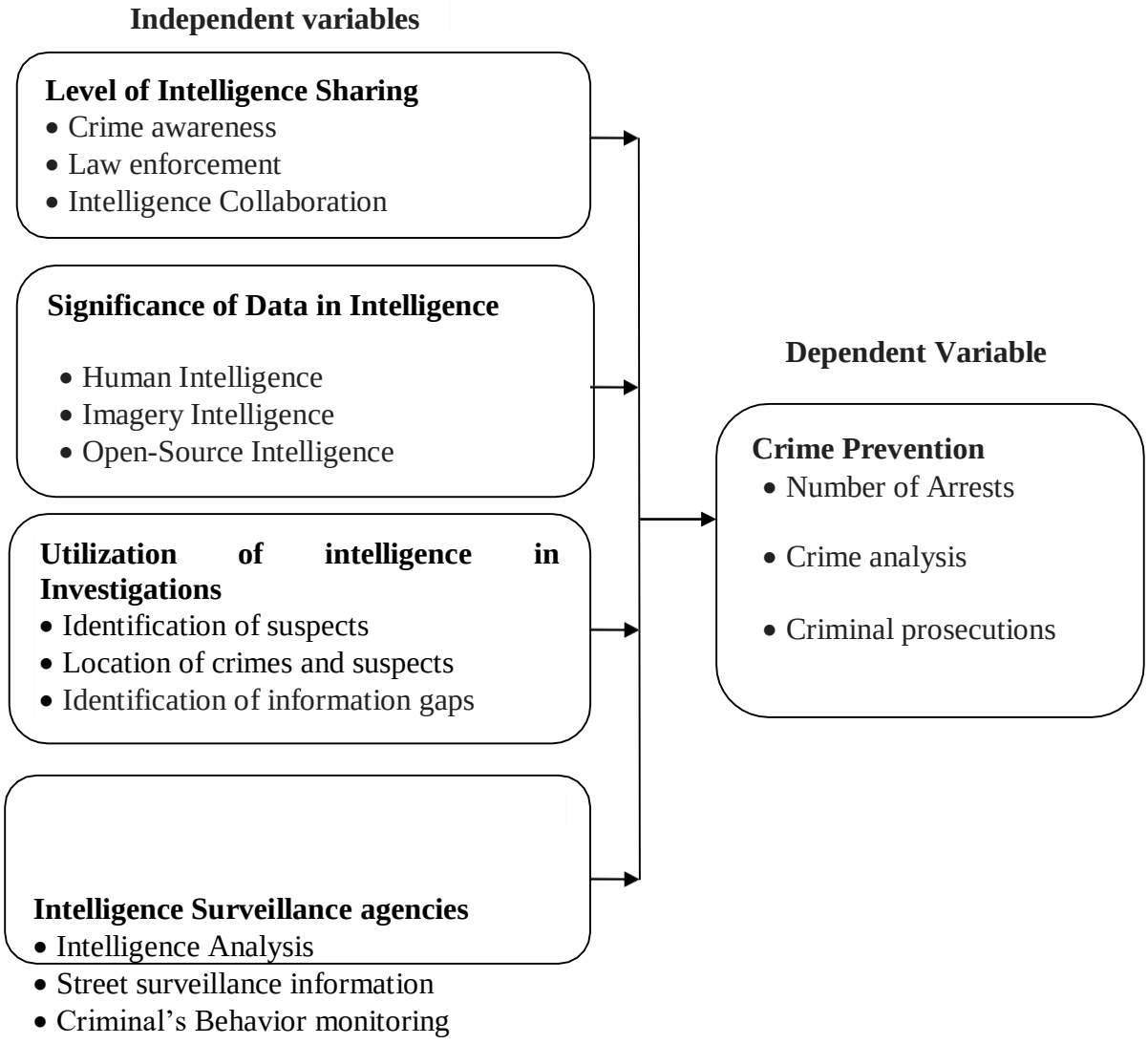

Figure 1. 1: Conceptual Framework of the Intelligence Sharing on Crime Prevention

In the above framework, the dependent variable is the crime prevention in Mogadishu City while the Independent variables include level of intelligence sharing, significance of intelligence data collection, utilization of intelligence cooperation in investigations and relationship among intelligence agencies in surveillance. The dependent and independent variables exhibit linear relationship.

The conceptual framework shows that significance of data in intelligence assessed by human intelligence; imagery intelligence and open-source intelligence have a linear relationship with crime prevention. In addition, it shows that utilization of cooperation in investigations assessed by identification of suspects, location of crimes and suspects and identification of information gaps have a linear relationship with crime prevention. In addition, agencies of intelligence surveillance measured by intelligence analysis, street surveillance information and criminal's behavior monitoring have a linearrelationship with crime prevention. Finally, level of intelligence sharing measured by crimeawareness, law enforcement and intelligence collaboration has a linear relationship with crime prevention.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

The purpose of the study is to establish the influence of intelligence sharing on crime prevention in Mogadishu City, Somalia. This chapter discusses literature review for contribution of intelligence cooperation (intelligence sharing, intelligence data collection, intelligence cooperation in investigations and intelligence in surveillance). Lastly the summary of the literature and research gaps will be presented.

2.2 Review of the Literature

Bowers (1984), notes that the intelligence collections dates from the early days of civilization. Primitive man searched for answers to survival and comfort issues. The need to know thus is as deeply integrated as the need to replicate in human biology and culture. To order to survive, people need to know about their climate, for example in relation to hazards and food supplies. The gathering of knowledge on these basic needs is therefore a key to survival. Intelligence is as old as humanity itself as one of the basic instincts of the human survival (Hughes & Wilson, 2005). Obviously, human beings and the institutions have their own secrets, things which are concealed between individuals, between institutions and between nations or states. Fear, vulnerability, gullibility and guilt contribute to a tendency to hide information from one another. Human beings, on the other hand, have inherited curiosity. This is also a natural instinct to want to learn and discover the mysteries of the other side. The presence (curiosity against secrecy) of these two opposing forces led to natural rivalry among enemies and sometimes between friends and allies (Hughes & Wilson, 2005).

2.2.1 Level of Intelligence Sharing and Crime Prevention

The sharing of intelligence is the ability between federal, state, local or private entities to exchange information, data or knowledge concerning crimes as required (Sillaber, Sauerwein, Mussmann & Breu, 2016). The exchange of intelligence also involves bilateral or multilateral intergovernmental agreements, and internationalorganizations, to deter any kind of crime Sauerwein, Sillaber, Mussmann and Breu (2017) argued that information exchange is crucial to deal with crime. It assists the police, municipal services and national law enforcement agencies stop criminals moving within municipalities.

According to Li and Xue (2019), the exchange of information to enhance criminal intelligence is specifically intended to increase the available resources for decision-making. This can not only help to identify the target group, but also helps to recognize lower risk cases in an era of resource constraints (Sauerwein, Sillaber, Mussmann & Breu, 2017). They can also help prevent 'blindness of ties' where there is no knowledge in one jurisdiction in other jurisdictions. This could contribute to the full extent of crime that goes beyond the boundaries of regulation. The Bichard investigation in the United Kingdom into the death of two children by a school attendant revealed failures to exchange information among police and child protection services leading to blindness. The investigative report urgently recommended that a national police intelligence system be implemented. An improved intelligence picture could have led in each case to an increased exchange of information among jurisdictions (Sillaber, Sauerwein, Mussmann & Breu, 2016).

Jasper (2017) notes that the sharing of information also supports de-conflict, which aims to avoid the opposite of link blindness if several police forces investigate the same

individual and group simultaneously. In this situation the sharing of information can lead to time and resources savings by preventing duplication of efforts for each agency concerned. In Australia, crime information about an entity can be held in several databases. A parliamentary survey in Australia's criminal intelligence in 2013 found that such information could be held on several multi-legal enforcements, police and government agencies' different systems. The sharing of information on law enforcement can also lead to higher results than a single agency would do alone (Sillaber, Sauerwein, Mussmann & Breu, 2018)

Although information sharing has clear benefits, risks are also present. Most important to law enforcement agencies is the safe maintenance and communication of information. The recipient agencies must be confident about their handling and secure information (Wagner, Mahbub, Palomar & Abdallah, 2019). In other words, those who operate within a network for information sharing must meet common security standards governing information storage and distribution. Sheptycki (2017) noted that this can demarcate 'insiders' who are being shared by the police by "outsiders" and are not being shared by them. This can be especially relevant when dealing with certain foreign jurisdictions, in which high levels of public sector corruption may erode trust.

Mashiloane (2013) examined the use of intelligence led policing in crime prevention by the South African Police Service. The perception that only the crime intelligence unit (structure) within the SAPS is responsible for collecting crime information, and the notion “Intelligence collection is not seen as everyone’s job still exists. The study revealed that the intelligence products used for planning and executing crime prevention and/or crime combatting operations do not have adequate information, which

does affect the outcome of the operations. The lack of adequate information on the intelligence products is attributed to nonintegrated crime and information analysis, as well as noncompliance with the draft policy on crime information/intelligence flow.

Mabia, Iteyo and Were (2016) examined the effectiveness of intelligence-led policing in the management of domestic crimes in Kenya based on a case of Kakamega County. The overall objective of the study was to examine the practice of intelligence led policing with a particular focus on the management of domestic crimes in Kakamega County. The specific objectives were to: examine the nature of intelligence led policing, assess the effectiveness of intelligence-led policing in the management of domestic crimes, and determine the challenges that intelligence-led policing encounter. The study was guided by rational choice and social control theories. The study employed a descriptive survey design and the target population consisted of household heads, police officers, private security firms, chiefs and assistant county commissioners in Kakamega County. Purposively sampling techniques was used to select OCPD, DCIO, OCS, private security firms, assistant county commissioners, chiefs while random sampling technique was used to select junior police officers and household heads. In the total, the sample respondents were 293. Primary data was collected through interviews, questionnaires while secondary data was collected from books, internet, journals and newspapers. Validity was determined using content validity while reliability was done using test retest method. Data was analysed using descriptive and inferential statistic and it was presented in form of tables and charts. The findings revealed that Intelligence-Led Policing in Kakamega County was characterized by criminal informer, targeting of criminals unlike particular crime and holistic investigation of crimes using results-oriented tactics and strategies. The study

recommends that government needs to commit more resources toward Intelligence-Led Policing so that police officers can be trained, equipment and technology can be procured.

2.2.2 Significance of Collection in Intelligence Data and Crime Prevention

The collection of information is just a first step in the fight against crime, even terrorism. An information piece is like a puzzle piece. Often, the big picture is only when a piece of information is combined with many others (Lassau, Estienne & Bidault, 2019). In addition, information must lead to action and not to terrorist acts. It is therefore critical that information is not only collected on terrorist activities but also shared with other federal governments that possess similar information and lead to preventive action (Tricco, Zarin & Straus, 2018).

The most available and easily obtainable source of intelligence is open source intelligence (OSINT). OSINT includes the traditional publicly available sources such as newspapers, books and magazines, as well as the huge expansion of online available sources (Williams & Blum, 2018). Online sources, such as commercial databases which are available on subscription, also qualify as OSINT. Online sources are the most commonly used open sources. The law enforcement reports, which only reflect reported, recorded and then not canceled crimes, are two major methods for collecting crime data and the victim survey (victimization statistical surveys) which are based on personal memory and honesty (Lassau, Estienne & Bidault, 2019). Incidents reported are generally more reliable but under recorded for less common crimes such as intentional murder and armed robbery. As laws and practices differ from jurisdiction to jurisdiction, it may be difficult to compare criminal statistics between and even within countries; typical compare can be made between violent deaths (homicide or killing) and the relative clear definition

(Hassan & Hijazi, 2018). The reviewed literature did not highlight the significance of intelligence data collection on crime prevention in Mogadishu City, Somalia.

The collection of intelligence data includes both the acquisition of information and the provision for crimes prevention. The collection process includes the administration of different activities, including the development of collection guidelines, to optimize the availability of intelligence resources. Information collection requirements for the needs of potential consumers are developed (Zheng, Tao & Rieckermann, 2018). Based on the intelligence identified, specific tasks for the collection of information are given. These tasks are usually redundant and can be used for collection activities in a number of various intelligence disciplines. Tasking redundancy compensates for the possibility of a collected asset loss or failure. It ensures that if a collection asset fails, doubling or other assets that meet the collection needs are compensated. The use of various types of collecting systems leads to redundancy. It also allows the collection of various types of data to confirm or refute potential assessments of crime (Ezeji, & Olutola, 2018). The reviewed literature did not highlight the significance of intelligence data collection on crime prevention in Mogadishu City, Somalia.

Intelligence data collection systems rely, as per Hassan and Hijazi (2018), on secure, fast, redundant and reliable correspondence that enable data exchange and offer opportunities for asset intersection and exchange of tips between assets. Once gathered, processing and production information is correlated and forwarded. Uniform criminal reporting (UCR), however, has become one of the leading social indicators in the country over the years and generates reliable information for use in law enforcement administration, operations and management. The program was the starting point for law

enforcement officers, criminal justice students, researchers, the media and the general public seeking crime information in the country. In 1929, the International Association of Police Chiefs conceived the program to respond to the country's need for reliable and consistent crime statistics (Lassau, Estienne & Bidault, 2019).

Information which could be collected for crime intelligence analysis is informant information, surveillance, travel records, CCTV videotapes, banking transactions, undercover information, pen-register/trap and trace) (communications-related information), documentary evidence, forensic evidence, communications intercepts (wiretaps). Just as information and intelligence should be distinguished from each other, there is also a difference between information sharing and intelligence sharing‘. Of importance is that intelligence is both a process and an end-product, or both an activity and a product of that activity (Williams & Blum, 2018).

Although Australia does not have an external threat of terrorism it has a counter-terrorism information collection organisation known as the Australian Security Intelligence Organisation. This agency was created in 1949 and derives its authority from the Australian Security Intelligence Organisation (ASIO) Act of 1979. The main function of this intelligence organisation is to collect and analyze information on threats to the country’s internal security, such as terrorism and trans-national crimes. Intelligence products are disseminated to the government, police, and the Australian Intelligence Community at large for operationalization. The main source of information for this agency is the community who provide information as informants or ordinary law abiding citizens. In addition, the agency actively collects information via computer access, intercepts of mail and telecommunications, and through covert listening and tracking devices. ASIO has a

close working relationship with federal, state, and local law enforcement agencies (Chalk & Rosenau, 2004).

The South African Communist party was established in 1921. During the start of the Second World War, the communists in South Africa refused to be involved in any way in the war, either by supporting the allied forces or physically participating in the war as soldiers of the Union of South Africa. Immediately after the invasion of Russia by Hitler, the communists became loyal and fervent allies of the Allied powers, namely, Britain and the United States of America. This led to the Communist party of South Africa recruiting members to fight against Germany in the war. As a result, the communists managed to infiltrate the army, the civil service, and the labor unions of South Africa. This strong position of the Communist party of South Africa posed a serious threat to the internal security of the country as it was suspected of being behind the strike actions by miners in the Witwatersrand area and in other areas in the Transvaal province (de Witt Dippenaar, 1988). As the first line of defense, the police had to improvise to deal with the threat of communism which was spreading like cancer in South Africa, creating insecurity by organizing strikes across the country. This situation posed a serious threat to the white minority government of South Africa.

The situation prompted the police management to establish a special unit which was tasked with preserving the internal security of the country. In response, the then Commissioner of the South African Police, Major General Palmer, instructed Major H. J du Toit to establish the Security branch of the South African Police which would deal mainly with the threat of communism and other political activities which threatened to undermine the white government in 1947. This new branch was on a par with the Detective

and Uniform branches of the SAP. The establishment of this new branch was met with resistance from the old commissioned officers, who regarded the security branch as essentially foreign to the traditional nature and duties of the police force. In 1948 Major du Toit and a team of police officials went to Britain to be trained in methods of combating subversion and subversive organisations. After the training, they returned to South Africa with firm ideas regarding the further operation of the Security Branch and began to apply them in practice (de Witt Dippenaar, 1988). Africa and Kwadjo (2009) in addition state that this unit acted as an elite political police. Its primary function was to gather information about the political opponents of the apartheid regime. The main aim of this unit was to achieve short and medium term objectives such as detentions, prosecutions, and imprisonment.

The first step in the information collection process is to establish and understand the assets that the organisation is responsible to protect. An example would be, that in the law enforcement environment the police are responsible for protecting the citizens from criminal elements and any public disorder. It is, therefore, very important to know the capabilities of different individual criminals and criminal organisations, and to understand where they can direct their intelligence efforts. Prior to collecting any information, it is essential to define adversaries or targets (Metscher & Gilbride, 2005).

Metscher and Gilbride (2005:13) define an adversary as any person or organisation which is involved in criminal activities. On the other hand, Colombo and Nash (2007:4-5) define a target as a group, organisation, or individual that is the intended subject of an authorised criminal intelligence assignment because there is a reasonable suspicion that the group or organisation is, or individual members of the group or organisation are, involved

in a definable criminal activity or enterprise. The above definitions will help to direct collection efforts, namely who should be the target of collection, and what and where the efforts should be directed. Adversaries pose a threat to the organisation. I It is, thus, very important to understand the meaning of the word “threat”.

Active collection includes entering search criteria into a search engine, reading through articles in print media, or making “open cover” telephone calls. With active search, the researcher must enter search criteria and review the results, or dial a phone number to determine if it is a voice or data line (Metscher & Gilbride, 2005:15). Even though open sources of information are such vital tools of information collection, in South Africa only a few crime analysts and intelligence operatives, especially at station level, have access to open sources of information such as print and electronic media. This creates a deficiency with regard to information collection and the generation of intelligence products

Passive collection is conducted using automated processes, with some offered free of charge. Using refined, relatively focused search criteria with an automated process provides useful results with minimal “noise”. The basic service is typically a “news alert” offered by a search engine with varying amounts of customization, and, at the high end, are either pay access media databases offering intelligent agent features or a local software application that crawls the web, or any other designated network, in search of matching data. These applications will monitor specific websites or blogs and give notification when the content of the site changes (Metscher & Gilbride, 2005:15).

Duarte (2007:14) contends that information collection is the bedrock ofintelligence, and that it is the most difficult aspect in the intelligence cycle. Collection is

difficult because it should answer questions posed by the policy makers. The questions are often difficult and challenging because the answers are always protected by the enemy or criminal group. The collector, therefore, is faced with the challenge of obtaining information that is difficult to get or hidden from plain view. Instead of attempting to answer main intelligence questions outright, intelligence professionals seek to break down requirements into packets of information that can be analyzed. These requests which are known as intelligence requirements outline specific bits of information to be collected. Together these bits of information help the analyst to form answers to the policy question being investigated.

As has been indicated previously information collection has to be done within the ambit of the law, and Section 2(3) of the National Strategic Intelligence Act, 39 of 1994 gives the South African Police powers to collect information. It states that the function of the Crime Intelligence Division of the South African Police Service shall be to gather, correlate, evaluate, and use crime intelligence in support of the functions of the South African Police Service as contemplated in section 205 of the constitution. Emanating from the needs of a specific intelligence problem, collection is conducted utilizing sources, methods, and techniques in the fields of Human Intelligence (HUMINT), Electronic Intelligence (ELINT), Signals Intelligence (SIGINT), Technical Intelligence (TECHINT), and Open Source Intelligence (OSINT). The products of all these different collection activities are forwarded to the intelligence analyst who will convert these raw data to an intelligence product. During the conversion of information into intelligence the analyst is also responsible for the identification of information deficiencies or gaps. After identifying the information gaps the analyst will formulate them into intelligence collection

requirements. These requirements are compiled or included in a collection sheet or plan and thereafter distributed to the correct information or intelligence collection technique agency, Human Intelligence (HUMINT), Electronic Intelligence (ELINT), Signals Intelligence (SIGINT), Technical Intelligence (TECHINT), and Open Source Intelligence (OSINT) to satisfy the information or intelligence requirements (Stephens, Smith, van der Merwe, Maganedisa, Mthimunye, Makhombothi, Nel, Mawdsley, Neethling, Sizani, de Beer, Terblanche, & Duvenhage, 2004: 01).

Mabia, Iteyo and Were (2016) examined the effectiveness of intelligence-led policing in the management of domestic crimes in Kakamega County, Kenya. The findings revealed that Intelligence-Led Policing in Kakamega County was characterized by criminal informer, targeting of criminals unlike particular crime and holistic investigation of crimes using results-oriented tactics and strategies. The study recommends that government needs to commit more resources toward Intelligence-Led Policing so that police officers can be trained, equipment and technology can be procured. The reviewed literature did not highlight the significance of intelligence data collection on crime prevention in Mogadishu City, Somalia.

2.2.3 Use of Intelligence in Investigations and Crime Prevention

This is the stage where intelligence products are applied, for crime prevention, investigation, operational, or management purposes. The intelligence unit must ensure that the intelligence products are thoroughly understood by the operational components and the management who utilize them. In cases of tactical intelligence, an analyst should work actively with the investigators or crime prevention unit to give advice and monitor the application of intelligence. There must be constant feedback among those who use the

intelligence and the analyst and the intelligence unit manager (Schneider, 2009). During the interaction with CIOs, CIMO and crime prevention commanders, it came to light that in South Africa, there are few, if not no, instances where feedback is given to crime analysts about the utilisation of intelligence products. To add salt to the wound there is no credit given to crime analysts when successes are achieved from the intelligence products.

The advent of criminal intelligence analysis is directly linked to the transformation of individual crime into organized or group crime. The effective use of intelligence is crucial to a law enforcement agency's ability to combat criminal groups. Intelligence analysis also provides the agency with the knowledge required for effective management of its resources. With appropriate tasking, the products of intelligence analysis can assist in developing strategic plans to tackle current problems and prepare for future anticipated ones.

Criminal intelligence analysis permits law enforcement authorities to establish a pro-active response to crime. It enables them to identify and understand criminal groups operating in their areas. Once criminal groups are identified and their habits known, law enforcement authorities may begin to assess current trends in crime to forecast, and to hamper the development of perceived future criminal activities. Intelligence provides the knowledge on which to base decisions and select appropriate targets for investigation. While the use of criminal intelligence analysis is appropriate to support investigations, surveillance operations and the prosecution of cases, it also provides law enforcement agencies with the ability to effectively manage resources, budget, and meet their responsibility for crime prevention.

Intelligence Cooperation in Investigations entails analysis of intelligence which assists investigations by helping to focus resources on the information gaps available and by more clearly focusing the investigation (Ok & Park, 2016). It also helps to prevent duplication and avoid error in areas that are irrelevant. Improving criminal investigation requires widespread reforms which go beyond the police and involve other institutions, including the judicial authorities and the government, which have very different organizations and cultures and backgrounds. Reform processes seldom co-ordinate all the attributable institutions and changes in one institution may be overshadowed by the absence of any change. Due to the size of the entire system, it is necessary to implement multiple reforms. This is why the reforms are limited and the effects of the rest of the system are absorbed. Reformations must also reflect a long-term strategy, in large-scale or gradual processes, that supports further transformations instead of creating hurdles (Eiran, 2016). The literature did not highlight the contribution utilization of intelligence in investigations has on crime prevention in Mogadishu City, Somalia.

In order to tackle organized crime, international and European intelligence services and police forces cooperate closely. Many countries have concluded treaties on the investigation and extradition of criminals. Intelligence is a key law enforcement function and a critical resource for effective and effective inquiries (Jaffel, 2019). There are ever more sources of information supporting evidence collection in today's technology and data-driven society, and digital content is becoming a key driver of police and intelligence investigation. Law enforcement can be useful in analyzing and processing digital data sources, such as mobile phones, social media profiles, video surveillance footages, by using artificial intelligence technology (Sauerwein, Sillaber, Mussmann & Breu, 2017). The

literature did not highlight the contribution utilization of intelligence in investigations has on crime prevention in Mogadishu City, Somalia.

When it comes to investigation, it is crucial to gain as much detailed information as possible, however if there is no way of reviewing and interpreting information efficiently it is not always helpful to have too much intelligence. At the start of each inquiry, agents and officers should set the priorities for intelligence review and collection, balance time and work to extract evidence from data sources and allocate resources to other investigative activities. The technology of artificial intelligence enables law enforcement to meet this challenge by increasing information processing (Wagner, Mahbub, Palomar & Abdallah, 2019).

According to Li and Xue (2019), the emergence of a criminal intelligence assessment is directly connected with the transition to organized or group crime of individual crimes. The effective use of intelligence is critical for fighting criminal groups by a law enforcement agency. Intelligence analysis also provides the agency with the knowledge it needs to manage its resources effectively. Intelligence analytic products can assist in developing strategic plans to address current problems with appropriate tasks and prepare for anticipated future problems (Sheptycki, 2017).

The Analysis of Crime Intelligence allows law enforcement to determine pro-active crime response. It allows them to identify criminal groups in their fields and to understand them. Once criminal groups are identified and familiar with their habits, law enforcement authorities can start assessing current crime trends and obstructing the development of perceived future criminal activity (Victor, Chika & Innocent, 2019). Intelligence provides

the knowledge to base decisions and select suitable investigative targets. Whilst it supports investigations, monitoring operations and prosecution, the use of crime intelligence analyses provides law enforcement agencies with the ability to efficiently manage resources, budgets and carry out their crime prevention responsibilities (Zheng, Tao & Rieckermann, 2018).

Omar and Miyonga (2017) examined the determinants of crime prevention in Mogadishu, Somalia. The study found out that there is a strong relationship between Education developments, Employment development agricultural development Social development, Social development and crime prevention in Mogadishu Somalia. The study established that employment development plays a significant role in crime prevention for it provides many access to employment opportunities. In a situation where one is engaged positively in an income generating activities, there would be little or no time to engage in criminal activities.

Jerome (2020) did a study on Criminal Investigation and Criminal Intelligence: Example of Adaptation in the Prevention and Repression of Cybercrime. The emergence of mass delinquency, such as cybercrime, has thus strongly altered the role of investigation as a useful mode of knowledge production. This obsolescence has appeared gradually and can be summarized in four stages, which generates a suspicion about the social relevance of the investigation. It seems that the holistic approach of criminal intelligence is more adapted to the fight against new forms of crime. The investigation becomes a precision instrument assigned to functions that become more specific. This article considers this paradigm shift by the approaches to knowledge management of crime control. Cybercrime is then emblematic of this shift. This study is based on the criminological review and the

delinquency analysis led by the central criminal intelligence service of the national gendarmerie. Its premise may likely guide the strategy of French law enforcement agencies.

2.2.4 Agencies in Intelligence Surveillance and Crime Prevention

In order to comprehend the concept of surveillance it is important firstly to take a look at the meaning of the word "surveillance". The following three definitions will suffice for the purpose of this study. Dempsey, in Baker and Gunter (2005:3), defines surveillance as a covert observation of places and persons for the purpose of obtaining information. Stanley (2004:9) defines surveillance as any collection and processing of personal data, whether identifiable or not, for the purpose of influencing or managing those whose data have been garnered. The Macmillan English dictionary for advanced learners defines surveillance as the process of carefully watching a person or place that may be involved in a criminal activity (Rundell & Fox, 2005:1448).

Intelligence surveillance consists of the monitoring of behaviour, activities or information to influence, manage or direct. This may involve distance monitoring by electronic equipment such as CCTV or intercepting information transmitted electronically, such as Internet traffic. Simple technical methods such as intelligence collection and mail interception can be included. Surveillance of crime information assists in making arrests and even identifying the crime suspects (Swire, Woo & Desai, 2019).

Surveillance is used by governments in gathering intelligence, preventing crime or objecting protection or crime investigation. Criminal organizations also use it for the purpose of planning and committing crime and companies to collect intelligence from their

competition, suppliers or customers (Malhotra, 2018). Monitoring can be viewed as a privacy violation, and civil liberties activists are often opposed as such. There can be laws in a liberal democracy that restrict domestic government and private supervision. There are few domestic constraints on authoritarian governments and all kinds of countries have international espionage (Abich, Reinerman-Jones & Matthews, 2017).

Concerns about surveillance of the internet of things were raised. Where surveillance techniques are used to identify, monitor, track locations, or gain access to buildings and networks (Camilleri, 2018). Various researchers have also investigated whether using supervisory cameras reduce crime, such as CCTVs and dashboard cams, may also prevent crime by increasing the likelihood of arrest and punishment, for a small fraction of the costs of recruiting more officials because of rapidly expanding surveillance cameras in recent years (Danner, 2019).

The use of stationery technical surveillance can provide massive information to collectors. This type of surveillance must be limited to activities that would normally be visible from a public venue such as street or sidewalk. This method of surveillance involves three components, namely, a surveillance platform, a power source, and a camera/recording device. The most common and suitable surveillance platform is a vehicle. The suitable vehicle for this type of work, which will also assist in concealing the identity of the surveillance team, is a rental vehicle.

These vehicles may be changed to meet the specific needs of the environment or terrain of the target; for instance it is easier to identify a surveillance sedan vehicle on a farm than it would be a dirty van. Once the platform is established, the next step is to hide

the power supply and camera/recorder components in the surveillance platform. The technical connections and preparations should be made covertly in a garage or other secluded location (Baker & Gunter, 2005:7). Creativity plays an important role in this type of surveillance. For instance if there is activity, the investigator is not going to be able to run up to the car and move the camera to change the field of view. Information about the subject and the purpose of the investigation must be used to determine the location of the camera. The front door is usually the best place to identify individuals who live and arrive. Knowledge of what is expected from this kind of surveillance will determine the placement of the surveillance platform and the positioning of the camera for the right field of view. The surveillance camera or lens can be hidden in a box, a pile of news-papers, or on anything within the vehicle (Baker & Gunter, 2005:7).

Selection of sources can also be regarded from the angle of cost effectiveness. Use of open sources instead of deploying expensive covert assets may significantly reduce the budget for a collection exercise, or alternatively, permit the acquisition of more information within an established budget. Use of open sources can also help protect or conserve sources of closed and classified information. At the same time, as exploration of open sources often requires handling extremely large data volumes, an analyst involved in OSINT should receive specialist training in the subject or be supported by an OSINT expert.

The ultimate objective of an operational intelligence analyst is to bring about the arrest of the criminal(s) under investigation and/or the disruption of a criminal group's activities. The aim of the team should therefore be to develop the most useful sources and collect the information most likely to produce successful results. A common starting point is to identify the criminal's associates however; the objective should always be to identify

relationships between individuals and their roles in the criminal activities, rather than identifying associates for their own sake.

A major issue in a collection exercise is the language of the source. Intelligence analysis is particularly appropriate for investigations of organized crime activities, which very often have a cross-border dimension. Exclusion of information (including open source information) purely on the basis of language can have a seriously damaging effect on the quality of an analytical product. Language training of analysts is one solution. Use of translation software is another.

Oke, Aigbavboa and Sepuru (2017) observed that Intelligence surveillance is one activity justified by its potential effect on prevention of crime. Surveillance proponents claim that crime is prevented through dissuasion, particularly where open surveillance recalls potential police presence and observation crime criminals (Karuri & Muna, 2019). Critics claim that monitoring can simply move crime to unattended locations instead of preventing it. Regards, the surveillance can both alert police to the need for an operational response and/or prove the continued criminal investigation and enforcement in the event that an area under surveillance becomes a crime scene (Barrow, Alam & Mustafa, 2019). Due to the many factors involved in police and personal contact, monitoring technology transmitting information to the police can have important advantages over eyewitness monitoring. Video or audio information recording techniques are particularly valuable in support of research and prosecution (Mutemwa, Mtsweni & Mkhonto, 2017). The literature did not highlight the contribution utilization of intelligence in investigations has on crime prevention in Mogadishu City, Somalia.

In addition, Wambugu (2015) examined the application of mobile phone in crime prevention within central division, Nairobi City County. Mobile phone applications such as Facebook, WhatsApp, Twitter, emails and short text messages were found through adapted technology acceptance model (TAM) as to effectively contribute to crime prevention based on respondents' perspective. Police effort to use mobile technology was found to have significant effects on crime prevention. Based on these findings, the study recommends development of customized police mobile phone applications and enhancement of applications use through capacity building among police officers.

A second 'proactive' tool of investigation in which many forces have recently made substantial investment is that of surveillance teams. A recent police survey found that about 60 per cent of police forces in Britain had already formed one or more 'dedicated' (full time, specialist) mobile teams and nearly all the rest had the capacity to set up surveillance teams on an ad hoc basis. Surveillance thus provides a good example of current efforts to systematize a particular aspect of proactive crime control. In commenting on how it is used in practice, we shall draw on experiences in several forces, rather than using one case study as in the previous section.

All the forces visited either had at least one full-time or part-time surveillance team or had plans to introduce one in the near future. The usual pattern was for the team to be based at force headquarters (or, in large forces, for two or three teams to be located in various divisions) and for other police units to put in requests for its services, ideally in the form of properly researched and formally presented 'target packages'. In some forces, most requests and packages came from FIOs or others working in intelligence offices (often at force level), while in others many came from local CID offices or specialist squads

(particularly drugs squads). The two main kinds of task which the teams were asked to perform were to gather further intelligence about particular targets (e.g. to follow them to see where they were living or with whom they were associating) or, less often, to watch them in the hope of 'catching them in the act' or, at least, producing photographic or other hard evidence of their involvement in a particular crime. As far as possible, surveillance teams avoided becoming directly involved in arrests, as this could compromise their 'cover' and reveal their methods: if arrests were expected, other officers would normally be close at hand to make them.

"With regard to information sharing and the internet amongst law enforcement agencies, it is worth noting that information and knowledge lay at the heart of most law enforcement activities. While the overriding notion is that policing is primarily associated with patrolling the streets, as law enforcement agents must also gather and share intelligence. This is due to the fact that law enforcement agents rely on information, gathered facts and tacit knowledge developed from street experience in order to draw conclusions (Lindsay, Cooke, & Jackson, 2009)." Sharing of this information and knowledge effectively is also a critical and pivotal step to effective crime prevention, reduction and investigation strategies. To this end, law enforcement agents must work together rather than in isolation to solve criminal cases (Lindsay, Cooke, & Jackson, 2009).

The key challenge however is that law enforcement agencies encounter significant barriers in effectively sharing knowledge key among them irrational bureaucratic cultures, mammoth hierarchical command structures as well as authoritarian management style. With the base of this hierarchical pyramid containing the vast majority of employees, it is difficult to tap into the entire wealth of knowledge held at the lower level. The end result

is a break down in the flow of information thus hindering effective decision-making (Lindsay, Cooke, & Jackson, 2009).

2.3 Summary of Review of Literature and Research Gaps

Cooperation between law enforcement (crime intelligence) and positive intelligence (military and civilian intelligence) could be mutually beneficial. Criminal intelligence has become a central tool to support modern crime control. The sharing of intelligence is the ability between federal, state, local or private entities to exchange information, data or knowledge concerning crimes as required. The exchange of intelligence also involves bilateral or multilateral intergovernmental agreements, and international organizations, to deter any kind of crime.

The collection of information is just a first step in the fight against crime, even terrorism. An information piece is like a puzzle piece. Often, the big picture is only when a piece of information is combined with many others. In addition, information must lead to action and not to terrorist acts. It is therefore critical that information is not only collected on terrorist activities but also shared with other federal governments that possess similar information and lead to preventive action. Intelligence Cooperation in Investigations entails analysis of intelligence which assists investigations by helping to focus resources on the information gaps available and by more clearly focusing the investigation.

Improving criminal investigation requires widespread reforms which go beyond the police and involve other institutions, including the judicial authorities and the government, which have very different organizations and cultures and backgrounds. Intelligence monitoring consists of the monitoring of behaviour, activities or information to influence,

manage or direct. This can include distance observation by electronic devices like CCTV or an interception of information transmitted by electronic means such as Internet traffic.

Terror attacks coupled with other crimes have continued to thrive in Somalia's capital. There has been little improvement in crime-fighting efforts especially through involvement of the intelligence officers. Growing allegations of corruption and incompetence in crime fighting have been continually levelled against the Intelligence officials. In addition to this, there is limited literature focusing on contribution of intelligence cooperation on crime prevention. Though, Omar and Miyonga (2017) examined determinants of crime prevention in Mogadishu, Somalia, the study did not expound on influence of intelligence sharing on crime prevention. In addition Wambungu (2015) examined the application of mobile phone in crime prevention within central division, Nairobi City County but it did not still explore influence of intelligence sharing on crime prevention. Hence this study sought to bridge this gap by establishing the influence of intelligence sharing on crime prevention in Mogadishu City, Somalia. In conclusion, several authors have clearly indicated conceptual, contextual and methodological gaps. From a methodological point, most of the studies have either been qualitative or quantitative. This study therefore sought to bridge this gap by establishing the influence of intelligence sharing on crime prevention in Mogadishu City, Somalia.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter describes the methods to be used to gather information on the area of the study. The chapter guided the research methodology to be used in carrying out the study. The chapter presents details of the research design, research site, target population, study sample, study sample size, sampling procedure, data collection, data analysis and legal and ethical considerations.

3.2 Research Design

Research design refers to the overall strategy that you choose to consistently and logically integrate the individual components (Creswell & Poth, 2016). According to Gorard (2013) research design is the plan, structure and strategy of investigation proposed for obtaining answers to research question. The research design for this study was descriptive. The design is ideal because it attempts to describe the features of certain groups, to estimate the proportion with certain features, and to make forecasts. Descriptive survey is the collection of quantified data from a population for purpose of description or to identify variation between variables that may point to causal relationship. The design is suitable for the study because the study wishes to collect data with an intention of describing the nature of existing conditions of intelligence sharing on crime prevention. The design is suitable in studying attitude, opinion and perception so as to determine the actual status of the population. This design involves the quantitative data collection for conducting inferential analysis and qualitative data for describing the influence of intelligence sharing on crime prevention in Mogadishu City, Somalia.

3.3 Research Site

Mogadishu is Somalia's largest and most populous town. Situated in the coastal region of Banadir in the Somali Sea, this town has for centuries been an important port. The City is approximately 91km square with an approximate population of 2.5 million (Somalia Government Statistics, 2019). The level of crime is currently at 67% (Mogadishu Security Data, 2019). There are many security agencies operating in Mogadishu both private mercenaries and government and vigilante groups. Given the fact that the research has focused on crime prevention, there is a dire need to have knowledge of the security apparatus in the area of concern. However, regardless of the numerous security agencies that are in the city, the city is still a hub for crime. The lack of proper coordination and collaboration among the parties entrusted with the security of Mogadishu are some of the factors that have led to the high cases of criminal activities.

3.4 Target Population

The population target is defined as the whole group of people, units or elements that the researchers want to generalize the findings (Creswell & Poth, 2016). Therefore, the target population in study was 536 including CID officers, NISA officers and police officers living in Mogadishu city Somalia as shown in Table 3.1. C.I.D stands for Criminal Investigation Department. It is a government body that is responsible for investigating serious criminal cases. The agency has a lot of information about crime and criminals and that makes it an important party in this research. The National Intelligence and Security Agency is another party that is pertinent in this study. The agency collects criminal data to assess the state of the nation as far as crime is concerned. Police officers are also important in this study because they help in implementing the law and preventing crime. The reason

why the three agencies were important to this research is that if they collaborated and exchanged intelligence, it would help to reduce rate of crime in Mogadishu.

Table 3. 1-Target Population

Category	Target Population	Percentage
CID officers	180	33.6
NISA officers	167	31.2
Police officers	189	35.3
Total	**536**	**100**

Source: Somalia Government Statistics (2019)

3.5 Study Sample

This is defined as the small portion of a population selected for a particular study. Sampling is a deliberate decision of a certain number of items who are asked to provide the results from a research on some large group represented by those items (Leavy, 2017)

3.5.1 Sampling Procedure

The sampling involves selecting a number of persons within a whole group to estimate the population's characteristics. The study uses laminated random sample techniques to select the respondents. Stratified random samples are an impartial method by which heterogeneous populations are grouped into hologenetic sub-sets and selected for representationally. The goal of stratified random sampling is to reach the desired representation of different population subgroups. The selection of the existing subgroups in the population is more or less represented within the sample in stratification random

sampling subjects (Yin, 2017). A simple random sampling was used to select the interviewees from every layer.

3.5.2 Study Sample Size

A sample is a representative population portion of interest that is randomly chosen (Wang, 2015) missing in reference. The sample size was determined at 95% level of confidence and an error of 0.05 using the Nassiuma (2000) formula using a target population of 536 as illustrated

$$n = \frac{N(cv^2)}{Cv^2 + (N-1)e^2}$$

Where ***n***= sample size

N = population (536)

Cv= Coefficient of variation (take 0.6)

e= tolerance of desired level of confidence (take 0.05) at 95% confidence level)

$$n = \frac{536(0.6^2)}{0.6^2 + (536-1)0.05^2} = 113.5 \text{ (Rounded off to 114)}$$

The sample size was 114. To determine how the sample is distributed among the targeted respondents including CID officers, NISA officers and police officers the sampling ratio was calculated and then multiplied with target population for targeted group. The ratio was 114/536=0.212, which was used as shown in Table 3.2.

Table 3. 2-Sampling Frame

Category	Target population	Ratio	Sample
CID officers	180	0.212	38
NISA officers	167	0.212	35
Police officers	189	0.212	41
Total	**536**		**114**

3.6 Data Collection

Data collection is the collection and measurement process in a systematically established form of information on the variables of interest to allow one to reply and assess research findings, hypotheses and results (Flick 2017). This section presents instruments of data collection and research instruments pilot testing.

3.6.1 Data Collection Instruments

The study used questionnaires in obtaining primary data. The questionnaire consists of questions that are both open and closed. The open questions helped encourage respondents to provide a comprehensive and sensitive answer without feeling reluctant to provide any information, and the closed questions enable respondents to answer limited options outlined. As per Rahi (2017), comprehensive responses from respondents are possible when questions are open ended or unstructured, while closed or structured questions are generally more easily evaluated. The questionnaires are used to conserve time and money as well as to facilitate an analysis because they can be used immediately. The question had two sections where section A had questions on demographic information of the participants while section B has questions on intelligence sharing, section C has

questions on intelligence data collection, section D has questions on intelligence cooperation in investigations and section E has questions on intelligence surveillance.

3.6.2 Pilot Testing of Research Instruments

The pilot study is to measure a dependent variable between subjects. It aims at ensuring that the elements in the instrument are clearly stated and that all respondents have the same meaning. The purpose of the data tool is to ensure that the items in the instrument are clearly indicated and that they all have the same meaning. Pilot tests were conducted on research instruments to provide pilot survey respondents with 22 questionnaires selected on a random basis that represent 20 percent of the sample size. The pilot study was done among security officers in Baidoa in Somalia. After one day, the same participants were requested to answer the same questionnaires, however without notice, to determine any changes to the first and second test responses. The pilot findings were used in improving the research instruments. It is also an excellent opportunity for participants to receive important comments and suggestions. This improved the instrument's efficiency. This process is repeated until the researcher is satisfied that there are no changes or vagueness's in this instrument.

3.6.3 Instrument Reliability

Reliability means the extent to which it is bias-free, thus ensuring consistent measurement over time and across various elements of the instrument (Creswell & Poth, 2016). A pilot group of 22 randomly selected respondents of the target population was given the questionnaire and their answers were used to check the reliability of the tool. The reliability of the data collection instrument is calculated using Spearman Brown correlation formulae using the partition-half method to achieve the entire test reliability. If the sum scale is completely reliable, we can expect the two halves to correlate perfectly. A

reliability coefficient of 0.7 or higher is considered appropriate for this study for all constructs (Rahi, 2017).

3.6.4 Instrument Validity

Validity is the accuracy and significance of the conclusions based on the results of the research (Creswell & Creswell, 2017). Validity is to the extent that the test item sample represents the test content. The content validity used in this study is a measure of the extent to which data collected from a given tool represent a specific field or content of a particular concept. The validity of the content concerns the representativeness of the sample population. For a piece of information to be valid, it must answer the questions that it is supposed to answer. Different ways can be used to measure the validity of content. The first way is the ability of the content to increase knowledge on the topic of research and the second way is the ability of the content to answer questions that might be present about the topic of research. Also, the involvement of authoritative scholars in the composition of the content affects the validity of the content. Expert opinions on the representativeness and adequacy of questions and suggestions for corrections to the structure of research tools were requested. This helps to increase the validity of the data collected.

3.6.5 Data Collection Procedures

The study used drop and pick later method to administer questionnaires. The assistant delivered the questionnaire and gave the selected respondent a maximum of 3 days after which the researcher collected the completed questionnaire for analysis. The researcher also made sure participants are treated with strict confidentiality for the information they provide. For officers who have busy schedules, the researcher booked an appointment before administering the questionnaires. The researcher then administered and coordinates the questionnaires with the designated officials to ensure that respondents have

enough time to complete the questionnaires. This enabled create a conducive environment for the distribution and administration of the questionnaire. Administration of the questionnaire followed the agreed schedule.

3.7 Data Processing and Analysis

The data was analyzed through the Social Science Statistical Package (SPSS release 25.0). All received questionnaires were referenced and the data entry items were encoded. After data clearing that involves checking for errors in the entry, all quantitative variables and information submitted is estimated in terms of descriptive statistics such as frequencies, percentages, medium and standard deviation. The qualitative data from the questions are analyzed and presented in a narrative form using thematic content analysis.

3.8 Legal and Ethical Considerations

The researcher observed fundamental clauses in social research ethics. Confidentiality was guaranteed for all respondents verbally and in writing as the researcher did not reveal their identity and they were instructed not to write their names in the questionnaire. The researcher endeavors abide by the ethical and legal principles of conducting research the research was purely for academic purpose. Permission was sought from Africa Nazarene University, the government of Somalia and officials from Mogadishu city before actual field work commenced. Voluntary participation was also a consideration in this research. Considering that the research also focused on human participants, it was important to ensure that each of the participants offered to be part of the research without being coerced or threatened. In the case that a participant did not wish to continue with the process of offering data, the participant would be allowed to leave the process. Relevance and respect to boundaries were also considered in the process of collecting data. The researcher did not ask questions that were not relevant to the research

topic. The researcher was sensitive when it came to questions and this is because people can be sensitive to some questions. With the aim of ensuring that all people were comfortable with the whole process, questions that might be sensitive were avoided at all cost.

CHAPTER FOUR

DATA ANALYSIS AND FINDINGS

4.1 Introduction

This chapter discusses the findings obtained from the primary instrument used in the study. It discusses the characteristics of the respondents and their opinions on the influence of intelligence sharing on crime prevention in Mogadishu city, Somalia. The researcher provided tables that summarized the collective reactions of the respondents.

4.2 Characteristics of the Respondents

This section required the respondents to indicate their response rate and general information including gender, designation, how long they have worked in their respective designation, highest level of education and age bracket. This information would be used to ascertain the eligibility of the respondents to participate in data collection of the study. It also determined how reliable and valid was the information given by the respondent.

4.2.1 Response Rate

Questionnaires that the researcher administered were 114 out of which only 89 fully filled questionnaires were returned. This gave a response rate of 78% which was within what Creswell and Poth (2016) prescribed as a significant response rate for statistical analysis and established at a minimal value of 50%.

Table 4. 1: Response Rate

		Response Rate
Response	89	78%
Non-response	25	22%
Total	**114**	**100**

4.2.2 Gender of the Respondent

The respondents were requested to indicate their gender. It is for this reason why respondents came from both genders. The findings were as shown in Table 4.2.

Table 4. 2-Gender of the Respondents

	Frequency	Percent
Male	70	78.7
Female	19	21.3
Total	**89**	**100**

From the findings, majority (78.7%) of the respondents were male while the rest were female as shown by 21.3%. This shows that the study considered all respondents irrespective of the gender to collect reliable information. The findings also show that the security sector in Somalia is dominated by men. Even though the percentages might vary significantly, it is important to note that Somalia is a nation that has not embraced the involvement of women in leadership positions. Finding a woman in a disciplined force is a challenge and therefore, the current percentage would be the best representation given

the fact that the respondents came from security agencies. The findings also show that the security sector in Somalia is dominated by men. The findings can be echoed by the reality in the political situation of Somalia. When a nation is affected by war, women are the most affected. Therefore, it is a challenge to find women committing themselves to serve in the disciplined forces when the nation is surrounded by war.

4.2.3 Respondents Designation

The respondents were asked to indicate their designation. The findings for this are illustrated in Table 4.3.

Table 4. 3-Respondents Designation

	Frequency	**Percent**
CID Officer	29	32.6
NISA officer	28	31.5
Police officer	32	36
Total	**89**	**100**

From the findings, the respondents indicated their designation to be a police officer as shown by 36%, CID officer as shown by 32.6% and NISA officer as shown by 32.5%. This is an indication that the data was collected from all the respondents as it covered all designations. Respondent designation improves their ability to enhance the findings by providing reliable information.

4.2.4 Period Working in the Current Designation

The respondents were asked to indicate how long they had worked in their respective designation. The findings are illustrated in Table 4.4.

Table 4. 4-Period Working in the Current Designation

	Frequency	Percent
Less than 3 years	7	7.9
3 to 9 years	21	23.6
9 to 12 years	33	37.1
More than 12 years	28	31.5
Total	**89**	**100**

From the findings, the respondents indicated that they had worked in their respective designation for a period of 9 to 12 years as shown by 37.1%, more than 12 years as shown by 31.5%, 3 to 9 years as shown by 23.6% and less than 3 years as shown by 7.9%. This shows that most of the respondents had worked in their respective designations long enough to be able to provide information on subject under study. The more experienced were in a better position to answer questions regarding the subject under and hence improved the findings.

4.2.5 Highest Level of Education

The respondents were asked to indicate their highest level of education. The findings were presented in Table 4.5.

Table 4. 5-Respondents Level of Education

	Frequency	Percent
Certificate	59	66.3
Diploma	14	15.7
Degree	6	6.7
Masters	6	6.7
PhD	4	4.5
Total	**89**	**100**

From the findings, majority of the respondents had certificate as shown by 66.3%. Others indicated to have a diploma as shown by 15.7%, degree as shown by 6.7%, masters as shown by 6.78% and PhD as shown by 4.5%. This is an indication that majority of the respondents had the required knowledge to respond to the questions in the research tool correctly.

4.2.6 Age Bracket of the Respondent

The respondents were further asked to indicate the age bracket to which they belong. The findings were as shown in Table 4.6.

Table 4. 6-Age of the Respondent

	Frequency	Percent
20-30 years	41	46.1
31-40 years	32	36
41-50 years	9	10.1
More than 50 years	7	7.9

Total	**89**	**100**

From the findings, the respondents indicated that their age was between 20 and 30 years as shown by 46.1%, between 31 and 40 years as shown by 36%, between 41 and 50 years as shown by 10.1% and more than 50 years as shown by 7.9%. This shows that the study covered all age groups in collection information on subject under study. This implies that age of the respondents affected their ability to provide reliable information regarding the study.

4.3 Presentation of Research Analysis, Findings and Interpretation

The purpose of the study was to establish the influence of intelligence sharing on crime prevention and how such cooperation could be used to strengthen the fight against crime and terrorism in Mogadishu. This section presents findings for level of intelligence sharing, significance of intelligence data collection, utilization of intelligence in investigations and intelligence in surveillance.

4.3.1 Intelligence Sharing

The study sought to determine the level of intelligence sharing on crime prevention in Mogadishu City, Somalia. The respondents were asked to indicate whether intelligence sharing contributes to crime prevention in Mogadishu city. The findings are illustrated in Table 4.7.

Table 4. 7-Whether Intelligence Sharing Influences Crime Prevention

	Frequency	Percent
Yes	84	94.4
No	5	5.6
Total	**89**	**100**

From the findings, most of the respondents indicated that they think that intelligence sharing influences crime prevention in Mogadishu city as shown by 94.4%. Further, these respondents were also asked to indicate the extent to which intelligence sharing influences crime prevention in Mogadishu city. The findings are illustrated in Table 4.8.

Table 4. 8-Extent to which Intelligence Sharing Influences Crime Prevention

	Frequency	Percent
Low extent	11	13.1
Moderate extent	24	28.6
Great extent	32	38.1
Very great extent	17	20.2
Total	**84**	**100**

From the findings, most of the respondents indicated that intelligence sharing influences crime prevention in Mogadishu city to a great extent as shown by 38.1%, that intelligence sharing Influence to crime prevention in Mogadishu city to a moderate extent as shown by 28.6%, that intelligence sharing contribute to crime prevention in Mogadishu city to a low extent as shown by 13.1% and that intelligence sharing influence crime

prevention in Mogadishu city to a very great extent as shown by 20.2%. This implies that intelligence sharing contribute to crime prevention in Mogadishu city to a great extent.

The respondents were further asked to indicate their level of agreement with the various statements on influence of intelligence sharing on crime prevention in Mogadishu. The findings are illustrated in Table 4.9.

Table 4. 9-Agreement with Various Statements on Influence of Intelligence Sharing

	Mean	Std. Dev.
Sharing intelligence have increased number of arrests	3.921	0.661
Intelligence sharing helps in thwarting a crime before it happens	2.539	1.235
Intelligence sharing helps in law enforcement	4.337	0.673
Information Sharing Leads to Inter-agency Collaboration	3.090	0.807

From the findings, the respondents agreed that intelligence sharing helps in law enforcement as shown by a mean of 4.337 and that sharing intelligence have increased number of arrests as shown by a mean of 3.921. The respondents were however neutral that information sharing leads to inter-agency collaboration as shown by a mean of 3.090 and that intelligence sharing helps in thwarting a crime before it happens as shown by a mean of 2.539.

4.3.2 Intelligence Data Collection

The study further sought to establish the significance of intelligence data collection on crime prevention in Mogadishu City, Somalia. The respondents therefore were asked to indicate whether intelligence data collection contributes to crime prevention in Mogadishu city. The findings are illustrated in Table 4.10.

Table 4. 10-Whether Intelligence Data Collection Influences Crime Prevention

	Frequency	Percent
Yes	82	92.1
No	7	7.9
Total	**89**	**100**

From the findings, most of the respondents indicated that they think that intelligence data collection contributes to crime prevention in Mogadishu city as shown by 92.1%. Further, these respondents were also asked to indicate the extent to which intelligence data collection contribute to crime prevention in Mogadishu city. The findings are illustrated in Table 4.11.

Table 4. 11-Extent to which Intelligence Data Collection Influences Crime Prevention

	Frequency	Percent
Low extent	19	23.2
Moderate extent	13	15.9
Great extent	40	48.8
Very great extent	10	12.2
Total	**82**	**100**

From the findings, most of the respondents indicated that intelligence data collection contribute to crime prevention in Mogadishu city to a great extent as shown by 48.8%, low extent as shown by 23.2%, moderate extent as shown by 15.9% and very great extent as shown by 12.2%. This implies that intelligence data collection contributes to crime prevention in Mogadishu city to a great extent. The respondents were further asked

to indicate their level of agreement with the various statements on contribution of intelligence data collection on crime prevention in Mogadishu. The findings are illustrated in Table 4.9. The level of trust that people have on a source of information affects the level of embracing the information. The fact that some newspapers have been used for the wrong reasons in the past makes it hard for some people to trust them. However, when a person individually share information about a crime or criminal, it is likely for the information to be trusted and embraced. The reason behind it is that there is an available source that can be referred to in the case of anything.

Table 4. 12-Agreement with Various Statements on Contribution of Intelligence Data Collection

	Mean	**Std. Dev.**
Information from informants help in locating crime suspects	2.809	0.655
Intelligence in open sources like newspapers creates awareness of the identity of criminals	3.292	0.944
Having prior information about an eminent crime helps in crime prevention	4.169	0.644
Intelligence collection gives directions on where to conduct covert operations	3.483	1.024

From the findings, the respondents agreed that having prior information about an eminent crime helps in crime prevention as illustrated by a mean of 4.169 and that intelligence collection gives directions on where to conduct covert operations as illustrated by a mean of 3.483. The respondents were however neutral that intelligence in open sources like newspapers creates awareness of the identity of criminals as illustrated by a mean of

3.292 and that information from informants help in locating crime suspects as illustrated by a mean of 2.809.

4.3.3 Utilization of Intelligence in Investigations

The study sought to assess the utilization of intelligence in investigations on crime prevention in Mogadishu City, Somalia. The respondents therefore were asked to indicate whether utilization of intelligence in investigations contributes to crime prevention in Mogadishu city. The findings are illustrated in Table 4.13.

Table 4. 13-Whether Utilization of Intelligence in Investigations Contributes to Crime Prevention

	Frequency	**Percent**
Yes	86	96.6
No	3	3.4
Total	**89**	**100**

From the findings, most of the respondents indicated that they think that utilization of intelligence in investigations contributes to crime prevention in Mogadishu city as shown by 96.6%. Further, these respondents were also asked to indicate the extent to which utilization of intelligence in investigations contribute to crime prevention in Mogadishu city. The findings are illustrated in Table 4.14.

Table 4. 14-Extent to which Utilization of Intelligence in Investigations Contribute to Crime Prevention

	Frequency	**Percent**
Low extent	14	16.3
Moderate extent	21	24.4
Great extent	37	43
Very great extent	14	16.3
Total	**86**	**100**

From the findings, most of the respondents indicated that utilization of intelligence in investigations contribute to crime prevention in Mogadishu city to a great extent as shown by 43%, moderate extent as shown by 24.4%, low extent as shown by 16.3% and very great extent as shown by 16.3%. This implies that utilization of intelligence in investigations contribute to crime prevention in Mogadishu city to a great extent.

The respondents were further asked to indicate their level of agreement with the various statements on contribution of utilization of intelligence in investigations on crime prevention in Mogadishu. The findings are illustrated in Table 4.15.

Table 4. 15-Agreement with Various Statements on Contribution of Utilization of Intelligence in Investigations

	Mean	Std. Dev.
Intelligence gives a clue on who to investigate	4.371	0.774
Intelligence helps to avoid duplication of effort and prevent straying into areas of no relevance	3.719	0.826
Intelligence helps in identifying information gaps to focus the investigation more clearly	4.146	0.833
Intelligence helps in identification of criminals within the community	3.360	0.932

From the findings, the respondents agreed that intelligence gives a clue on who to investigate as shown by a mean of 4.371, that intelligence helps in identifying information gaps to focus the investigation more clearly as shown by a mean of 4.146 and that intelligence helps to avoid duplication of effort and prevent straying into areas of no relevance as shown by a mean of 3.719. However, the respondents were neutral that intelligence helps in identification of criminals within the community as shown by a mean of 3.360. Having a clue on who to investigate is the first step to dealing with crime. One of the major hurdles in solving a case is identifying the suspects. After the identification of a suspect, one is able to follow the thread until the real suspect is caught.

4.3.4 Intelligence in Surveillance

The study sought to examine the influence of intelligence surveillance agencies on crime prevention in Mogadishu City, Somalia. The respondents therefore were asked to

indicate whether intelligence in surveillance contributes to crime prevention in Mogadishu city. The findings are illustrated in Table 4.16.

Table 4. 16-Whether Intelligence Surveillance Agencies influence Crime Prevention

	Frequency	**Percent**
Yes	84	94.4
No	5	5.6
Total	**89**	**100**

From the findings, most of the respondents indicated that they think that intelligence in surveillance influences crime prevention in Mogadishu city as shown by 94.4%. Further, these respondents were also asked to indicate the extent to which intelligence in surveillance contribute to crime prevention in Mogadishu city. The findings are illustrated in Table 4.17.

Table 4. 17-Extent to which Intelligence Surveillance Agencies Influence Crime Prevention

	Frequency	**Percent**
Low extent	8	9.5
Moderate extent	27	32.1
Great extent	42	50
Very great extent	7	8.3
Total	**84**	**100**

From the findings, most of the respondents indicated that intelligence in surveillance agencies influence crime prevention in Mogadishu city to a great extent as

shown by 50%, that intelligence in surveillance contribute to crime prevention in Mogadishu city to a moderate extent as shown by 32.1%, that intelligence in surveillance contribute to crime prevention in Mogadishu city to a low extent as shown by 9.5% and that intelligence in surveillance contribute to crime prevention in Mogadishu city to a very great extent as shown by 8.3%. This implies that intelligence surveillance agencies contribute to crime prevention in Mogadishu city to a great extent.

The respondents were further asked to indicate their level of agreement with the various statements on contribution of intelligence surveillance agencies influence crime prevention in Mogadishu. The findings are illustrated in Table 4.18.

Table 4. 18-Agreement with Various Statements on Contribution of Intelligence in Surveillance Agencies

	Mean	Std. Dev.
Surveillance assists in identification of crime suspects	3.371	0.946
CCTV surveillance inflicts fear of being caught on criminals	4.371	0.774
Surveillance provides evidence and proof for criminal prosecution	4.337	0.673
Checking the history of crimes reveals the patterns of crimes	3.146	0.886

From the findings, the respondents agreed that CCTV surveillance inflicts fear of being caught on criminals as shown by a mean of 4.371 and that surveillance provides evidence and proof for criminal prosecution as shown by a mean of 4.337. However, the respondents were neutral that surveillance assists in identification of crime suspects as shown by a mean of 3.371 and that checking the history of crimes reveals the patterns of crimes as shown by a mean of 3.146. Based on the data that was collected, it is no doubt

that the respondents had more trust on some of the aspects and less trust on others. However, they doubted the way surveillance intelligence is used. The reason behind it is that they believed that surveillance helped in the identification of criminals. On the other hand, they did not believe that surveillance helped in the apprehension of a criminal. It therefore means that after law enforcement agents get hold of information, they do not work on it.

4.3.5 Crime Prevention

The respondents were asked to indicate the trend of the various aspects crime and the aspects of crime were number of arrests, crime analysis, and criminal prosecutions. The findings are illustrated in Table 4.19.

Table 4. 19-Trend for Various Aspects of Crime Prevention

	Mean	**Std. Dev.**
Number of Arrests	3.989	0.593
Crime analysis	2.258	0.886
Criminal prosecutions	3.371	0.831

From the findings, the respondents indicated that number of Arrests has increased as shown by a mean of 3.989, that criminal prosecutions has been constant as shown by a mean of 3.371 while crime analysis has reduced as shown by a mean of 2.258.

CHAPTER FIVE

DISCUSSIONS, SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

5.1 Introduction

This chapter presents discussion of findings, summary of main findings, conclusions and recommendations as per the objectives of the study. The objective of this study was to establish the influence of intelligence sharing on crime prevention in Mogadishu City, Somalia.

5.2 Discussion

This section presents the discussion of findings, where the findings for this study are compared with findings of other researches and literature review.

5.2.1 How does the level of intelligence sharing influence crime prevention in Mogadishu City, Somalia?

The study established that intelligence sharing have a great influence in crime prevention in Mogadishu city. Intelligence sharing helps in law enforcement and that sharing intelligence has increased number of arrests. Information sharing leads to inter-agency collaboration and that intelligence sharing helps in thwarting a crime before it happens. These findings are in line with Sauerwein, Sillaber, Mussmann and Breu (2017) who argued that information exchange is crucial to deal with crime. It assists the police, municipal services and national law enforcement agencies stop criminals moving within municipalities. The exchange of information to enhance criminal intelligence is specifically intended to increase the available resources for decision-making. This can not only help to identify the target group, but also helps to recognize lower risk cases in an era of resource constraints.

In addition, the findings concur with Sauerwein, Sillaber, Mussmann and Breu (2017) argued that information exchange is crucial to deal with crime. It assists the police, municipal services and national law enforcement agencies stop criminals moving within municipalities. Moreover Li and Xue (2019), the exchange of information to enhance criminal intelligence is specifically intended to increase the available resources for decision-making. The findings also conform to Mashiloane (2013) who examined the use of intelligence led policing in crime prevention by the South African Police Service and revealed that the intelligence products used for planning and executing crime prevention and/or crime combatting operations do not have adequate information, which does affect the outcome of the operations, Sheptycki (2017) also noted that this can demarcate 'insiders' who are being shared by the police by "outsiders" and are not being shared by them.

5.2.2 What is the influence of significance of data in intelligence on crime prevention in Mogadishu City, Somalia?

The study found that intelligence data collection has a great Influence on crime prevention in Mogadishu city. The study established that having prior information about an eminent crime helps in crime prevention and that intelligence collection gives directions on where to conduct covert operations. Additionally, the study established that intelligence in open sources like a newspaper creates awareness of the identity of criminals and that information from informants help in locating crime suspects. The fiondings are in line with Lassau, Estienne and Bidault (2019) who argues that information which could be collected for crime intelligence analysis is informant information, surveillance, travel records, CCVTV videotapes, banking transactions, undercover information, pen-register/trap and trace) (communications-related information), documentary evidence, forensic evidence, communications intercepts (wiretaps). Intelligence data collection systems rely, as per

Hassan and Hijazi (2018), on secure, fast, redundant and reliable correspondence that enable data exchange and offer opportunities for asset intersection and exchange of tips between assets.

The findings are in line with Mabia, Iteyo and Were (2016) who examined the effectiveness of intelligence-led policing in the management of domestic crimes in Kakamega County, Kenya and revealed that Intelligence-Led Policing in Kakamega County was characterized by criminal informer, targeting of criminals unlike particular crime and holistic investigation of crimes using results-oriented tactics and strategies. The findings are also in line with Ezeji and Olutola (2018) who argued that the use of various types of collecting systems leads to redundancy. It also allows the collection of various types of data to confirm or refute potential assessments of crime.

5.2.3 In which ways does use of intelligence in investigations influence crime prevention in Mogadishu City, Somalia?

The study established that utilization of intelligence in investigations greatly influence to crime prevention in Mogadishu city. The study found that intelligence gives a clue on whom to investigate, that intelligence helps in identifying information gaps to focus the investigation more clearly and that intelligence helps to avoid duplication of effort and prevent straying into areas of no relevance. The study established that intelligence helps in identification of criminals within the community. These findings concur with Ok and Park (2016) who argues that intelligence in investigations helps to prevent duplication and avoid error in areas that are irrelevant. Improving criminal investigation requires widespread reforms which go beyond the police and involve other institutions, including the judicial authorities and the government, which have very different organizations and cultures and

backgrounds. The findings are in line with Jaffel (2019) who argues that in order to tackle organized crime, international and European intelligence services and police forces cooperate closely.

The findings are also in line with Wagner, Mahbub, Palomar and Abdallah (2019) who argues that technology of artificial intelligence enables law enforcement to meet this challenge by increasing information processing. The findings are also in line with Li and Xue (2019) also argues that the emergence of a criminal intelligence assessment is directly connected with the transition to organized or group crime of individual crimes.

The findings also concur with Omar and Miyonga (2017) examined the determinants of crime prevention in Mogadishu, Somalia and found out that there is a strong relationship between Education developments, Employment development agricultural development Social development, Social development and crime prevention in Mogadishu Somalia.

5.2.4 What is the influence of intelligence surveillance agencies in crime prevention in Mogadishu City, Somalia?

The study established that intelligence surveillance agencies influence crime prevention in Mogadishu city to a great extent. The study established that CCTV surveillance inflicts fear of being caught on criminals and that surveillance provides evidence and proof for criminal prosecution. The study found that surveillance assists in identification of crime suspects and that checking the history of crimes reveals the patterns of crimes. These findings are in line with Swire, Woo and Desai (2019) who argues that surveillance is used by governments in gathering intelligence, preventing crime or objecting protection or crime investigation. Criminal organizations also use it for the

purpose of planning and committing crime and companies to collect intelligence from their competition, suppliers or customers.

The findings are in line with Camilleri (2018) who argued that concerns about surveillance of the internet of things were raised. Where surveillance techniques are used to identify, monitor, track locations, or gain access to buildings and networks. Oke, Aigbavboa and Sepuru (2017) also observed that Intelligence surveillance is one activity justified by its potential effect on prevention of crime.

The findings also conform to Wambungu (2015) who examined the application of mobile phone in crime prevention within central division, Nairobi City County and found that mobile phone applications such as Facebook, WhatsApp, Twitter, emails and short text messages were found through adapted technology acceptance model (TAM) as to effectively contribute to crime prevention based on respondents' perspective.

5.3 Summary of Main Findings

The study established that intelligence sharing have a great contribution to crime prevention in Mogadishu city. The study found that intelligence sharing helps in law enforcement and that sharing intelligence has increased number of arrests. The study revealed that information sharing leads to inter-agency collaboration and that intelligence sharing helps in thwarting a crime before it happens.

The study found that intelligence data collection has a great contribution to crime prevention in Mogadishu city. The study established that having prior information about an eminent crime helps in crime prevention and that intelligence collection gives directions on where to conduct covert operations. Additionally, the study established that intelligence

in open sources like a newspaper creates awareness of the identity of criminals and that information from informants help in locating crime suspects.

The study established that utilization of intelligence in investigations greatly contributes to crime prevention in Mogadishu city. The study found that intelligence gives a clue on who to investigate, that intelligence helps in identifying information gaps to focus the investigation more clearly and that intelligence helps to avoid duplication of effort and prevent straying into areas of no relevance. The study established that intelligence helps in identification of criminals within the community.

The study established that intelligence in surveillance contributes to crime prevention in Mogadishu city to a great extent. The study established that CCTV surveillance inflicts fear of being caught on criminals and that surveillance provides evidence and proof for criminal prosecution. The study found that surveillance assists in identification of crime suspects and that checking the history of crimes reveals the patterns of crimes.

5.4 Conclusions

The study concluded that intelligence sharing significantly influences crime prevention in Mogadishu city. This could be attributed to the fact that intelligence sharing helps in law enforcement and have increased number of arrests. Information sharing has also leads to inter-agency collaboration and helps in thwarting a crime before it happens.

The study concluded that intelligence data collection significantly influences crime prevention in Mogadishu city. Having prior information about an eminent crime helps in crime prevention while collection of intelligence gives directions on where to conduct

covert operations. Moreover, it was made clear that intelligence in open sources like newspapers creates awareness of the identity of criminals and this is supplemented by information from informants to assist in locating crime suspects.

The study concluded that utilization of intelligence in investigations significantly influences crime prevention in Mogadishu city. It was established that intelligence gives a clue on who to investigate as well as identifying information gaps to focus the investigation more clearly. In addition, intelligence helps to avoid duplication of effort and prevent straying into areas of no relevance and in identification of criminals within the community.

The study concluded that intelligence in surveillance significantly influences crime prevention in Mogadishu city. CCTV surveillance inflicts fear of being caught oncriminals and surveillance provides evidence and proof for criminal prosecution. Moreover, surveillance assists in identification of crime suspects and checking the historyof crimes reveals the patterns of crimes.

5.5 Recommendations

The study recommends that there is a need to establish procedures and mechanisms for sharing intelligence among the security officers. The establishment of a joint task force is important in this case because it will make it easier for the law enforcement agencies to share information. A joint task force should have access to data handlers such that it can access any type of information that it needs to deal with a specific threat.

The study further recommends that law enforcement officers need to make use intelligence surveillance by making use of robot cameras since it is not possible for the police to appear everywhere at the same time an also there are places deemed risky for any

police office to appear. The hard areas can now be managed easily without physically being there thorough use of these robots where they are thrown and monitored at a certain place to do search in suspected homes, and even vehicles since it can move freely w-using electric motor.

The study recommends that training should be provided to all levels of law enforcement personnel involved in the criminal intelligence process. This will equip the law enforcement personnel with skills that enable them to collect adequate intelligence to prevent crime even before it happens. The recipients of criminal intelligence training should be recognized and awarded certificates for successful completion of training

The study recommends that law enforcement officers need to make use of CCTV cameras, computers and tablets for communication so as to easily source intelligence. One of the solution as addressed by the research was the installation of CCTV cameras. CCTV cameras instill fear among criminals and this is why it is recommendable to instill CCTV cameras in all areas that are a threat to the safety of the city. This makes it easy to get information and act on them faster from any location. This gives officers more time to work and patrol as they rely on information

5.6 Areas of Further Research

The study also recommends that the future studies should focus on how intelligence led policing contributes or intelligence sharing can be a crucial on crime prevention in other cities. The current research has helped to know the importance of sharing intelligence among security agencies in reducing crimes. It would be important to research how the information exchanged and shared helps in reducing the rate of crime.

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APPENDICES

Appendix I- Letter of Introduction

Dear Respondent,

Re: PERMISSION TO CARRY OUT RESEARCH

I am a Master student at Africa Nazarene University, Kenya; I am carrying out a research study on the **INFLUENCE OF INTELLIGENCE SHARING ON CRIME PREVENTION: A CASE OF MOGADISHU CITY, SOMALIA**.

You have been identified as one of the people that could be of assistance with the research and I thus request your participation in the research. Essentially, you would be required to complete a questionnaire. You will be treated anonymously and your responses will be treated with utmost confidentiality. The information you provide will be used only for academic purposes and all ethical considerations will be upheld.

The questionnaire is strictly for academic purposes and any information given shall be treated with strict confidentiality; please give the information as accurately as possible. Thank you very much.

Yours faithfully,

Abdullahi Hassan Diblawe.

Appendix II-Research Permits

Jamhuuriyadda Federaalka Soomaaliya
WASAARADDA AMNIGA GUDAHA
XAFIISKA AGAASIMAHA GUUD

جمهورية الصومال الفدرالية
وزارة الأمن القومي
مكتب الأمين العام

SOMALI FEDERAL REPUBLIC
MINISTRY OF INTERNAL SECURITY
OFFICE OF THE DIRECTOR GENERAL

Ref: MOIS/004/20

Date: 03/06/2020

Mr. Abdullahi Hassan

Following your application for authority to carry out data collection on "***THE CONTRIBUTION OF INTELLIGENCE SHARING ON CRIME PREVENTION IN MOGADISHU CITY, SOMALIA***." I am pleased to inform you that you have been authorized to undertake the data collection in Mogadishu City for a period of one year

On the completion of the research, you are expected to submit two hard copies of the research thesis/ report to our office.

Mr. Ahmed Mohamed Mohamed
General Director

MINISTRY'S ADDRESS, MAKAH-AL-MUKARAMA MAIN ROAD, SHANGANI DISTRICT, MOGADISHU, SOMALIA
Tel: +25261 846 45 51 E-mail: mois@gov.so

JAMHUURIYADDA FEDERAALKA SOOMAALIYA
Wasaaradda Waxbarashada, Hidaha iyo Tacliinta Sare
Xafiiska Agaasimaha Guud

جمهورية الصومال الفدرالية
وزارة التربية والثقافة والتعليم العالي
مكتب الأمين العام

Somali Federal Republic
Ministry of Education, Culture & Higher Education
Office of the Director General

Ref: MED/723/20 Date: 02/06/2020

This is to certify that Mr. **Abdullahi Hassan Diblawe** of Africa Nazarene University has been licensed to conduct research in Mogadishu on the topic: **THE CONTRIBUTION OF INTELLIGENCE SHARING ON CRIME PREVENTION IN MOGADISHU CITY, SOMALIA.** For a period of one year.

Mr. Abdi Ahmed Ali
General Director

Address: Jidka Afgoye, Km5, Hodan, Mogadishu – Somalia, Tel: +25261-7241548
Email: minister@moe.gov.so

AFRICA NAZARENE
UNIVERSITY

26th May 2020

RE: TO WHOM IT MAY CONCERN

Abdullahi Hassan Diblawe (19J03EMGP005) is a bonafide student at Africa Nazarene University. He has finished his course work and has defended his thesis proposal entitled: - ***"Contribution of Intelligence Sharing on Crime Prevention in Mogadishu City, Somalia".***

Any assistance accorded to him to facilitate data collection and finish his thesis is highly welcomed.

Rodney R. Reed

Rodney Reed, PhD.

DVC Academic & Student Affairs.

Appendix III-Questionnaire

This questionnaire is to collect data for purely academic purposes. The study seeks to investigate the ***Influence of Intelligence sharing on Crime Prevention in Mogadishu City, Somalia***. All information will be treated with strict confidence. Do not put any name or identification on this questionnaire.

Answer all questions as indicated by either filling in the blank or ticking the option that applies.

SECTION A: SOCIO-DEMOGRAPHIC INFORMATION

1) Please indicate your gender:

   Female [ ] Male [ ]

2) Please indicate your designation

   CID Officer [ ] NISA officer [ ] Police officer [ ]

3) How long have your worked in the respective designation?

   Less than 3 years [ ] 3 to 9 years [ ]

   9 to 12 years [ ] More than 12 years [ ]

4) State your highest level of education

   Certificate [ ] Diploma [ ] Degree [ ] Masters [ ] PhD [ ]

5) Please Indicate your age bracket

   20-30 years [ ] 31-40 years [ ]

   41-50 years [ ] More than 50 years [ ]

SECTION B: INTELLIGENCE SHARING AND CRIME PREVENTION

INTELLIGENCE SHARING

6) Do you think intelligence sharing influences to crime prevention in Mogadishu city?

   Yes [ ] No [ ]

7) If yes, to what extent does intelligence sharing influence to crime prevention in Mogadishu city?

   Very low extent [1] Low extent [2] Moderate extent [3]

   Great extent [4] Very great extent [5]

8) Please indicate your level of agreement with the following statements on influence of intelligence sharing on crime prevention in Mogadishu using a 5 Likert scale where 1 is strongly disagree 2 is disagree, 3 is neutral, 4 is agree and 5 is strongly agree

	1	**2**	**3**	**4**	**5**
Sharing intelligence have increased number of arrests					
Intelligence sharing helps in thwarting a crime before it happens					
Intelligence sharing helps in law enforcement					
Information Sharing Leads to Inter-agency Collaboration					

9) In which ways do you think intelligence sharing have influences to crime prevention in Mogadishu city?

_____

_____

_____

INTELLIGENCE DATA COLLECTION

10) Do you think intelligence data collection influences to crime prevention in Mogadishu city?

Yes [ ] No [ ]

11) If yes, to what extent does intelligence data collection influences to crime prevention in Mogadishu city?

Very low extent [1] Low extent [2] Moderate extent [3]

Great extent [4] Very great extent [5]

12) Please indicate your level of agreement with the following statements on influences of intelligence data collection on crime prevention in Mogadishu using a 5 Likert scale where 1 is strongly disagree 2 is disagree, 3 is neutral, 4 is agree and 5 is strongly agree

	1	**2**	**3**	**4**	**5**
Information from informants help in locating crime suspects					
Intelligence in open sources like newspapers creates awareness of the identity of criminals					

Having prior information about an eminent crime helps in crime prevention					
Intelligence collection gives directions on where to conduct covert operations					

13) In which ways do you think intelligence data collection have influences to crime prevention in Mogadishu city?

_____

_____

_____

INTELLIGENCE IN INVESTIGATIONS

14) Do you think intelligence cooperation in investigations influences to crime prevention in Mogadishu city?

Yes [ ] No [ ]

15) If yes, to what extent does intelligence cooperation in investigations influences to crime prevention in Mogadishu city?

Very low extent [1] Low extent [2] Moderate extent [3]

Great extent [4] Very great extent [5]

16) Please indicate your level of agreement with the following statements on influences of intelligence cooperation in investigations on crime prevention in Mogadishu using a 5

Likert scale where 1 is strongly disagree 2 is disagree, 3 is neutral, 4 is agree and 5 is strongly agree

	1	2	3	4	5
Intelligence gives a clue on who to investigate					
Intelligence helps to avoid duplication of effort and prevent straying into areas of no relevance					
Intelligence helps in identifying information gaps to focus the investigation more clearly					
Intelligence helps in identification of criminals within the community					

17) In which ways do you think intelligence cooperation in investigations have contributed to crime prevention in Mogadishu city?

_____

_____

_____

INTELLIGENCE SURVEILLANCE

18) Do you think intelligence surveillance influences to crime prevention in Mogadishu city?

Yes [ ] No [ ]

19) If yes, to what extent does intelligence surveillance influences to crime prevention in Mogadishu city?

Very low extent [1] Low extent [2] Moderate extent [3]

Great extent [4] Very great extent [5]

20) Please indicate your level of agreement with the following statements on influences of intelligence surveillance on crime prevention in Mogadishu using a 5 Likert scale where 1 is strongly disagree 2 is disagree, 3 is neutral, 4 is agree and 5 is strongly agree

	1	**2**	**3**	**4**	**5**
Surveillance assists in identification of crime suspects					
CCTV surveillance inflicts fear of being caught on criminals					
Surveillance provides evidence and proof for criminal prosecution					
Checking the history of crimes reveals the patterns of crimes					

21) In which ways do you think intelligence surveillance have influenced to crime prevention in Mogadishu city?

_____

_____

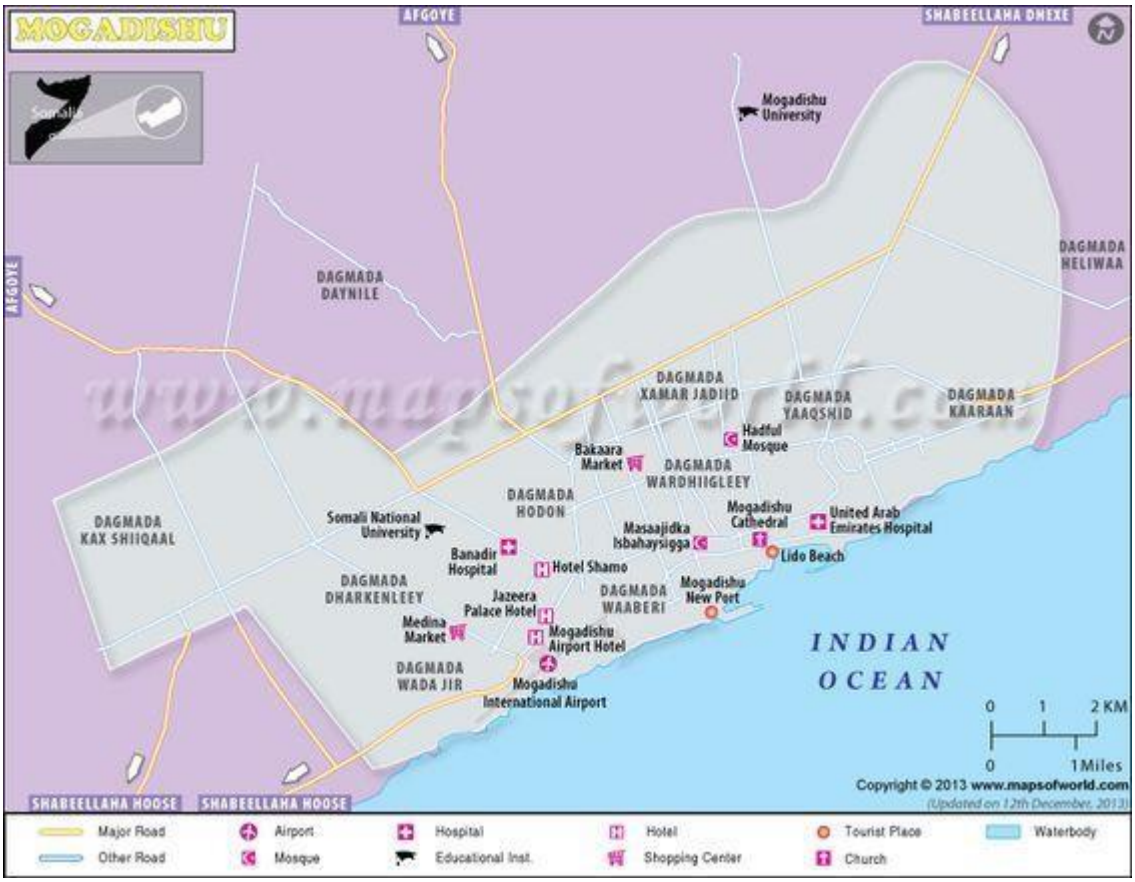
_____

CRIME PREVENTION

Please indicate the trend of the following aspects crime prevention in Mogadishu City using a 5 Likert scale where 1 was Greatly decreased 2 was Decreased, 3 will be constant, 4 was Increased and 5 was Greatly increased

	1	**2**	**3**	**4**	**5**
Number of Arrests					
Crime analysis					
Criminal prosecutions					

Appendix IV-Map of Mogadishu, Somalia



Source: Google maps (2020)