ANTECEDENTS OF OCCUPATIONAL SAFETY AND HEALTH AMONG POLICE OFFICERS IN NAIROBI COUNTY, KENYA

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Antecedents of Occupational Safety and Health among Police Officers in Nairobi County, Kenya

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DECLARATION

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

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This thesis has been submitted for examination with our approval as the University Supervisors.

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DEDICATION

This study is dedicated to my loving family, sons Enoch Toroitich and Elisha Tuitoek, daughter Abigail Jerop, and wife Peris, for their patience throughout the entire study program. I also salute and dedicate this study to my late loving mother, Targok Kipkelwon, who served as both mother and father when the latter died before I even saw or knew him. She drove me to school despite her own lack of academic education. She was in fact traditionally well educated. Her dedication and zeal for my academic success challenged me. She could walk the entire distance to Kituro Boarding Primary School and Kituro High School on her own hand made hides and skins shoes to pay me a visit and make sure I was doing well. She also visited me while at Moi High School, Kabarak, and the University of Eastern Africa. Due to her advanced age, she was unable to visit me during my postgraduate studies at the University of Nairobi. She accepted Jesus Christ and went to be with the Lord in January the same year 2013 before I graduated. Her own medical prowess, particularly in herbal medicine for reproductive health, inspired me to become a doctor earlier in life. Her patients could travel across two districts (now counties), Baringo and El Keiyo Marakwet, to our modest home, which served as her medical center. Expectant and lactating mothers with their babies may arrive in tropes of joy bearing a variety of gifts, including live goats with their kids. This is after they had previously spent several years unsuccessfully seeking medication elsewhere with no success in conception before consulting or seeking her medical services. I thank God for her. As a result, I dedicate this work entirely to her.

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TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

LIST OF APPENDICES

ABREVIATIONS AND ACCRONYMS

CIETT	International Confederation of Private Employment Services
CTDs	Cumulative Trauma Disorders
DCI	Directorate of Criminal Investigations
DRC	Democratic Republic of the Congo
EFA	Exploratory Factor Analysis
EPZ	Export Processing Zone
ERG	Existence Relatedness and Growth
GLS	Generalized Least Squares
HSE	Health Safety and Environment
HSC	Health and Safety Committees
HSO	Health (internal) Safety Organizations
ILO	International Labor Organization
ISIS	Islamic State of Iraq and Syria
KTB	Kenya Tourism Board
MSDs	Musculoskeletal Disorders. It includes chronic back, neck and shoulder pain.
NCG	Nairobi City Government
NIOSH	National Institute for Occupational, Safety, and Health

NPS	National Police Service
NGOs	Non-Governmental Organizations
OCPD	Officer Commanding Police Division
OCS	Officer Commanding Station
OLS	Ordinary Least Squares
OSH	Occupational, Safety, and Health
OSHA	Occupational, Safety, Health, Authority
PDF	Probability Density Function
PPE	Personal Physical Equipment
SCPC	Sub County Police Commander
SEM	Structural Equation Modeling
SPSS	Statistical Package for Social Sciences
SIDA	Swedish International Development Agency
SPM	Safety Performance Measurement
UK	United Kingdom
UN	United Nations
USD	United States Dollar
USA	United States of America
VIP	Variable Importance Projection

OPERATIONAL DEFINITION OF TERMS

Antecedents	This word means the past. It refers to things or some things that are of the past but can affect what is to come (Peltier, Barber, & Ogle, 2017).
Policies, Practices and Procedures	These are procedures or information that guide police officers as they perform their diverse duties, interact with people and show how to deal with any grievances that may arise (Streng & Kamimura, 2015).
Health and Wellness	It is a situation where a person or individual is living to full satisfaction as one goes about performing his or her duties (Friedmann, Son & Saleem, 2015).
Job Stress	This is also called stress at work where a job is strenuous, depressing, regrettable and fearful. It is experienced at a place of work resulting from lots of work given while at the same time an employee is trying to meet deadlines (Burman & Goswami, 2018).
Leadership Style	This is a special skill which is implemented to affect, instruct and supervise other workers on what they are to do as they performed their duties (Asgaro, Mezginejad & Taherpour (2020).
Legal Framework	A legal framework is composed of some set rules and activities which have to be either permitted or refused depending on the state they are in (Chetty & Alathur, 2018).
Occupational Safety	This is a situation where workers are operating in a safe environment and that will enhance their survival as company assets at work (Rue, Ibrahim & Byars, 2016).
Occupational	It deals with the welfare of employees at work in terms of working

Safety and Health	in a safe and healthy environment (Friend & Kohn, 2018).
Resources	They are defined as those things, circumstances, a person's profession or gift and in-built personal efforts that all add some economic value to individuals, a people or a country (Freedy & Hobfoll, 2017).
Safety	When the state of safety is good or high, it means that prevailing conditions are safe and makes it necessary to go slow on any actions aimed at increasing safety levels (Hollnagel, 2018).
Safety Culture	An organizational behavior which must contain human beings to safeguard against serious environmental issues based on their targeted goals and polices (Turner, 2019)
Work Environment	A healthy work environment is defined as a situation where an organization or workers are enabled to operate where things are all in order like procedures of work (Stalpers, de Brouwer, Kaljuow & Schuurmans, 2015).
Workload	This is defined as the number or quantity of work a worker is allocated to do and is able to perform well to satisfaction in terms of excellence and output (Swiger, Vance & Patrician, 2016).
Workers' Compensation	This happens when an employee gets injured while on duty and is paid for as a compensation for injuries sustained. It can also include helping employees to secure training or education after being injured (Friend & Kohn, 2023).

ABSTRACT

This study focused on antecedents of occupational, safety and health (OSH) among the police officers in Nairobi County in Kenya. The general objective of the study was to find out the antecedents of occupational, safety, and health of police officers in Kenya. Data was collected from police officers who were the main study population. The study chose Nairobi County where all the police stations were covered. The target population was 4,000 police officers that included commanding officers to have a sample size of 200. They were sampled through stratified random sampling. First a pilot test 10% of all 33 police stations in Nairobi and the police officers there in were initially used. The pilot study used Cronbach Alpha Coefficient to test on the reliability of instruments. The validity of the research instruments was also tested. The computer software SPSS version 28 was used to analyze the collected data. Out of the police stations that had remained, a sample of 5 percent of police officers and a commanding officer in each station were studied. Data from the respondents were collected by the use of questionnaires. The study was carried out on police officers who were on duty but after permits had been obtained from the relevant authorities, National Police Service (NPS) and National Commission Science Technology and Innovation (NACOSTI). It was based on a stratified random sampling research method where each officer had a chance of being chosen. Every officer commanding a police station was selected. Each respondent was requested to confirm in writing, affirmative action or signing a document without indicating their name to show that the study was done with their approval. The filled questionnaires were collected and kept with confidence. Through these modes of data collection, every population was well represented as a sample. Descriptive and inferential statistics were used in data analysis. Data was then presented in the form of figures, tables and charts. The response rate of the respondents was acceptable. It was found out that majority of the police officers had worked in the NPS for many years and were married. Four of the leading variables in this study that affect OSH were leadership style, legal framework, work environment and available resources. It was found out that majority of the leaders of police officers were visionary, valued the constitution and see it as a protector and supporter of their OSH. They see Kenya Human Rights and OSHA respectively as valuable Acts. In their work environment, many police officers were aware that they face risks during political rallies. On the other hand, majority of them consider available resources like government equipment; guns do affect their OSH. Majority of police officers, were of the view that government policies, practices and procedures are helpful to them during emergencies. It is recommended that police officers are availed sufficient safety gear in terms of personal protection equipment for their safety and health while at work. They should also be provided with comprehensive medical cover to help them in terms of need as they perform their duties in securing the nation. They should also be availed some counselors to help those who are stressed up. Through this, we shall reduce incidences of police killings and suicides among them.

Their population ratio should be improved to meet the international standards for them to efficiently perform their duties.

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

The study established a framework for comprehending the elements that influence police officers' occupational safety and health in Nairobi County, Kenya. Local, regional, and global perspectives were all studied. The chapter contained an overview of the study's aims, justification, and scope. Furthermore, the study examined the relevant occupational safety and health rules and regulations established by the Government of Kenya (GOK). It is critical for people to be safe at work, according to Kenya's Occupational Safety and Health Act (2010). According to this Act, employers are obligated to be vigilant at all times.

The study established the antecedents of occupational safety and health among Kenyan police personnel in Nairobi County. It found out on the global, regional, and local viewpoints. The chapter also described the study's objectives, rationale, and scope. The study also examined pertinent Government of Kenya (GOK) legislation on occupational safety and health and also Employment Act No. 11 of 2007 (Revised 2012). According to Kenya's Occupational Safety and Health Act, employee safety is of the utmost significance (2010). It goes on to say that employers must zealously defend this at all time.

According to the Work Injury Benefits Act (2012), the location of a job is immaterial. It does not matter if it is at an office, a factory, an employee on the road driving, or overseas on an international work assignment. This Act stipulates that an employee's health must be considered at all times. An employer's role is to compensate for any injuries, accidents, or other tragedies that may occur while a worker is on the job. The Kenyan government has labor rules that serve to safeguard on employees' well-being in various vocations.

According to the National Police Service Act No. 11A of 2011 (Revised, 2016), in Kenya, police officers must be appointed first before beginning any assigned responsibilities. It goes on to say that police officers are either administrative or regular. Officers in the Directorate of Criminal Investigations, Reservists, and Special Forces are among those selected for specific missions. Furthermore, police officers have all rights; they must work normal hours, be on duty at all times, and their safety and security must be guaranteed. The government controls access to classified material under this Act for officers' protection, safety, and national security. These take precedence over their rights or the rights of others who participate in studies like this one. A police station, on the other hand, is a place that has been set aside by the Inspector General of Police for running their operations. Other studies have been done on occupational safety and health of police officers as seen next.

A study on the causes and relationships of occupational stress among police constables was carried out in Kisumu, Kenya (Oweke, Muola & Ngumi, 2014). Other studies have also been conducted to determine how a work environment affects the performance of police personnel (Nderi & Kirai, 2017; Barasa, 2017). A study was also undertaken on employee compensation based on injuries or diseases caused by work-related duties, which resulted in death (Barrett, 2016). It has also been shown that police officers suffer from a variety of psychological issues to even after they have retired (Muthondeki, Sirera & Mwenje, 2014). Police personnel are also frequently depressed (Violanti *et al.*, 2016). This is due to a fear of physical threats and a lack of administrative and organizational assistance, which lead to their high rates of suicide. It was suggested that there had been little scholarly research on Kenyan police officers (Muthondeki, Sirera & Mwenje, 2014).

1.1.1 Global Perspectives in Antecedents of Occupational, Safety, and Health.

Aside from health hazards, police officers encounter and are exposed to missiles fired across borders. Policemen in Sderot, Israel, confront a horrific challenge as they attempt

to police their town. According to Jonathan-Zamir and Weisburd (2013), the police do not participate in interdicting missile launches or putting obstacles in their path, but they are the first responders and have overall responsibility for handling the scenes of missile landings; they also handle the remains of the missiles or bombs; and police officers are responsible for directing traffic and crowds around the scene and assisting local residents.

Rapes, assault, fighting with weapons, gang battles, robberies, or muggings were among the perceived forms of violence in an American metropolitan city survey (Hoffman, Mair, Hunter, Prince, & Tebes, 2018). The data revealed that there was no difference between men and women in high-crime metropolitan regions in their perceptions of safety and violence. Furthermore, it was observed that women's judgments about their safety, such as sexual assault, were significantly anticipated. A research done in the United Kingdom found that strong occupational safety and health standards (OSH) reduced the rate of fatal accidents from 0.8 in 2003 to 0.74 in 2011 (Abubakar, 2015).

In the United States, there have been mass shootings in public areas such as schools, which were the result of criminals or people who went wild and found enjoyment in brandishing firearms and exterminating other humans (Fox & DeLateur, 2013). This study solely looked at mass shootings and revealed that police officers were assigned to public schools in the years 2005–2006 (41.7%), 2007–2008 (46.3%), and 2009–2010 (42.8%). The stated study made no mention of police personnel's safety and health.

1.1.2 Regional Perspective of antecedents of Occupational Safety and Health

In Uganda, an examination was performed into the pressures that wildlife officers encounter while on duty. It was discovered that difficulties and obstacles such as pay and trade tools lead to high stress levels among workers (Moreto, 2016). According to McCleary-Sills *et al.,* (2013), there has been a lot of violence against women in Tanzania. The study's findings revealed that respondents were aware of the types of actions they felt were required in reporting to police officers. It demonstrated that

domestic abuse against women is not reported to just anybody. Furthermore, research revealed a widespread pattern in which women do not disclose any violence against them. Women's first choice is to seek assistance from their family. Finally, it was discovered that survivors of violence seek assistance in Dar es Salaam even when referral networks do not exist (McCleary-Sills *et al.*, 2013).

Elenge, Levenque, and Brouwer (2013) conducted a comprehensive study including 180 miners in the Democratic Republic of the Congo's Lupoto Katanga Province (DRC). They began by analyzing the miners who had previously worked for one year prior to the research. According to the statistics, 72.2 percent of the miners were engaged in the 392 incidents reported. The majority of these mishaps (51.5%) were caused by how personnel handled tools, and 32.9% included high loads. Age, seniority, and apprenticeship were factors in the research that were unimportant in these incidents. Contusions (50.5%) and lower limbs (29.3%) were involved in the incidents (Elenge *et al.*, 2013).

As a result of the incidents involving miners in DRC, 80.5% of them were cared for by their colleagues, while 50% were unavailable to work for three or more days (Elenge *et al.*, 2013). They claim that 19% of them had bodily injuries and that one of the reasons for mishaps in the research was the usage of inappropriate instruments. Another reason is that miners were unable to separate what was required of them based on their function and age. According to the findings of this study, people did not quit working even when their salary was low. Finally, the researchers' sole solution was to instruct miners on safety.

1.1.3 Local Perspective of Antecedents of OSH

As a result of the violent eruptions that happened soon after Kenya's elections in 2007 and 2008, it became vital to overhaul the police force (Ogada, 2016). According to Ogada, the police were accused of violating Kenyan residents' human rights by murdering 400 of them during the post-election rioting. A government panel

recommended the formation of a committee. It resulted in the establishment of the National Police Service (NPS), the National Police Service Commission (NPSC), and the Independent Police Organization Authority (IPOA) with distinct functions via acts of parliament that were important in establishing a Kenyan police policy. The IPOA, for example, is tasked with supervising policies and conducting investigations into complaints lodged against police officers.

The NPSC, on the other hand, was created to address policy concerns including recruitments, promotions, transfers, disciplinary issues, and methods of remunerating police personnel (Ogada, 2016). According to Ogada, the NPS handles all matters relating to all police officers, which include Administration Police (AP), Criminal Investigation Department (CID), General Service Unit (GSU), and ordinary regular police. When it comes to policing, the NPS is unwilling to use technology, for example, cameras fixed on them in its operations. These could have minimized or eliminated corruption. They are also required to be self-sufficient, accountable, and to supervise civilians. Police personnel are required to be accountable and transparent in operational matters, although they are routinely reviewed and controlled by the NPSC. In 2015, 1346 senior police officers were vetted, and it was revealed that 62% of them were unsuitable to perform their duties owing to corruption and other unethical activities (NPSC, 2015).

Police changes were also beneficial in assessing their salaries in 2015. Salary levels were reviewed, and a plan for police personnel's health and well-being was devised (Republic of Kenya, 2015). According to an IPOA study, the police population in Kenya was 80,000 in 2016, with 78.75% of them living in extremely low housing units. However, due to recruitment, this housing figure has decreased by 8% (IPOA, 2016). The vast majority of police officers opted to be awarded housing allowances in order to avoid staying at their work stations. The police chiefs are opposed to this housing arrangement because it would cause delays in responding to a crisis (Ogada, 2016).

As a consequence of the inspections, it was recommended that police security be reinforced and improved in the following ways: Security at the gates increased by 2%, report desks by 4%, fences by 4%, and signs by 2%. It was disheartening to see that 37% of police stations lacked resources such as fire apparatus and only 2% had first aid packs. Despite receiving 8% more gasoline and cars, funds for fuel were irresponsibly spent to the tune of Kenya Shillings 20,004,118. Other factors, such as promotion policies and training in accordance with rules, were not much improved, such as counseling and psychological assistance. A new curriculum was created to improve training. Several police personnel complained about not receiving their allowances because of dishonest high position officers (IPOA, 2016).

Muthondeki, Sisera, and Mwenje (2014) carried out a research in Kenya on the psychological issues experienced by retired police officers and discovered that the profession was plagued with employment problems that contributed to stress and poor performance at work. According to the survey, 10% of police officers who got injured on the job retained that injuries stress into retirement, and 58% of them had restless nights as a result of their professions.

An industrial research done in Nakuru County discovered that the majority of saw mill employees (80%) had not received occupational safety and health (OSH) training (Mong'are, Mburu, & Kiiyukia, 2017). According to the results, workers were not provided with personal protective equipment for their safety. It was also discovered that just 16% were wearing face masks, 46% were using nose masks, 21% were wearing ear protection, and 44% were wearing helmets. As a result of these flaws, 45.1% of them were involved in workplace accidents.

1.1.4 The Kenya National Police Service Profile

Afrobarometer, in collaboration with Michigan State University, the Institute for Democracy in South Africa (IDASA), and the Center for Democratic Development in Ghana (CDD-Ghana), conducted a study on Kenya Police Officers. Their study indicated

that the interaction between people and the police was lacking, necessitating the establishment of desks at police stations to improve or enhance it (Afrobarometer, 2015). According to a public study conducted in 2015, 29.8% of Kenyans did not trust police officers. Another poll on police standards countered these findings by stating that 98.2% of police officers did not detect any problem with civilians (IPOA, 2013). The majority of police studies are conducted by themselves, and civilian individuals who venture to participate are not freely given enough information (Ruteere, 2014). This study done by a civilian also experienced this.

The Kenya National Police Service is led by an Inspector General of Police, who is assisted by two other Deputy Inspector Generals who oversee the Kenya Police Service (KPS) and Administration Police Service (APS) as shown in figure 1.1. This chain of command has since been reorganized to only one Deputy Inspector General after matching KPS and APS. A Director of Criminal Investigations (DCI) reports to the Inspector General of Police as well. In Kenya, there are various police stations or posts overseen by police officials. The Administration Police Service (APS) and DCI were not studied. Figure 1.1 depicts the Kenya National Police Service's organizational hierarchy. The study was carried out on the Kenya Police Service (KPS) at the police station level as depicted in the organizational chart. The National Police Service was later reconstituted advocating for the merger of APS and KPS with one command structure. The organizational chart, figure 1.1 had earlier been developed before the new reconstitution of the police force.

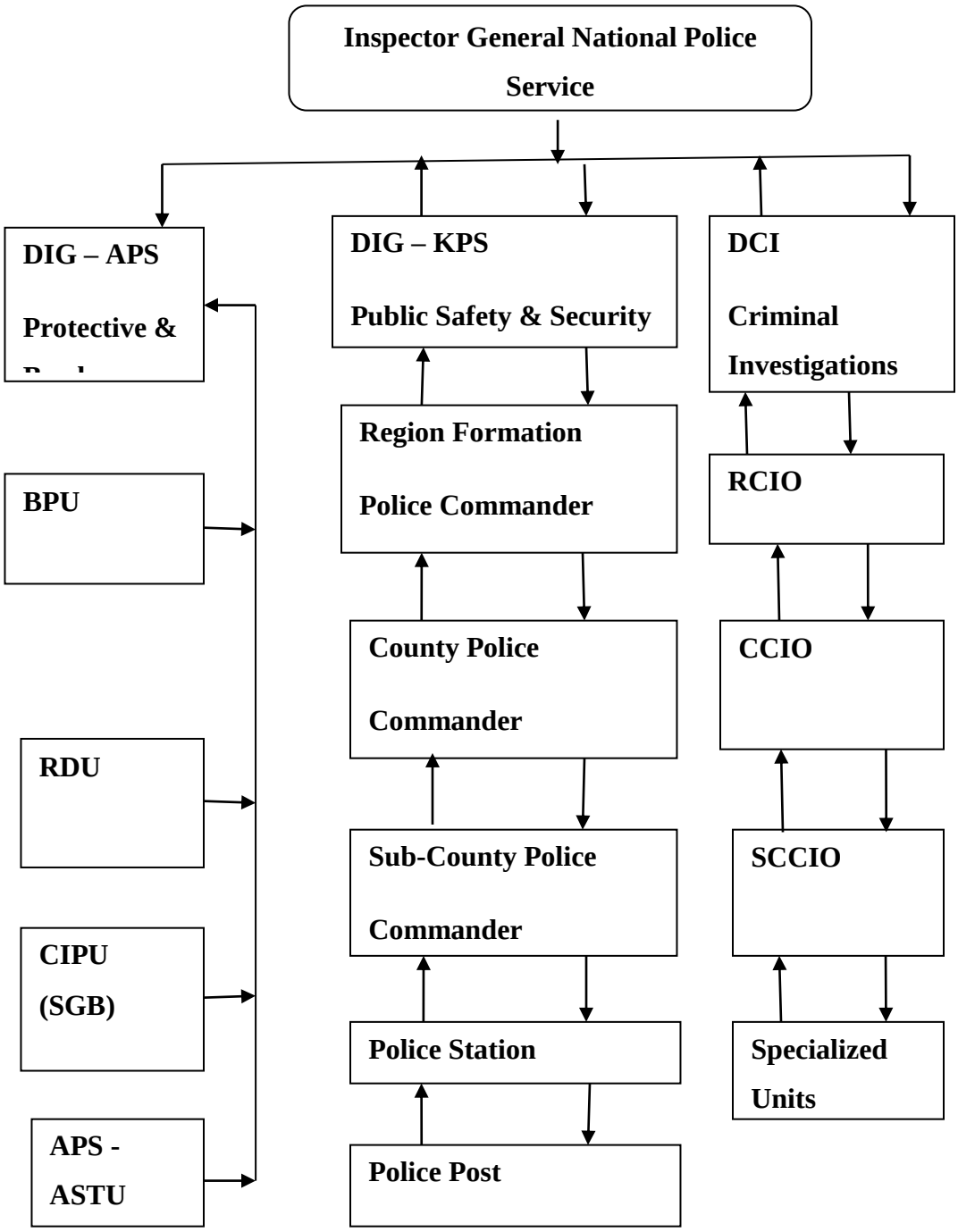


Figure 1.1: National Police Service Organizational Structure

Source: National Police Service

Key:

⟶ Chain of Command/Reporting Channel

BPU – Border Police Unit

RDU – Rapid Deployment Unit

CIPU – Critical Infrastructure Protection Unit (new)

APS-ASTU – Administration Police Service - Anti-Stock Theft Unit

All the above are under the command of the DIG Administration Police Services. The new structure was developed and it led to the abolishment of OCPD (Officer Commanding Police Division). This has been replaced by Sub-County Police Commander.

DIG – APS – Deputy Inspector General, Administration Police Service

DIG – KPS – Deputy Inspector General, Kenya Police Service

DCI – Director Criminal Investigations

RCIO – Regional Criminal Investigations Officer

CCIO – County Criminal Investigations Officer

SCCIO – Sub-County Criminal Investigations Officer

Specialized Units

The Kenya National Police Service has twelve formations of police (National Police Service, 2019a). These are General Service Unit (GSU), Anti Stock Theft Unit (ASTU), Kenya Police College, Traffic Police Department, Presidential Escort Unit (PEU), Kenya Police Dog Unit, Kenya Airports Police Unit, Kenya Railways Police Unit, Kenya

Tourist Police Unit, Diplomatic Police Unit, Maritime Police Unit and National Disaster Management Unit.

1.1.5 The Choice and Profile of Nairobi County

Nairobi is a Maasai term borrowed from their language (NCG, 2018). It goes on to say that the city was formerly a marsh and that it was first settled in 1899, when the British completed the Mombasa-Uganda railway line. The City Council of Nairobi was renamed Nairobi County in accordance with the 2010 Kenya Constitution. The Nairobi County Assembly consists of 85 elected and 38 nominated Members of the County Assembly (MCAs), with a Speaker serving as the leading officer (NCG, 2018).

The study picked Nairobi County since it is the only county in Kenya where the national government's headquarters are located to operate its operations (NCG, 2018). Nairobi is a Metropolitan City. The city is connected to the counties of Kiambu, Kajiado and Machakos to the North/West, South and East respectively. It is strategically positioned and linked to all major cities across the world by roads, railroads, and aircraft. This is due to the numerous airports, such as Jomo Kenyatta International Airport, Mombasa International Airport, Eldoret International Airport and Wilson Airport among others. Nairobi also contains some of the largest hotels, embassies, and offices of United Nations organizations, for example, it is the headquarters of United Nations Environment Programme among other amenities. Nairobi County's economic and social prominence requires the requirement of high-level security (NCG, 2018). According to police officials, it has a large population of roughly 4,000 police personnel (the exact number was not given for security reasons).

Nairobi County was also chosen for this study due to its strategic importance and to have consistently had the largest population of 3.5 million people according to the 2009 population census, the highest in East Africa and 14th in Africa (NCG, 2018). According to the 2019 census, Nairobi County's population increased to 4,397,073, accounting for 9.2% of Kenya's total population of 47,564,296, followed by Kiambu County with

2,417,735 and Nakuru County with 2,162,202 (Kenya National Bureau of Statistics, 2019). Furthermore, the city is metropolitan in character and has housed many people from other nationalities and tribes, as well as being the headquarters of a central government. Nairobi's diversity poses a security risk to Kenyans, visitors, and investors and police personnel are particularly the most vulnerable. According to a Transparency International, Kenya (2016) survey, police officers (32%) and officials in charge (68%) have received training on current developing challenges such as terrorism and other crimes. This demonstrates the significance of the study problem.

1.2 Statement of the Problem

It has been stated that the nature of police officers' employment should be anticipated to induce discomfort (Violanti, *et al.*, 2016). They argue that this is exacerbated by their administrative procedures, their inability to gain support from their colleagues, the public opinion of them, and their sense of hopelessness. According to studies, work accidents more than doubled in 2009 compared to the previous year (Achim, 2018). According to the researcher, 97% of individuals who become handicapped as a result of an accident are blind. Furthermore, there was continuity in those who died from 2008 to 2009, with 5 of them being the result of gunshots in 2009. According to this study, accidents climbed by 60% in 2009 compared to 25% in 2010, yet police officers were handicapped by 96%. In the years that followed, there were accident reports in both 2011 (4 fatalities) and 2012 (256 accidents, 229 of which were work-related, 27 from accidents, and 97% disabled). In 2013, there were 233 injuries, whereas in 2014, there were 286. In 2013, there were 233 injuries, up to 286 in 2014, which were all disabled (Achim, 2018).

Emerging challenges such as terrorism exacerbate police personnel' occupational safety and health hazards. On January 15, 2019, a terror assault at the Dusit Hotel in Kenya killed 21 people (National Police Service, 2019a). One Kenyan police officer was killed among the 16 Kenyans, one Briton, one American, and three other Africans who

perished. It is also alleged that 28 people were hurt and sent to hospitals near the crime scene. Five terrorist offenders had to be eliminated by the valiant police officers (National Police Service, 2019a).

In various crime reports, as mentioned and listed in Appendix I and II, on-duty police officers have been maimed, disabled, and even killed across various years 2014 to 2021. In Kenya, 70 police personnel were killed in 2016 (National Police Service, 2019b). It was also alleged that 34 of them were slain in the Rift Valley, with 7 being tragically killed by their own officer who had gone insane or sick. Al-Shabaab also attacked other police personnel at police stations or while on patrol.

According to police sources, 28 cops were murdered and 102 were injured while responding to robberies and terrorist assaults (National Police Service, 2019c). According to another source, 23 police officers were slain, 10 were wounded, and 10 civilians were killed (National Police Service, 2019d). Four police officers were shot on June 19, 2011, at Lochakula camp, and two died as a result of their injuries (National Police Service, 2019e). It was also claimed that on October 28, 2011, a truck carrying GSU policemen was blown up by an improvised explosive device (IED) near Liboi, injuring the police officers. There are a total of 538 police officers killed and 3,127 were injured on the line of duty from the year 2014 to 2021 as shown in Appendix I and II (National Police Service website, 2022).

The study's goal was to determine why police officers' occupational safety and health was an issue. After being notified, telephoned, or contacted to attend to a terror attack or other emergency, such as a fire or an accident, police officers are typically the first responders (Janathan-Zamir & Weisburd, 2013). This exposes them to the risks of being injured or killed while on the line of duty. Many run over IED planted in the roads and killing them.

It is critical to do research on the occupational safety and health of police officers for a variety of reasons. They, like other employees, have families, friends, coworkers, and

superiors with whom they must collaborate (Violanti *et al.,* 2016). Their employment, safety, and health are protected by law and will ensure the country's safety (Work Injury Benefits Act, 2012). They also pay taxes to the government and, regrettably, confront several obstacles upon retirement (Muthondeki, Sirera & Mwenje, 2014). Based on the different studies mentioned above, the study concluded that the occupational safety and health of police officers is a research problem. A lot of research has been done on police stress but scanty studies have been done on occupational safety and health making it a research gap. From the literature reviewed, the study derived the research objectives as they are listed next.

1.3 Research Objectives

1.3.1 General Objective

The general objective of the study was to find out the antecedents of the occupational safety and health of police officers in Kenya.

1.3.2 Specific Objectives

The specific objectives of the study were:

i. To determine on how a leadership style affected the occupational safety and health of police officers.

ii. To analyze how a legal framework affected the occupational safety and health of police officers.

iii. To evaluate how the nature of work environment affected the occupational safety and health of police officers.

iv. To establish how the available resources affected the occupational safety and health of police officers.

v. To find out how the amount of workload influenced the occupational safety and health of police officers.

vi. To determine on the moderating effect of government policies, practices, and procedures on the relationship between antecedents and occupational safety and health of police officers.

1.4 Research Hypotheses

The study used the following null hypotheses:

H_{01}: There is no significant relationship between leadership styles and occupational safety and health among police officers in Kenya.

H_{02}: There is no significant relationship between legal frameworks and occupational safety and health among police officers in Kenya.

H_{03}: There is no significant relationship between work environment and occupational safety and health among police officers in Kenya.

H_{04}: There is no significant relationship between available resources and occupational safety and health among police officers in Kenya.

H_{05}: There is no significant relationship between workload and occupational safety and health among police officers in Kenya.

H_{06}: There is no significant moderating effect of government policies, practices, procedures on the relationship between antecedents and occupational safety and health among police officers in Kenya.

1.5 Justification of the Study

The study in question was critical to all parties involved. Work will flow smoothly when businesses, workers, and clients are safe while conducting their business. The study will

also assist companies in developing methods for staying and working safely. As a result, the impacts of violence, danger, terrorism, and other disasters will be prevented or mitigated. Organizations will also be able to save millions of dollars that would otherwise have been wasted due to a lack of safety and security.

The level of power wanted by a holder influences a leader's manner. Some leaders are highly reputed for their leadership styles. The leadership style of a police officer commanding a county, sub-county, or station affected the officers' safety and influenced their occupational safety and health. Police officers were chosen in the study for they normally secure the internal security of a country. Their safety also is paramount even as they secure a country's population. According to government records as shown in appendix I and II, in the period 2014 to 2021, 3,127 Kenyan police officers were injured while 538 died on the line of duty (National Police Service website, 2022).

1.5.1 The Government of Kenya

In this day and age, where kids are being radicalized into terrorist organizations or cells, the occupational safety and health of police officers is critical. With the findings of this study, the government will be in a better position to protect her security agencies and the nation as a whole. As the cops carried out their duties, they would be more alert to any threats, putting their own safety first before that of others. The findings will also help other multi-agency security officers. Kenyan security professionals are being utilized beyond borders, in United Nations peacekeeping missions, and even in Interpol assignments.

1.5.2 The Kenya Police Service

The Kenya Police Service was founded in accordance with the constitution's National Police Service Act No. 11A of 2011 (2016) and is separated into Kenya Police Service and Administration Police Service. Research into police officers' safety is becoming increasingly important with the rise of terrorism and terror. This wickedness is

penetrating all sectors of the economy, African countries, and the world at large. This threat exists in all economies, whether emerging or developed, including superpowers such as the United States and Russia. This research will be beneficial to police personnel so that they may take good care of themselves and others. They will be able to put an end to and prevent terrorism, as well as other types of terror and bloodshed. The police will also guarantee that they operate in a safe and healthy workplace. The government will also boost the safety of the cops through safety training and medical programs.

1.5.3 Human Resource Practitioners

The work will be useful to other researchers, particularly those in the field of human resource management. The study's findings will be beneficial to the human resource profession. Employers and workers will understand the significance of employees' occupational safety, security, health and will act on the study's conclusions and thereby cut off costs from injuries and illnesses. This includes human resource personnel who work with police officers.

1.5.4 Researchers and Scholars

The findings of the study will add to the corpus of knowledge. Other experts will analyze the findings and do more research after they have been made public.

1.6 Scope of the Study

The study was conducted within the Kenyan territory. It was limited to the internal security sector, but primarily the Kenya Police Service. Other security agencies, such as Administration Police Service, the military or Kenyan prisons personnel, were not included. The research was conducted in Nairobi County, the country's capital. The study was carried out on a total of 33 police stations in Nairobi. It was difficult for security services to provide the precise number of police personnel stationed at various police stations, particularly to avoid attacks by Al-Shabaab and terrorists. This was not

provided for their own security and safety. According to a senior officer, the survey included around 4,000 police officers. Data was gathered from officers of all ranks. A pilot study of 10 percent, that is, three police stations of the thirty three police were picked. A sample of 200 police officers which was 5 percent of the target population was chosen. Apart from the 3 police stations for pilot studies, the remaining ones were issued with questionnaires to fill. Data was thereafter analyzed and findings reported. The whole study process till analysis took about nine months between the months of February to November 2019.

The scope of the research project was on five independent variables. These are the following: leadership style, legal framework, work environment, available resources, and workload. The study also sought to determine the moderating influence of government policies on the relationship between antecedents and occupational safety and health of police officers. Occupational safety and health (OSH) is the dependent variable in this study.

The study looked at how different leadership styles influenced occupational safety and health (OSH) outcomes. Legal issues in an organization might impede timely responses to a security attack, necessitating an examination of how a legal framework influenced OSH. The work environment had to be analyzed as well to determine how it influenced OSH. The study also determined how resources influenced occupational safety and health. The workload was then determined, as well as how it affected OSH. Finally, it was critical to determine how government policies had a moderating influence on the occupational safety and health of police personnel.

1.7 Limitations of the Study

The study had a number of limitations. First, the study was a sensitive security issue which was being studied. The issue of the occupational safety and health of police officers is a sensitive topic to do. Secondly, the police officers were initially reluctant to fill in the questionnaires when they were given. They were not sure of the use of the

outcome of the study. Thirdly, the police officers are quite very busy while performing their tasks. They did not have enough time to instantly sit down and fill the questionnaires. They took their time doing this especially after work.

The above limitations were overcome by the study by doing the following: For the first limitation, the study had to secure approval from the headquarters of the National Police Service (Vigilante House) to do the research. After obtaining that approval, the study also had to obtain another from the Commandant of Nairobi. This was based on their policy of chain of command. After that, a permit was also obtained from National Commission of Science Technology and Innovation (NACOSTI). The second limitation was overcome by meeting all the Officers Commanding Stations (OCS) of each police station to get their permission. This was made easy by showing the commanders the approval letters and permits to carry out the study. A good relationship was developed with those police officers and they were given the questionnaires to distribute to their juniors. The third limitation was made easy after overcoming the second one. The OCS was able to distribute the questionnaires according to the availability of officers. The officers who were on duty were each given a questionnaire after being given explanations and seeking their consent.

CHAPTER TWO

THE LITERATURE REVIEW

2.1 Introduction

This chapter reviewed the literature on the study's variables. It also reviewed the theoretical framework. A review was done on all the theories relevant to the study. A theory was identified and reviewed for each of the variables in the study. Each of the

variables was linked to a theory relevant to it. When conducting research, the literature is thoroughly evaluated, pertinent theories are addressed, a conceptual framework and critique are found, and research gaps are filled. The development of a conceptual framework was also studied and empirical review done from literature. A critique of literature and summary was reviewed. Finally a research gap was identified.

2.2 Theoretical Review

When a study is unique, it is extremely valuable to other researchers (Charmaz, 2005). The researcher went on to say that this would help alternative hypotheses to emerge. A theory, according to this academician, allows a researcher to look beyond the scope of the study. A researcher did this, according to the scholar, by delving deeper into the meaning of words and the field of study. It is further suggested that scholars go through phases of study, data collection, and analysis before generating an idea and eventually a theory.

When doing research, it is critical to have a theoretical framework in place. It comprises demonstrating the basis for conducting research; identifying problems and causes for them; answering any important issues that must be addressed; and demonstrating the relevance of a study (Grant & Osanloo, 2014). According to these scholars, theoretical frameworks are created from theories sourced from the literature that have stood the test of time, are valid, or are relevant to the study being conducted. According to Merriam (1997), it is a researcher's eyes that view the world. In research, one may grasp the technique to be employed in order to address issues, methods of doing so, and how connected each variable is to the other. It employs methodical methods. Furthermore, it is the systematic approach of each concept, what is assumed, and the researcher's conviction in supporting and leading study programs (Miles & Huberman, 1994). It also displays the research parameters and their relationships.

An issue must be discovered in a research project, which is usually created by various circumstances that lead to the requirement for a certain field of study (Miles &

Huberman, 1994). These researchers assert that a theoretical framework must have some linkage to a study topic. Furthermore, a researcher must define the purpose of the research as a justification for conducting it. The theoretical framework created should be relevant to the purpose of the study. A researcher should describe the relevance of a study subject. It contains the beneficiaries, its worth, and the reasons for selecting a certain theoretical framework relevant to your field of study (Miles & Huberman, 1994). The study discovered six theories that support both independent variables and dependent variable under consideration and one supporting the moderator.

2.2.1 Douglas McGregor Theory

According to Baron (1999), the Biblical Moses' leadership skills, straits or styles, are still regarded as very important. Moses established laws and regulations that are applicable throughout or cross-culturally. This leadership style is beneficial for quick thinkers; people who are not dogmatic in their leadership styles; being trusted through difficult times; and having laws and regulations that are appropriate and recognized cross-culturally. Other prominent leadership styles for nations are Confucius' and Plato's. Second, Aristotle is good for political leaders since he lacked meaning and virtue. Third, Machiavelli advises leaders to be solid, steady, and stable. Finally, Hegel's form of leadership may be found at West Point Military Academy, where soldiers are required to study before they are given the opportunity to lead.

Other leadership philosophies and theories are as follows:

Theoretical Framework

This one is distinguished by the habits that determine a person's qualities (Bass, 1990_a). For Situational Analysis, the circumstances of a specific scenario have a vital role in shaping leaders (Stodgill, 1947). In America, it is considered that leaders are born rather than made. It is stated that leaders do not grow themselves but rather assist in the resolution of existing challenges, leading to the development of great leaders (Murphy,

1941). Situational leadership theorists contend that leaders attain a degree of leadership as a result of prevailing conditions and the time period in which they exist (Bass, 1990_a). According to Bass, crises create an ideal environment for the birth of leaders. There are various aspects to comprehend about this form of leadership, which are as follows: First, consider the leader's attributes and goals. The second factor is the perspective and images that others see in a particular leader. Third, there are different signals or characteristics that manifest in a certain leader. Finally, there is the current situation in which people who are being led find themselves (Gerth & Mills, 1952).

Political Theory

This theory holds that the wealthy, troops, government officials, and religious leaders are intended to lead the people (Gerth & Mills, 1952). They claimed that in order to compete via politics, leaders must recognize their followers' needs, wants, and necessities. They should not also disregard the poor while deciding on the role that the many will play. Other human development theories include those of Argyris, Likert, Blake & Mountain, Maslow, Hersey & Blanchord, and McGregor (Landis & Hill, 2014).

Argyris (1957) Theory explains that it is a condition in which an organization offers individuals with the assistance they require to contribute to its success and they must be disciplined (Landis & Hill, 2014).

Likert Theory

It is critical for leaders to consider what is anticipated and appreciated, as well as the talent of the people with whom they work (Bass, 1990_b). They should also not disregard those beneath them; when making decisions, they must consider their followers' needs, especially when it comes to assisting their followers to achieve success.

Mounton and Blake's Theory (created between 1964 and 1965)

This is founded on concern for both the organization and the individual, which should be the same in order to have successful followers who are devoted to the organization and the job they undertake. None of them should be lower than the others (Landis & Hill, 2014). The next theory is relevant to the study.

Mcgregor Theory X and Y

In theory X, it is stated that people will only easily work through being forced to do so. Theory Y on the other hand, is a situation where people will only work through motivation (Landis & Hill, 2014). The theory deals with leadership styles as stated by scholars ((Derek, Hall, & Taylor, 2008). It was developed in 1960 by Douglas McGregor and it involves theory X and theory Y managers. It focuses on human relationships, along with output and performance. In this theory, managers using theory X believe that human beings dislike work and this means they have to be coerced, controlled, directed or threatened with punishment for them to put effort.

A theory Y manager on the other hand believes that human beings who work under proper conditions learn not only to accept but seek responsibility. They are able to exercise self-direction and self-control to achieve an objective. Autocratic and transactional leadership styles are combined in the theory (Derek *et al.,* 2008). The human aspect of business revealed that organizations in the United States of America (USA) used this management approach. According to this premise, people needed to be continually supervised and shown what to do through tight supervision and stringent regulations (theory 'X'). This is in contrast to when they are considered as people who can handle themselves (theory 'Y'). Good leaders and managers model good behavior and allow people to work and be safe at the same time (Derek *et al.,* 2008).

Other forms of leadership styles include transactional, transformational, enabling, and controller leadership (Armstrong, 2009). Enablers aim to help others see the good in the future by enabling them to achieve even impossible goals. Transactional leaders are primarily concerned about money. These leaders are involved in occupations, security

difficulties, and other comparable situations that need people to follow them without fail. According to Armstrong, transformational leaders are terrific motivators for others to reach new heights. Controllers, on the other hand, are tyrants who impose their will on others and do not allow employees or individuals to raise their heads. Their sole goal is to utilize people to fulfill their needs. Employees are suppressed and not transformed in this environment. A four-year research project on psychological risk exposure was conducted at the police department, and the cost was estimated to be three million euros (Hassard *et al.*, 2014). Transformational leaders are focused on change (Smith, Eldridge & Dejoy, 2016).

Goleman (2000) proposed six distinct leadership styles: coercive, authoritative, affiliated, democratic, pace-setting, and coaching. According to these leadership styles, police commanders must employ one or more of them to manage their colleagues, particularly on occupational safety and health concerns. If the applied style is dangerous, other police officers and stakeholders will also become unsafe. The idea addresses concerns about authoritarian and democratic leadership styles. The flexible leadership style is supported by the idea because it guarantees that businesses have leaders who lead in accordance with any prevailing conditions for the occupational safety and health of employees.

Douglas Mcgregor theory has been criticized by scholars like Mash (1974). Other academicians have also had their share of criticism by claiming that it is not complete not unless an assessment is done based on detailed situations of the environment (Dartey-Baah, 2009). According to this academician, Theory Y, for example, is generalized instead of being given specifics. This scholar adds that the advocates of the theory factor are the fact that leaders have fundamental assumptions affecting the nature of human beings and other employees. The role played by the environment is critically important (Dartey-Baah, 2009). Douglas McGregor Theory supports leadership style to ensure that organizations are run well for the occupational safety and health of employees. Police officers are the employees in this study.

2.2.2 Fit or Contingency Approach Theory

In Islam & Hu (2012), Hofstedes' contingency technique was studied. According to these researchers, it was created in 1967. They discovered that issues concerning the economy, technological progress, and even social elements influenced budget creation. According to Islam and Hu (2012), Hayes pushed for the application of contingency theories in 1977. They said it was beneficial for researching organizational behavior. Contingency theory is believed to be a study of organizational behavior and how contingent circumstances impact the design and performance of organizations (Islam & Hu, 2012). It indicated that the outcomes of any organization were the result of a fit or match between two or more elements that impacted it.

Contingency theory deals with both external and internal tactics (Derek *et al.*, 2008). They argued that an external strategy called for a human resource to collaborate with customer demands. This means that any human resource rules adopted should be beneficial in order to guarantee that a firm's operations run smoothly (Derek *et al.*, 2008). They went on to say that the approach is important for staff management in order for them to be effective workers. When it comes to their hiring, they should be team players, friendly, and cooperative, as opposed to those that work alone. An employee's contribution to the team must be evaluated. Rewards are also granted based on the performance of the team. Employees are also compensated based on their performance on the job. In difficult economic times, performance is crucial.

According to Niu (2010), amid difficult economic times, there are various difficulties that increase employee job turnover, constraints at work, and job transfers that become widespread as brighter pastures are sought. According to this expert, litigation will be expensive. According to Niu (2010), rising litigation drives up costs, which are sometimes driven by unscrupulous activities by attorneys, court clerks, or agents. Work would also be done poorly in such settings by inexperienced staff that is unaware of their obligations, roles, and responsibilities. Furthermore, the ability to react to emergencies

would be called into question. Finally, the cost of administration and human resources is skyrocketing.

On the other hand, Niu (2010) stated that workers would experience a high number of injuries and occupational diseases, causing employees to suffer and be in pain; the cost of medication would rise as organizations sought to treat employees; and employees would seek off-duty work, resulting in lost work time. Future benefits and wages will be lost due to a lack of jobs. Job stability and even professional advancement would be jeopardized. The care of children at home would be an issue, and family members would be required to give home care help, raising expenditures. It would cause tension in family relationships. Employees would lose their sense of self-worth and identity as a result of this. There will be consequences for social and shared interactions. Finally, it will have an impact on social activities such as recreation. Contingency theory addresses policy and legal difficulties in dealing with employees. Even in difficult economic times, contingency theory may help organizations survive.

Fit or Contingency Theory have had its share of criticism. Osman (2019) criticized this theory by claiming that when all theories including Contingency, are examined, the biggest criticism can be directed to the fact that a huge proportion of leadership theories originated from North America. Some other scholars argued that the theory is often criticized for lack of strength in explaining it (Martin & Hofmann, 2019). This theory supports the flexible legal framework by ensuring that firms always follow the required rules, laws, and regulations for employee occupational safety and health, as well as organizational success.

2.2.3 Person - Environment Fit Theory

John RP French, who got a Kurt Lewin award in 1992, contributed to the creation of Person-Environment (PE) fit theory (Caplan & Van Harrison, 1993). The theory is connected to employee occupational difficulties and describes the relationship between human resource strategy and the organizational environment (Boselie, 2010). This

researcher went on to say that we need to market and institutionalize procedures for the latter, which deal with the kinds of competitors that companies encounter when they compete in the same business environment or region of operation. They compete for resources like personnel, consumers, and so on. According to Boselie, companies prospered because they emulated each other in how they conducted things. New institutionalism, on the other hand, contends that uniformity is undesirable. On the other hand, new institutionalism contends that, aside from the previously mentioned competition, other variables contribute to uniformity (Boselie, 2010).

Employees will become anxious if the working atmosphere is unsuitable (Niu, 2010). This professor went on to say that firms must find methods to combine their company operations, employee safety, and ensuring incidents are reported. He went on to list the following as some of the reasons employers and workers fail to disclose accidents: Difficulties in associating injuries with work, difficulties with the security of employment or job, supervisors who can be bought by firms not to disclose workplace accidents, employees preferred medical insurance coverage and avoided workers' compensation schemes (Niu, 2010). They believe that compensation applications will be denied. Some employees may experience self-denial of the damage due to financial obligations to maintain themselves and their families. Employees may have left their jobs due to redundancy, sacking, or transfer (Niu, 2010). Employees may have retired due to disability, according to the scholar.

The issue of safety culture is the leading cause of employee injuries and disasters after accidents (He, Xu & Fu, 2012). In this China study, culture and safety performance are connected elements that drove each other and caused accidents. Other researchers discovered that it was difficult for firms to define the aspects of a safety culture (Shi & Shiichiro, 2012). It was stated that safety was essential in all areas of the economy, including shipping. Businesses are being conducted in the most dangerous locations, according to reports (Ek, Funefors & Borell, 2014). They also mentioned that past work-related disorders included traumatic injuries, respiratory infections, occupational

dermatitis, and musculoskeletal injuries. Asthmatic illnesses, psychological stressors, and other impacts of video and computer use have emerged as new issues (Loewenson, 2001).

The person-environmental fit hypothesis promotes a changeable work environment because organizations will attempt to manage operations in such a way that the work environment does not jeopardize employees' occupational safety and health. Focused organizations will reward such excellent achievement (Redmond & Nemati, 2016). Person-Environment Theory has faced immense criticism from scholars. It has been criticized that it is a stagnant theory yet it is supposed to represent a vibrant relationship between the human being and the prevailing circumstances (Sekiguchi, 2004). The scholar adds that notwithstanding the criticism, more studies have been done proposing more vibrant models of the theory.

2.2.4 Conservation of Resources Theory (COR)

The Conservation of Resources Theory (COR) has been in use for 34 years, since Hobfoll first popularized it in 1989. According to Merino, Privado, and Arnaiz (2019), resources are any entity that has value and aids in the achievement of a given goal. They also mention the following characteristics about them:

i. They are objects, such as owning a building.

ii. It has personal attributes such as optimism or self-esteem, as well as physical or psychological qualities such as health.

iii. Some effort or energy expended, such as time, money, or knowledge gained via training.

iv. To know one's current situation or circumstances, such as marriage or employment. These contribute in many ways to achieve this.

The central tenet of Conservation of Resources Theory is that humans strive to safeguard, preserve, and develop resources because their well-being (eustress) is dependent on their growth and their level of stress (distress) is dependent on their loss (Merino, Privado, & Arnaiz, 2019). Others contend that Conservation of Resources Theory is a motivational theory because human beings have an incentive to preserve what they have currently and gain fresh resources (Halbesleben, Neven, Paustian-Underdahl, & Westman, 2014).

Other resources based studies has been done as that of Wernerfelt in 1984 but later its development was enhanced by several scholars through a number of paper presentations (Miller, 2019). It entails on the way organizations can competitively make use of the resources they have which include properties, the capability they have, being knowledgeable among others. According to Derek *et al.,* (2008), it is the viewpoint of Barney in 1991 that prompted Boxall in 1996 who sought to develop a strategic model. They said that the idea aims to maximize the utilization of existing resources for the benefit of organizations. According to Ali (2013), in a research conducted in Nigeria, criminals have evolved in their illicit operations in all parts of an economy. Ali went on to say that educated people are more aware of their own security, safety, and the state of the environment in which they live. Another solution is to provide jobs to the population in order to ensure economic stability. This is in addition to a country having responsible and accountable authorities and a solid transportation system. When these become well-established, they pose a threat to the public and the police (Ali, 2013).

It is the obligation of enterprises to ensure that their available resources are utilized economically and to improve employee safety (Underhill, 2002). This is determined by whether an employee is on a permanent or temporary basis. The author went on to say that there are several consequences when employees are hired, including: difficulties due to a lack of track record for hiring employees; they are found in diverse work environments that include high-risk areas; administrative tasks are difficult to handle;

and it is a shift away from psychological well-being issues and does not only deal with employees.

In one case, employees who had been hired on a permanent basis bullied others who had just started (Underhill, 2002). Many employees may die prematurely as a result of workplace stress, weariness, melancholy, and chronic headaches. These employees will compare themselves to inmates, especially if they are performing temporary or permanent occupations that they consider undesirable.

Underhill (2002) conducted a research on 85 firms that had hired temporary labor. It was discovered that numerous variables contribute to occupational safety and health. They were then listed as the ones that contributed to high levels of OSH in a company. Temporary employees were more likely than permanent employees to be injured; they were injured more frequently and seriously than permanent employees at the same location; and they were more likely to be injured early in their placement, with 48 percent of those injured receiving the injury in their first month of employment, compared to permanent employees who had not been injured in the same timeframe. Furthermore, they were generally younger and less experienced than regular staff. It was discovered that 43 percent of them were younger than 25 years old, while just 13 percent were permanent. On the other hand, 40% were unqualified, compared to 17% who were permanent. Furthermore, in order to offload risks, many businesses have decided to subcontract their work to agencies.

According to Hobfoll, Freddy, Lane, and Geller (1990), people have as their main objective to safeguard and protect those resources that they value. It is made possible by having a strong resource collection, so that resource strength secures potential development of resources and security. In other words, resources are valuable both directly and indirectly because they preserve other resources. According to other researchers as from the perspective of organization, the precursors of mental stress include demands from work and a lack of resources. They argue further that the

expectations include employment vagueness, role conflicts on roles, stressful situations, and a heavy workload. According to Hobfoll, Freddy, Lane, and Geller (1990), individuals have as their primary goal to preserve and protect those resources that they value. It is made feasible, in turn, by having a robust resource pool, so that resource strength protects future resource development and security. In other words, resources have direct and indirect value because they protect other resources. Other researchers claim that from an organizational standpoint, the antecedents of mental stress include organizational demands and a lack of resources. The expectations, they continue, allude to job ambiguity, role conflict, stressful occurrences, and a hefty workload.

The philosophy of resource conservation has been criticized. According to Merino, Privado, and Arnaiz (2019), even though reduction of resources results in anxiety, individuals may compensate up for the shortfall through other resources. Halbesleben, Neven, Paustian-Underdahl, and Westman (2014) have all criticized this hypothesis. They critiqued it, claiming that nearly everything good is a resource. They went on to say that the word value implies that it should result in something nice or positive, because even wonderful things can have negative consequences. They also claim that the meaning is deceptive.

Other researchers have also critiqued conservation of resources theory claiming that a shortcoming of earlier discussions of the connection involving mental fatigue and work efficiency is that they have not succeeded in clarifying the underlying cause of emotional exhaustion's impact on performance (Lun & Pan, 2008). According to them, employees will turn to preserving the resources they have left by reducing their spirits, diminishing their dedication to the company, and declining their productivity levels. These behaviors must be detrimental to a company. The variable of resources is supported by conservation of resources theory because firms must optimize their available elements of production for the occupational safety and health of their employees.

2.2.5 Expectancy Theory

This is a theory about the workload and rewards offered to employees. Vroom developed this hypothesis in 1964. Professor Edward C. Tolman created it first, and Victor H. Vroom expanded on it afterwards. According to Boselie (2010), there is a relationship between employee conduct and reward. According to the author, employees should be rewarded for their efforts, job performance, and good work. This professor went on to say that employees must be provided with occupations that are properly and evenly distributed.

The International Labor Organization (ILO) also collects data on employee workplace safety and health (Niu, 2010). According to Niu, it is the ILO's responsibility to guarantee that employees all around the world are appropriately taken care of. According to this researcher, the ILO's duty is to ensure that employees are secure, guarded, and protected from sickness, infections, and injuries. These are the results of dangerous and risky work environments. These included suggestions on how the job should have been structured. It is the primary responsibility of the ILO to work on standards that all people across the world must follow (Niu, 2010). As a result, these norms affected how countries worked, such as the creation of laws and regulations. Member nations must follow requirements such as Convention No. 127 and Recommendation No. 128. In this sense, the ILO developed standards and training manuals to serve as workplace norms (Niu, 2010).

According to studies, motivated personnel are less likely to be involved in accidents since they accomplish their tasks with joy and satisfaction (Redmond & Nemati, 2016). The authors define expectancy theory as a process that leads from attempts to performance and then to rewards that serve as a motivator. Employee efforts are referred to as expectancy. In this notion, employees want to be convinced that their efforts will result in high performance and that they will be rewarded. The term instrumentality refers to the act of performing. Employees want to know that their good performance

will eventually result in incentives from CEOs (Chief Executive Officers). The work will be done well with the correct tools and outcomes in all of these phases (Redmond & Nemati, 2016).

Expectancy theory has received a fair share of criticisms by scholars (Starke & Behling, 1975). They are listed as follows:

i. That it lacks data which are longitudinal in nature.
ii. There are shortcomings while trying to present outcomes at second levels. Presentations of subjects lack both negative and positive outcomes. There are also assumptions on level of each subject.
iii. There confusions between important and desirable things.
iv. There are difficulties in using subjects from several firms.

Even though Expectancy Theory has its limitations and being criticized, its development has in general brought good outcomes (Lee, 2007). This scholar states that despite the critics, the theory is the most current, clear and accurately explains the motivation of individuals. Despite the criticisms mentioned, this theory supports work load for safe and healthy employees in their profession. Expectancy theory supports or promotes varied workload since it is beneficial to employee rewards that lead to occupational safety and health benefits.

2.2.6 Economic Theory

From 1700 through 1800, David Recardo was a scholar of economics. This academician proposed the notion of comparative advantage in 1817 and presented it in 1885 (Abbas & Muhammed, 2016). The origin of comparative advantage theory can be traced to the 19th Century (Suranovic, 2007). Argues further that Economic or Recardian model describes the theory. Suranovic (2007) claims that there has been criticism of the model because it has various assumptions as follows:

i. It is assumed that goods are only produced by two nations.
ii. There is another assumption that the goods are homogenous in nature.
iii. It is also assumed the labor is homogenous.
iv. Another assumption is that transportation of goods is costless.
v. It is also assumed that labor does not cost anything to relocate.
vi. Another assumption is that labor is engaged to the maximum.
vii. It is also assumed that there are technological differences between countries.
viii. Finally there is the assumption that the markets operate competitively.

According to Basu (2013), individuals live in a world of abstract economic models, policies, and politics. According to this expert, it is not like rocket science or any other scientific research that people can readily grasp such things as mathematical calculations. It is claimed that the difficulty with policies is that they are created with hidden objectives. They may want to benefit at the end of it all, but the users do not. This is when corruption and political maneuvering enter the picture (Basu, 2013). Downs (1957) said that a government should be convinced by its citizens about the best police laws that will benefit the majority of its population. According to research, when firms manage their operations profitably, it means they have resourceful personnel (Nunez & Villanueva, 2011). Organizations, they noted, do not prioritize employee safety and health. Thomson (1997) claimed that when a workplace and its employees are safe and healthy, a firm has a competitive advantage, which leads to increased output, happier employees, and lower costs.

According to Myrdal (2007), Recardo's thesis was founded on natural law, addressed economic issues, and employed the same notions in his research. The three notions in his discussion of economic theory were ideas on value, freedom and doing housekeeping collectively and transforming the ideology of politics to economic theory (Myrdral, 1953). It was argued by North (2016) that a theory is the main determinant in a discipline but also it helps in its progress and development. According to the researcher, Adam Smith pioneered economic theory. The theory is useful for the smooth operation

of an economy (Basu, 2013). This expert emphasized that if a target demographic is prone to a lifestyle, such as too many workplace injuries, that must be considered.

Because of global economic upheavals, corporations and even nations attempt to implement policies that benefit employees and the general public (Basu, 2013). When it comes to collective bargaining agreements (CBAs), the researcher believes that trade unions must deal with governments to guarantee that their members benefit. In most circumstances, the labor market benefits businesses rather than employees. According to Basu (2013), the labor market is not functioning properly and has instead failed. Basu proposed reforming labor laws to stimulate a nation's growth, thereby improving corporate growth that benefits all employees in an economy. It is also stated that a sound economic theory in stabilizing markets will result in purchasing more food. It is also stated that a sound economic theory in maintaining markets stable will imply acquiring more food and stock from the public, particularly amid large harvests that result in cheap pricing, and vice versa.

Economic theory was developed by Gunnar Myrdal in the 1930s but borrowed the ideas of Keynes who was an economist (Myrdal, 1953). This scholar added that economic theory did not factor in costs involved while people live but its development involved speculating on politics and it dealt majorly on how politics and economics were related. Organizations are composed of individuals with one purpose in achieving set up goals (North, 2016). The scholar further adds that they include political, economic, social and educational bodies. Economic theory is relevant and supports government policies for it involves politics and economics.

According to Becker (1962), there have been critics of economic theory by arguing that: it has the assumption of a behavior which is reasonable, assumed organizations and families do not maximize the theory which is unable to explain behavior, assumed that the theory is not good for specifics and has the assumption that predictions are accurate. The economic theory supports or backs up the many government policies, methods, and

procedures that should be designed to give the police force an enabling environment to safely do their operations for their occupational safety and health reasons.

2.2.7 Maslow Theory

Maslow's theory, for example, was created in 1954, and human needs were categorized using hierarchies (Armstrong, 2009). According to the researcher, Maslow's hierarchy of needs is as follows: The first are psychological requirements. Second, there are psychological demands that must be satisfied, such as an employee feeling safe at work. Third, as already discussed, is the requirement for safety. This is about an employee or any other individual who needs to feel safe, whether at work, on the road, at home, or abroad. There is also a social requirement for all individuals (Armstrong, 2009). Because man is a social species, social relationships are very vital. Armstrong went on to say that everyone has an ego that must be protected at all times. This requirement consequently has to be satisfied. That is the reason organizations encourage employees to have social welfare meetings.

According to Armstrong (2009), the greatest need is self-esteem. This is the most pressing necessity. This professor went on to say that it is a need that cannot be met. Maslow's theory is similar to the Existence Relatedness Growth (ERG) theory in that both have the three, ERG requirements. Odhong, Were & Jonyo (2018) compare the third and fourth hierarchy of requirements to ERG's needs. When a need is not met, it motivates an employee's conduct (Armstrong, 2009). It was also stated that a dominant need improves people's conduct.

It is also believed that individuals will improve in all aspects as they progress up the hierarchy of demands, eventually leading to psychological development (Armstrong, 2009). According to this professor, Maslow's hierarchy of needs is a well-known theory. Despite its popularity, the hypothesis has been criticized in some circles or by scholars. It is also mentioned that theories promote the analysis of concepts up to advanced levels

in nature through procedures such as theoretical concepts, empirical research, synthesis, interpretation, and illustration of correlations between the same (Charmaz, 2005). Maslow theory supports the dependent variable, occupational safety and healthy because employees have needs including that of their safety. They need to be secure while performing their tasks.

2.3 Conceptual Framework

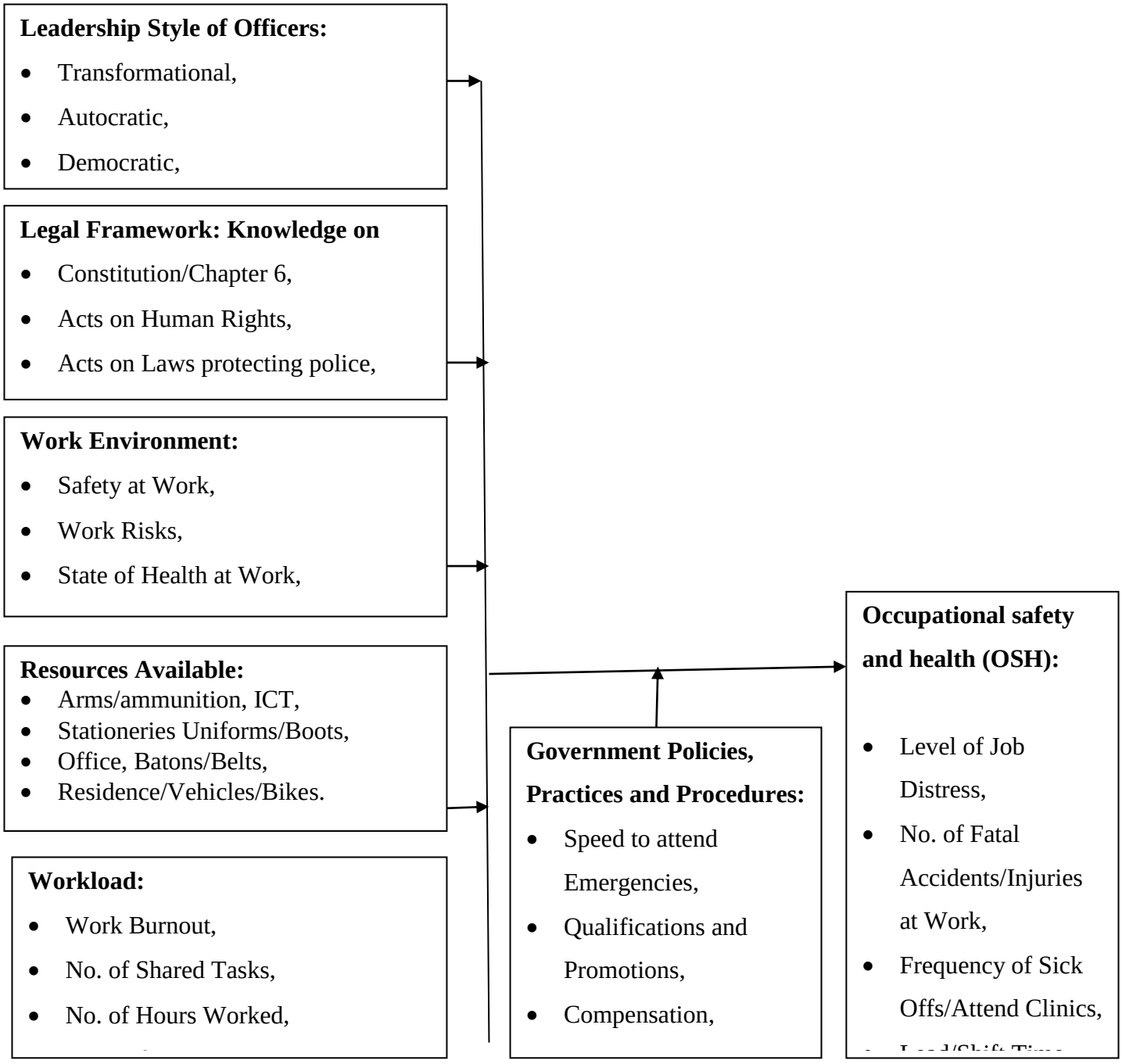
There is a distinction to be made between theoretical and conceptual frameworks. A theory, concept, conceptual framework, and theoretical framework are some of the essential terms in research. The way a researcher views a concept or anything influences the conceptual or theoretical framework that is adopted (Imenda, 2014). It is a factor in problem conceptualization. Theory is a guideline for developing a systematic body of study that demonstrates the concepts that comprise it and their links (De Vos *et al.*, 2005). Concepts are difficult to describe since they are influenced by circumstance and reflect ideas and opposing viewpoints (Imenda, 2014).

A research framework structure is a strategy that helps a researcher identify any study questions, variable measurements, selection, and analysis (Liehr & Smith, 1999). According to Liehr and Smith, a theoretical framework is described as a theory that a researcher has discovered to guide a study in the form of ideas. The theory that is chosen or identified is the one that explains an issue that is being researched. A conceptual framework, on the other hand, is created as shown below. In certain cases, obtaining the researcher's perspective may not be thoroughly found out by utilizing one theory or notion. To create an opinion, the researcher must critically study the viewpoints of other researchers in the literature review, both conceptually and experimentally. It requires the researcher to critically assess other researchers' viewpoints in the literature review, both theoretically and experimentally, in order to develop a conceptual framework model (Liehr & Smith, 1999). A set of concepts and their relationships are used to develop a conceptual framework. A theoretical framework will eventually become a theory.

The following are the goals of conceptual and theoretical frameworks: For starters, they assist researchers in effectively focusing their gaze on variables and topics for a study. Second, they aid researchers in developing a study technique that includes design, target population, research sample, data collection, and analysis. Finally, it serves as a guide for researchers as they gather, analyze, and explain data (Lierh & Smith, 1999).

The next topic of debate is the development of a conceptual framework. When statements are placed in a certain manner, they become concepts (Green, 2014). The assertions will demonstrate unique correlations between one or more variables. The goal is to comprehend a research topic. Well-being as opposed to mental illness is an example of a conceptual framework (Huppert & So, 2013). Well-being is the polar opposite of depression or anxiety, which are both types of mental disorders. A literature review assists researchers in developing a topic or area of study that may be found out (Aveyard, 2014). The researcher went on to say that it broadened a scholar's understanding and even transformed his or her attitude and field of study. A literature review is the compilation of information from papers that have either been published or have not been published in any field of study (Aveyard, 2014).

The components of leadership style, legal framework, work environment, workload, and resources were treated as independent variables in the study. The moderating variable was government policy, whereas the dependent variable was employee occupational safety and health. The conceptual framework was subsequently operationalized in the study, as illustrated in Figure 2.2. The variables were picked after reviewing the literature. They were obtained as a result of theoretical reviews. They are the primary factors influencing the occupational safety and health of employees, including police officers.


Leadership Style of Officers:
Transformational,
Autocratic,
Democratic,
Legal Framework: Knowledge on
Constitution/Chapter 6,
Acts on Human Rights,
Acts on Laws protecting police,
Work Environment:
Safety at Work,
Work Risks,
State of Health at Work,
Resources Available:
Arms/ammunition, ICT,
Stationeries Uniforms/Boots,
Office, Batons/Belts,
Residence/Vehicles/Bikes.
Workload:
Work Burnout,
No. of Shared Tasks,
No. of Hours Worked,
Government Policies, Practices and Procedures:
Speed to attend Emergencies,
Qualifications and Promotions,
Compensation,
Occupational safety and health (OSH):
Level of Job Distress,
No. of Fatal Accidents/Injuries at Work,
Frequency of Sick Offs/Attend Clinics,

Independent Variables **Moderating Variable** **Dependent Variable**

Figure 2.1: Conceptual Framework.

2.3.1 Leadership Style

Leadership style is the skill of leading other employees or persons. It is the technique of leading others or doing things for them. A leadership style is defined as a skill where a leader is capable to mobilize others towards following them to the achievement of a good goal (Nanjundeswaraswamy & Swamy, 2014). Police officers work in a special occupation that is full of risks. This is as per the National Police Service Act No. 11A of 2011 (Revised edition 2016). They do handle criminals of all sorts. Some of them are seasoned hard-core criminals who may have previously served in the armed forces or other security agencies. This brings in a lot of challenges because they know all the operations of police officers. The security agencies in Kenya or any country are divided into different types that include administration, criminal investigators, traffic, general service units, immigration police, stock theft, flying squad, anti-terrorism unit, anti-crime unit, and other security officers.

In Israel, the police are not involved in intercepting enemy rockets but rather in responding to crises (Jonathan-Zamir & Weisburd, 2013). They also stated that police communicate with other multi-agency security groups and share information. According to them, security is not fought by a single party or people. It is a collaborative effort to combat dangers such as terrorism and other crimes (Jonathan-Zamir & Weisburd, 2013). Terrorists usually target tourists in any country.

Transformational, autocratic, democratic, and charismatic leadership variables are used to assess leadership (Jonathan-Zamir & Weisburd, 2013). Significantly, authoritarian leadership styles, for example, affected the kinds of procedures used by the police force to guarantee that they function and operate in a safe and healthy manner. When safety precautions are implemented, there will be no laziness, resulting in the protection of everybody, especially amid emergency situations such as terror (Jonathan-Zamir & Weisburd, 2013).

2.3.2 Legal Framework

In a business environment, a country or areas of operation, there are rules or regulations that give guidelines to all those in an economic, social or geographic location with established legal systems (Nacu & Avasilcai, 2014).To avoid leadership flaws, a country's legal system must be sound (Jonathan-Zamir & Weisburd, 2013). Employee occupational safety and health problems are adequately addressed in Kenya's labor laws, pertinent regulations, and charters. The Workmen's Compensation Act, Cap 236, was abolished by the Work Injury Benefits Act, No. 13 of 2007 (revised in 2012).

Employers are obligated to register, insure, and preserve employee records under the Work Injury Benefits Act, No. 13 of 2007 (2012). It also campaigns for insurance policies and laws that are vital for employees, particularly when they are engaged in workplace accidents or injuries. Any failure by an employer to comply with this Act results in liability and fines. Furthermore, even if they have more than one employee, companies must register their workplaces when it comes to registration. They must also provide information on the type of business they run and the people involved.

Employees must be reimbursed in the event of an accident or injury under the Work Injury Benefits Act (2012). This is in terms of reimbursing medical bills as well as the money that would have been earned in terms of salary and other allowances. Accidents can result in temporary, partial, or total disablement, which the Act collects. Furthermore, temporary complete disablement might last three or more days. In this

case, an employee is entitled to be paid in accordance with government regulations and labor laws. Furthermore, there is transient and partial disablement. According to the Act, an injured employee will be compensated in a predetermined proportion. Employees are also reimbursed when accidents occur. Section 34 provides for compensation when an employee is killed in an unfortunate accident. Furthermore, it is given for employees' dependents to be rewarded and paid proportionately. There must be no deductions made from these fees. Employees' lawful dependents who were their financial providers are entitled to compensation if they can demonstrate proof of this.

2.3.3 Work Environment

Workers who have mental problems choose ordinary or conventional occupations since their sole gratification at the end of the day is being paid (Ellenkamp, Brouwers, Embregts, Joosen & Weeghel, 2016). Such employees discover that and are delighted which elevates their social standing. It provides them with significance in life, and they are at least known in society and will not be ashamed to associate with others. They further stated that such occupations will assist such individuals in earning a livelihood through work-related revenue.

All employees value a positive work environment. Employees that work in a suitable environment will have good health and live life to the fullest, but not mindlessly (Ellenkamp *et al.*, 2016). Employee engagement at work is increased by elements such as employees' freedom to express their ideas, understanding of their job content or performance, and freedom to interact at work.

2.3.4 Resources

Every task necessitates the use of resources in order to be completed successfully. Job resources are described as those things that are required for work and might be physical, social, or organizational in character (Schaufeli & Taris, 2014). They noted that they are advantageous to a job since they will aid in the achievement of goals and reduce job

demand costs that are both physiological and psychological. Furthermore, resources are important for motivating individuals to succeed at work.

When police officers lack the resources to carry out their duties, they endanger not just the public but also themselves. According to Ahaya (2016), a religion's influence strengthens terrorist activity. The expert went on to say that certain religious people may turn to violence to safeguard their faith. A commander of ISIS (Islamic State of Iraq and Syria) admitted that there might be misunderstandings between Muslims and others who do not share their beliefs (Ahaya, 2016).

2.3.5 Workload

Any firm places a high value on employee safety. Police officers typically work in shifts in order to complete the numerous responsibilities given to them. According to research, young police officers are more likely to be assigned to afternoon and night shifts than day assignments (Ma *et al.*, 2015). They also stated that when it came to police workload, this was evident throughout shifts. They reported a 94% consistency rate on specific shifts that were chosen. According to the findings of this study, police officers assigned to afternoon or night shifts are the most stressed at work.

As a result of their job, police officers are subjected to a great deal of stress or anguish. Some of the pressures they face include the quantity of work assigned to them, their own policing regulations, the structure of systems in society that involve both criminal and judicial systems, and officers who are overwhelmed by their own workload (Parsekar, Singh & Bhumika, 2015). It is said that tension is caused mostly by their sharing responsibilities and working shifts. These researchers suggested that police personnel should be frequently instructed on how to deal with stress.

2.3.6 Government Policies, Practices, and Procedures

Organizations that do business will function successfully based on the sort of leadership style and the rules that are in place (Alsheikh, Abdulraheem, Halim & Alremawi, 2017). They claimed that the data demonstrated that business rules influenced the methods used by hotels as well as the actions performed by workers and their performance. They also stated that it has an impact on their dedication, standards, and values, which should be consistent with those of their organization. As a consequence, the personnel will be catalyzed and will finally reach their defined targets or goals and objectives (Alsheikh *et al.*, 2017).

A company's rules affect how work is expected to be done in all facets of its transactions, including attendance, how work is done, quality standards, and output levels (Kuranchi-Mensah & Amponsah-Tawaiah, 2016). Each company in operation has its own corporate culture and ways of doing things, which manifest as policies. The culture of a corporation, like police rules, has a moderating influence in this study. Employee performance is affected by the nature of leadership styles, such as transformational or transactional leadership (Asheikh *et al.*, 2017). These leadership styles have a beneficial and negative impact on long-term success, respectively.

Recruitment, transfers, and promotions in the police force continue to be a pain in the flesh since they are fraught with injustice and cannot be properly accounted for due to pervasive prejudice. Those who are promoted are typically chosen based on ethnicity and favoritism by those who are in charge, rather than on merit (Ogada, 2016). According to Ogada, there are always integrity difficulties when it comes to recruiting and transfers when unethical deals are done by being known, linked, or interfered with. When it comes to recruiting, the physical appearance of a candidate is usually taken into account, while education, expertise, and talent are rarely regarded. Such critical essential skill aspects has problem-solving expertise, conflict resolution, and even the use of

technology, which is critical in this day and age, but are not taken into account (Ogada, 2016).

To advocate for gender equality and to attract women into the police force, the Kenya Association of Women in Policing (KAWP) was formed (Hope, 2015). To combat police prejudice, the NPSC developed laws for handling recruitments, appointments, transfers, promotions, and other deployments (NPSC, 2015). The introduction of county commanders in 2013 caused uncertainty following the ratification of the 2010 constitution. They were expected to address security concerns at the county level, but it caused uncertainty, which led to insecurity. It was necessary to increase the number of police stations in order to bring services closer to the people in order to try to harmonize the management of security concerns between the national and county governments (Republic of Kenya, 2020). In 2020, twenty-four police stations were added to Nairobi County. According to the National Police Service Commission (2021), police officers are guided by several Kenya Police Service policies as shown in Tables 2.1 and 2.2. Many of these police policies are derived through training and guidelines of work and may not necessarily have been written down. They are issued through memos, staff manuals and even by way of mouth or through commands. Police strictly follow chains of command during their operations.

Table 2.1: Kenya Police Service Policies

Police Policies on:	**Police Policies on:**
i. Shooting competitions to enhance their sharp shooter skills.	vi. Housing and staff accommodation outside the police station.
ii. A Paper on policing by police officers.	vii. Office space and work environment.
iii. Comprehensive medical cover for	viii. Working as a team.

all employees.

iv. Safely handling the tools of trade like guns.

v. Uniform.

ix. Compensation of police officers when injured at work.

x. Strategies in response to emerging issues like terrorism

Source: National Police Service Commission, 2021

Table 2.2: Extra Kenya Police Service Policies

Police Policies on:	Police Policies on:
i. Work station policy on HIV and AIDS.	xi. Counseling and Chaplaincy.
ii. Alarm orders as per chain of commands.	xii. Employment, leave, and administrative support.
iii. Frequent exercises and physical practice.	xiii. Dealing with conflict of interest.
iv. Emergency response.	xiv. Strategies and guidelines on traffic control, accidents, and political rallies.
v. Police communication.	xv. Police experience and expectations while on retirement.
vi. Training.	xvi. Operational issues: shift work/duties, overtime, work load, violence.
vii. Security measures and protection.	xvii. Rewards for good work done.
viii. Firefighting.	xviii. Organizational policies including pressure from supervisors.
ix. Welfare.	xix. How to handle exhibits in a safe environment.

x. Gender.	xx. Handling or arresting suspects or criminals.

Source: National Police Service Commission, 2021

2.3.7 Occupational Safety and Health (OSH)

The frequency of accidents, injuries, and illnesses associated with relevant employment in many industries has decreased (Kim, Park, & Park, 2016). This has been made necessary by technological innovation, which has resulted in several safety techniques being created or aimed to counteract employee injuries caused by workplace accidents and diseases. Many sectors have created advanced scientific safety technology as well as tight laws and regulations (Kim, Park, & Park, 2016).

Employee safety is typically influenced by the sort of job, nature of operations, and even profession (Steege, Baron, Marsh, Menendez & Myers, 2014). They noted that when employees perform certain duties, such as physical labor in a construction project, the frequency of injuries they will face increases. Painting is a hazardous job that will almost certainly increase the number of employees suffering from chest pain (Steege *et al.*, 2014). They went on to say that an employee's education, color, gender, and age are all important determinants for their safety. Workers' compensation is a policy for compensation of employees in case they are incapacitated and unable to work leading to complete absenteeism for say a week or more and will claim for compensation which has been accepted by those concerned in a given year (Australia, 2014).

2.4 Empirical Review

An empirical observation is one that is systematic in character (Galvan & Galvan, 2017). Normally, researchers plan what needs to be observed while taking into account the techniques to be employed and their features. Academic publications are the greatest sources of data for an empirical evaluation (Galvan & Galvan, 2017). They said that this is due to the fact that they are primary sources of study findings that demonstrate sampling procedures, measurements, and issues that have been detected. The following books, publications, and general media contribute to secondary sources of facts that are not reliable for their consumption (Galvan & Galvan, 2017).

An empirical review is a study in which evidence is produced experimentally (Imenda, 2014). Evidence is further defined as data is assessed in the form of research conducted using either quantitative or qualitative methodologies. Empirical research demonstrates its reliability in terms of observations, experiments, and case studies. It outlines the study's hypotheses and provides an overview of the findings of other researchers on similar studies. Data is evaluated in this section to get the outcomes of research that was seen via experimenting with hypotheses and other studies on the same topic. Case studies are another option. Figure 2.2 is an example of an empirical review.

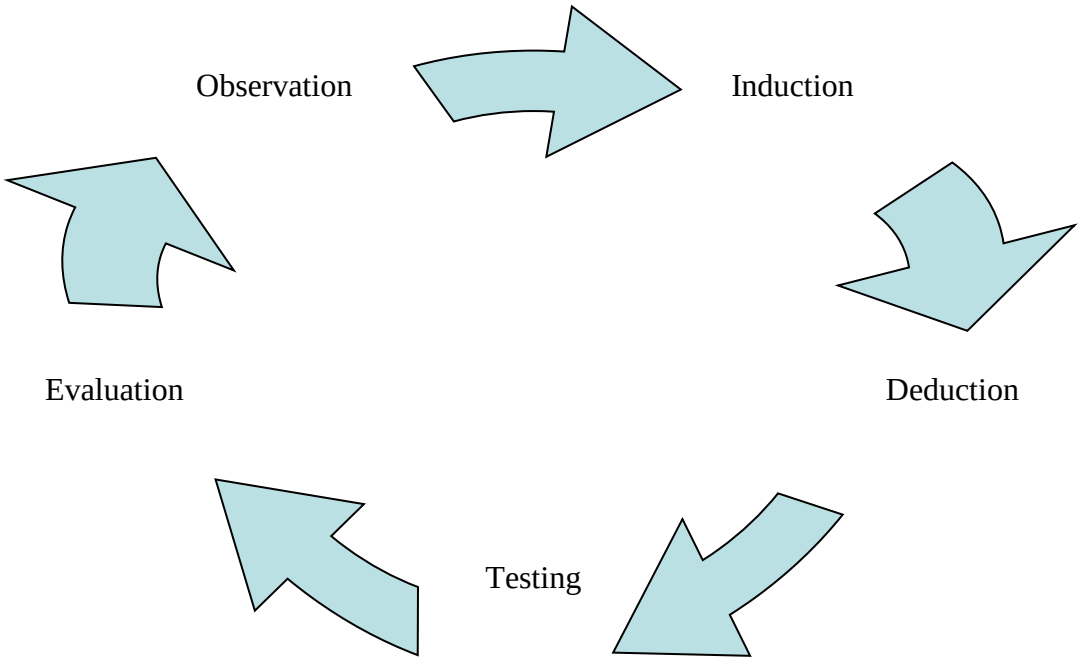


Figure 2.2: Empirical Review Illustrated

Source: Imenda, 2014

2.4.1 Leadership Style

When leaders are recognized on the way they lead others, it becomes their own conventional leadership style (Nanjundeswaraswamy & Swamy, 2014). They asserted that there are various advantages to strong leadership, including a lower incidence of employee turnover and firms' increasing output, which allow staff to meet their corporate objectives. It will also assist and encourage people at work, resulting in good job performance and productivity. These researchers have defined numerous leadership styles in the following sections (Nanjundeswaraswamy & Swamy, 2014). Through their leadership styles, they hope to guarantee that the goals they set are realized. Transactional leadership is the second type of leadership. The goal of leaders in this situation is to address the demands of employees in all aspects and to guarantee that work runs smoothly without interruptions. They do this by requiring that employees and employers sign a contract. Finally, there are charismatic leaders whose lifestyles include rallying people through well-crafted speeches.

According to the study, excellent leaders use a variety of styles while leading others (Nanjundeswaraswamy & Swamy, 2014). They contended that having a good leadership style in place would help employees. Employers will benefit from less staff turnover, increased output, and improved performance. It has also been discovered that 95% of police officers' job performance is affected by their health and safety (Nderi & Kirai, 2017). Additional studies have claimed that other aspects that influence police performance include their housing circumstances (98%), rewarding systems (85%) with a mean of 1.67, standard deviation of 1.32, and communication (52%). Scholars claim that destructive leaders that are exacerbated by unsatisfied leadership are likewise hazardous to organizations (Krasikova, Green & LeBreton, 2013).

2.4.2 Legal Framework

According to research on illegal migrants in the United States, foreigners who travel there confront several problems because the rules are against them while they labor (Flynn, Eggerth & Jacobson, 2015). They stated that if they became ill or were engaged in an accident, the law would not protect them. It is critical that police officers' wellbeing is carefully monitored since, unlike other professionals, they are more exposed to a variety of threats and experience a high level of stress (Habersaat, Geiger, Abdellaoui & Wolf, 2015). These researchers analyzed police officers' health and risk factors, concluding that these risk exposures would cause them to suffer from a variety of physical ailments, including heart disease, as well as psychological impacts.

According to the above-mentioned USA study, what influenced the health of police officers at work included how they and others saw their employment, their work environment, and even work organization. This study discovered that there are usually few influences on the health of police officers at work, including how they and others see their employment, their work environment, and even work organization. This study discovered that there are usually few obvious differences in the impacts they feel even while operating in various environments and jobs (Habersaat *et al.,* 2015). According to another study, 11.1 employees out of 1000 lodged significant accident claims between 2012 and 2013 (Australia, 2014). It is suggested that it was equivalent to making claims of 6.7 for every a million hours worked by a person. According to Australia's (2014), 90 percent of these claims were related to injuries and musculoskeletal ailments. Diseases and mental difficulties accounted for 10% and 6% of all claims, respectively. Police officers and other military personnel were not included in these claims because they were subject to separate regulations.

According to a study conducted among the Metropolitan Police, despite the fact that their laws and procedures were not clear, they were evaluated as fair (Tengpongsthorn, 2017). According to this researcher, such restrictions led to their abolition and needed to

be amended. The study found that corporate policy had a level which was significant r = 0.367 and p = 0 (p 0.01).

A separate research was conducted on employees' exposure to metals while completing certain duties. This was done on those who used shooting ranges for enjoyment or as part of their training (Vandebroek, Haufroid, Smolders, Hons & Nemery, 2018). It was discovered that none of the shooters used nasal protection while being exposed to lead. These researchers hypothesized on those other employees, particularly those performing cleaning or maintenance, that they used safety gear such as goggles, nasal masks, and gloves. Respondents in this study included teachers, police officers, maintenance workers, and members of the Special Forces (Vandebroek, *et al.*, 2018). According to the research findings, 80% of police officers are men, 10% are smokers, have a mean age of 44.5 (standard deviation of 13.3), and have 20.8 years of service (15 standard deviation). The results revealed that the mean values for sb (lead elements) in the urine of Special Forces, maintenance personnel, and shooting instructors were greater than in police officers. When lead elements (sb and pb) are elevated, users must be provided with personal protection equipment, education, medicine, and appropriate ammunition.

2.4.3 Work Environment

There is research on safety culture in the literature from all around the world. These are studies are conducted mostly in the industrial sector and other businesses. Various researchers have conducted studies on how to increase safety, and methods of doing so have been identified (Nielson, 2014). Neilson went on to say that organizational culture is a crucial component in employee safety. Safety culture is the state of being safe while on duty, driving or even walking. Safety culture is the way that safety is handled in an organization and how it has been done across several years. This is the lifestyle of employees, leaders and other stakeholders as pertaining safety (Nielson, 2014).

According to studies, stress affects various professionals due to the nature of their job and work environment, such as police officers, teachers, health care providers, and

media specialists (Oweke, Muola & Ngumi, 2014). According to their research, 37.1 percent of the majority of police officers suffered from moderate stress, while 11.4 percent experienced extreme stress. This is a situation where a worker at the course of the day or any other period does not feel well but is caused by the job. Job stress is the way an employee or any other employed person responds to any circumstance at or after work (Lin, Liao, Chen, & Fan, 2014).

A study conducted in France discovered that police officers, unlike other professionals, had a low risk of experiencing psychological difficulties (Dang, Denis, Gahide, Chariot & Lefevre, 2016). They stated that this occurs despite their regular exposure to risk and working in hazardous areas. In this study, police officers appeared to have specific protection from such workplace difficulties (Dang *et al.*, 2016). According to another study, female police officers work extremely hard, both physically and emotionally, to integrate into a male-dominated department (Langan, Sanders & Agocs, 2016). They also stated that following after their maternity leave they are sometimes moved or degraded in order to prove themselves.

According to studies, work accidents more than doubled in 2009 compared to the previous year (Achim, 2018). According to the researcher, 97% of individuals who become handicapped as a result of an accident are blind. Furthermore, there was continuity in those who died from 2008 to 2009, with 5 of them being the result of gunshots in 2009. According to this study, accidents climbed by 60% in 2009 compared to 25% in 2010, yet police officers were handicapped by 96%. In the years that followed, there were accident reports in both 2011 (4 fatalities) and 2012 (256 accidents, 229 of which were work-related, 27 from accidents, and 97% disabled). In 2013, there were 233 injuries, whereas in 2014, there were 286. In 2013, there were 233 injuries, up to 286 in 2014, which were all disabled (Achim, 2018).

2.4.4 Resources

Employees are more likely to work safely when government policies are in place. Terrorism has an impact on economies and lifestyles all over the world (Okeyo & Abdisamad, 2016). Terrorism is a new global threat posed by Al Qaeda, Boko Haram, Al Shabaab, and the Islamic State of Iraq and Syria, which would drain global security resources. According to a survey on police service satisfaction and an analysis of their needs, they are there to secure nations, ensure that rules are followed in transparent ways, and do an excellent job (Transparency International Kenya, 2016). According to their findings, police officers will require a large number of resources and equipment to ensure the success of their operations.

The nature of police operations required them to enter homes forcibly, meet idlers, suspects, and other victims, all of which make their work difficult and stressful (Stanley, 2015). Because of the nature of their jobs, cameras were fixed or mounted on their uniforms, which increased their ability to be trusted by the public. Such an action will necessitate good policies to ensure that information collected against the public privacy is not misused (Stanley, 2015). Such resources would improve policing and police officers' integrity.

A study was conducted, and it was discovered that all types of armor worn by police officers had an impact on their job performance (Schram, Hinton, Orr, Pope & Norris, 2018). They claimed that because of their size, the discomfort caused, and the ineffective use of other police supporting items such as handcuffs, belts, and magazines, it affected their performance. According to them, the nature of their job requires them to wear normal clothing and individual light-armored vests (ILAV). According to these findings, police officers rated all types of armor negatively. The ILAV B type was rated poorly, whereas other types were rated positively for performance and comfort.

2.4.5 Workload

When compared to other workers, police officers have a lot of tasks to complete at work, and they have to put in more effort, resulting in many man hours and having to work around the clock (Ma *et al.,* 2015). They also stated that officers must work 24 hours a day, which requires them to work in shifts, with junior officers typically assigned to work in the afternoon and at night. Furthermore, those who work in the afternoon prefer to switch shifts, but the workload is evenly distributed across all shifts (Ma *et al.,* 2015). They went on to say that police officers who work in the afternoons and at night are the most stressed. Some stressors, 60.5 percent, were not threatening, according to the data.

According to an American study, police officers preferred and would benefit from a system of analyzing staffing needs based on a workload that is simple to learn and implement by their superiors (Wilson & Weiss, 2014). They proposed that other less expensive options for reducing workload, such as cases to handle, best reporting strategies, and using civilian employees, be considered. Another study conducted by other scholars discovered that motivation influences 25.8% of police officer performance (Were, Gakure, Kiraithe & Waititu, 2012).

According to a study conducted among police officers, working in shifts causes stress. It was discovered that the distribution of workload varied greatly between shifts and showed p.008 (Ma, Andrew, Fekedulegn, Gu, Hartley, Charles, Violanti & Burchfiel, 2015). When the assignment of duties in shifts was compared to the previous month and year, there was a 94% strength (weighted Kappa =.905, 95% confidence level, and.863-.947). Some stressful circumstances were documented, including administrative, professional, and even physical dangers p.001 (Ma *et al.,* 2015). The findings also revealed that police officers working in the afternoon and night shifts experienced a high level of stress (p.05). This necessitates having good government policies.

2.4.6 Government Policies, Practices, and Procedures

A study on perceived factors affecting performance discovered that policies are critical for the smooth operation of organizations (Nzuve & Njeru, 2013). They stated that organizational policies should be clearly or well defined. A study was conducted on the nature of policing after a force was reformed, and it was discovered that 82 percent of respondents stated that when policies are unclear, it affects how employees perform their tasks. This is important when it comes to employee occupational safety and health. They also discovered that only 3 percent of their respondents were unsure whether policies could affect performance. This was a small proportion of those who felt it. This was a small proportion of those who believed it had an impact. It is the duty of police officers to work with other government agencies (Hope, 2015). According to the scholar, they were established through various acts and play different roles in the success of policing. According to a survey, 47 percent of police officers and 89 percent of those in command were pleased with their jobs (Transparency International Kenya, 2016).

In a study on how employee injury schemes are strategically used to prevent accidents and diseases, it was discovered that in 65 countries, it was recommended that safety is important because it is more important or better to prevent than to cure the injured (Sweden International Development Agency, 2013). According to the findings of this study, employment injury schemes served three distinct functions. It was also reported that they assisted in the support of preventive work, resulting in fewer workplace accidents and fewer workers affected by occupational diseases. Where accidents and illnesses occur, they aid in the rehabilitation process, allowing individuals affected to return to their original jobs when possible, or to seek alternative employment if this is not possible (Sweden International Development Agency, 2013). Individual workers who had lost their jobs due to illness or disability were compensated.

A Romanian study discovered that when occupational safety and health risks were managed, it meant that policies, procedures, and practices were used to identify risks

(Achim, 2014). The scholar went on to say that the risks facing police officers include the hazards they face at work, the risks of finding ways to control them, and revising the same process. This academician went on to say that the effects of work on police officers' health include both physical and mental health issues. Other consequences result from the type of work done (shifts, poor feeding, a lack of offs or rest, the use of force causing stress or tension, and moral issues when using guns) (Achim, 2014). Furthermore, police officers are affected by the strategies they use and the consequences: client hostility, fear of mixing with criminals, death threats, family influence, and other work-related pressures. It was also discovered that all of the aforementioned effects cause a variety of diseases, including cardiovascular, digestive, osteo-articular system, endocrine, infectious, and parasitic ailments (Achim, 2014).

2.4.7 Occupational Safety and Health (OSH)

Employees' occupational safety and health should be improved at work in order to reduce or eliminate the numerous injuries they face (Nielson, 2014). It is critical that employees change their perception of safety and create a positive culture around it. Many organizations have resorted to hiring or assembling a team of lawyers to provide legal advice on human resource issues such as employee safety (Nielson, 2014).

According to a study conducted in the United States of America, immigrants are highly discriminated against as employees in terms of their safety (Flynn, Eggerth & Jacobson, 2015). This has resulted in serious injuries to them. As a result, 67% of them are involved in accidents. Employees killed in fatal accidents increased by 52% between 2003 and 2006, compared to 1992, when it was only 52% (Flynn *et al.,* 2015). They went on to say that these injured workers would prefer to end their lives rather than return to their original, impoverished countries.

Several academicians have discovered that police officers face numerous stressful events while performing their duties (Ma, Andrew, Fekedukegn, Gu, Hartley, Charles, Violanti & Burchfiel, 2015). According to them, 60.5% of the stressful events in the previous

year had nothing to do with threats. They went on to say that the events were related to the nature of their job. These events included administrative issues, work pressure, shifts, and job rotation, among other things.

2.5 Critique of Literature

A number of researchers have begun to find out on the occupational safety and health of employees. Companies' safety committees, which are formed to address safety concerns, are ineffective (Nielson, 2014). According to Nielson, a critical analysis of safety data revealed that safety committees do not add value. The main issue here is determining how to enforce certain rules and ensure that businesses practice what they preach to their employees (Nielson, 2014). Even as they try to avoid authorities, undocumented immigrants face a slew of occupational safety and health hazards (Flynn, Eggerth & Jacobson, 2015). This cat and mouse game causes immigrant employees to be stressed, which affects their work and safety.

Nielson conducted the most recent study on improving safety culture (2014). The study concentrated on improving safety culture, an area where little research had previously been conducted. According to the author, organizational safety cultures do not result in change. According to the researcher, little has been done to improve safety culture. This was not entirely correct because there have been numerous studies on the subject. Furthermore, the author stated that little is known about safety culture and that its definition remains limited. This has to do with employee and organizational attitudes (Nielson, 2014).

A study on the causes and relationships of occupational stress among police constables was conducted in Kisumu, Kenya (Oweke, Muola & Ngumi, 2014). The study only included police constables, leaving out other ranks of the police force. It was too narrow to draw a conclusion about all police officers experiencing occupational stress. The study made no mention of their safety. The health aspect of stress has been discussed. The Kisumu study looked at the sources and relationships of stress among police

officers. The study focused solely on constables and stress. Another study on occupational stress was done in Nigeria but focused only on their psychological wellbeing (Adegoke, 2014).

There was also research done on employee compensation based on work-related injuries or diseases that even resulted in death (Barrett, 2016). The safety of police officers was not taken into account in the study. Barrett's 2016 study was based on employee compensation as a result of injuries, diseases, and even death as a result of the nature of the task performed. The studies did not deal with occupational safety and health issues collectively in either study. Only compensation, psychological issues, stress, and health were considered. They did not conduct research on police officer safety. This study filled a research gap in doing all of the various aspects of occupational safety and health. There was a research gap in doing all of the various aspects of occupational safety and health that was filled by this all-encompassing study. This was filled by including the antecedents of occupational safety and health.

Police officers have been found through research to experience and go through a lot of psychological problems up to retirement (Muthondeki, Sirera, & Mwenje, 2014). This later study was done by a police officer but focused solely on psychological problems faced by police officers up to retirement. This study only included retired Administration Police Service (APS), but not those who are still on the force. As a result, the research findings cannot be applied to all police officers. Officers who have retired face a number of retirement issues.

A study conducted in France discovered that, in comparison to other professions, police officers have a low likelihood of experiencing psychological issues (Dang, Denis, Gahide, Chariot & Lefevre, 2016). They stated that this occurs despite their frequent exposure to danger and working in hazardous environments. In this study, police officers appeared to have special protection from such workplace problems (Dang *et al.*, 2016). According to another study, female police officers work extremely hard, both physically

and emotionally, to fit into a male-dominated force (Langan, Sanders & Agocs, 2016). They also stated that after their maternity leave, they are sometimes reassigned or demoted in order to prove themselves.

According to the findings of an Afrobarometer survey, the relationship between civilians and police is lacking, necessitating the establishment of customer relations desks in police stations to improve or enhance it (Afrobarometer, 2015). According to a civilian survey conducted in 2015, 29.8% of Kenyans did not trust police officers. Another survey on police standards contradicted these findings by showing that 98.2% of them did not see any problem with civilians (IPOA, 2013). The majority of police studies are conducted by them, and civilians who dare to participate are not provided with information (Ruteere, 2014).

Violanti *et al.,* (2016) conducted a study that focused on the hopelessness of police officers. Hopelessness was caused by a fear of change, which could be physical or a lack of leadership (administrative and organizational), which could lead to suicide. This research was too narrow. Jonathan-Zamir and Welsburg (2013) conducted a research on the dangers that police officers face, particularly on the battlefield, such as missile landings, because they are the first responders. They put their lives in danger in such situations. This was a study on only police officer safety.

Rape, assault, fighting with weapons, gang fights, and robberies or muggings were among the perceived forms of violence in an American urban city study (Hoffman, Mair, Hunter, Prince & Tebes, 2018). The findings revealed that there was no difference between men and women in high-crime urban areas in their perceptions of safety and violence. This was a civilian study, and there was a need to find out police officers' perceptions of safety. Abubakar (2015) conducted research on men's and women's perceptions of safety. The scholar also found out the advantages of occupational safety and health regulations. One of the variables in our study was the legal framework, and there was a gap to be found out. In our study, one of the variables was the legal

framework, and there was a gap in the study of other variables. In Tanzania, a study was conducted on the violence experienced by women who are required to report to police officers (McCleary-Sills *et al.,* 2013). There was a need to find out on police officers' safety.

Moreto (2016) conducted a study on the stressors that affect wildlife personnel in Uganda. The study only included wild life personnel and stressors, excluding police officers' occupational safety. In a DRC study, researchers focused on accidents involving miners in the mining industry (Elenge, Levenque & Brouwer, 2013). The consequences of such accidents that result in injuries as a result of poor tool handling, inappropriate tools, and a lack of training are discussed. This study excluded police officers. Ogada (2016) conducted research on the Kenyan elections from 2007 to 2008 and the violence that occurred. Police officers were accused of violating people's human rights, necessitating reforms which were done within the force.

According to an IPOA study, the police population in Kenya was 80,000 in 2016, with 78.75% of them living in very poor housing units, but this number had decreased by 8% due to recruitments (IPOA, 2016). This study focused primarily on police officers' security, housing, and government policies, among other things. The issues concerning police officers' health were not addressed, necessitating our study. In a Nakuru plywood industry study, it was discovered that 80% of the employees had not received occupational safety and health training and had not been provided with PPE (Mong'are, Mburu, & Kiiyukia, 2017). As a result of these flaws, 45.1% of them were involved in workplace accidents. This necessitated a study comparing police officers who are frequently trained on occupational safety and health issues to civilians working in a timber factory. In a 2015 survey of civilians on their relationships with police officers, it was discovered that 29.8% of Kenyan citizens did not trust police officers (Afrobarometer, 2015). Another survey on the standards they set, conducted by the police, contradicted these findings, revealing that 98.2% of them saw no problem with civilians (IPOA, 2013).

The majority of police studies were conducted by themselves, and civilians who dared to participate in research were not provided with full information (Ruteere, 2014). A study was conducted to determine how technological advancement can aid in the prevention of accidents and diseases. The number of accidents, injuries, and diseases associated with relevant occupations in various industries has decreased (Kim, Park, & Park, 2016). This has been made necessary by technological advancement, which has resulted in numerous safety strategies being developed or designed to counteract employee injuries caused by workplace accidents and diseases. Rules and regulations are developed here to aid in the resolution of safety and health issues.

Police officers face numerous dangers and are under a great deal of stress. According to a study conducted in the United States of America, the things that affected police officers at work included the way they and others perceived their job, the work environment, work organization, and unnoticed effects (Habersaat, Geiger, Abdellaoui & Wolf, 2015). Another study was conducted on instructors, police officers, maintenance workers, and special-forces personnel and their exposure to metals as a result of shootings (Vandebroek, Haufroid, Smolders, Hons & Nemery, 2018). It was discovered that none of the shooters wore nose protection while being exposed to lead. These researchers hypothesized that other employees, particularly those performing cleaning or maintenance, wore protective gear such as goggles, nose masks, and gloves. This study only looked at metal exposure; other issues, such as occupational and health, needed to be looked into. According to studies, stress affects many professionals due to the nature of their duties and work environment, such as police officers, teachers, health care providers, and media specialists (Oweke, Muola & Ngumi, 2014). According to their research, 37.1 percent of police officers experienced moderate stress, while 11.4 percent experienced high stress.

The numerous studies that we have found out on each focused on a specific aspect of occupational safety and health. Other scholars' research includes the following summarized areas of study: A study was conducted on the occupational stress of police

constables while excluding other police officers. Another study was conducted on the impact of the work environment on police officer performance, which is just one variable in our study. Another study was conducted on the compensation of all employees in general, but it did not take into account the reasons for that action. The hopelessness of police officers was also studied. According to another scholar, this could be the source of the psychological stress experienced by police officers.

According to research, the dangers that police officers face while on the battlefield can cause stress. Other researchers' findings in brief include: perception of violence; benefits of occupational safety and health regulations; stressors affecting wildlife officers and violence faced by women; accidents and injuries in DRC mines; police officers abusing human rights during elections; and their housing. Other topics covered include safety training, the relationship between police officers and civilians, and the use of technology to combat accidents, injuries, and diseases. There have also been studies on the dangers and stress that police officers face; their exposure to metals as a result of shootings; psychological stress caused by shifts; the resources they use; their motivation and performance; job satisfaction; and so on. Studies have also been conducted on the dangers and stress that police officers face, including their exposure to metals as a result of shootings, psychological stress caused by shifts, the resources they use, their motivation and performance, job satisfaction, and occupational safety and health standards.

2.6 Summary of Literature

Employees' occupational safety and health are protected in Kenya by established legal labor laws. The study discovered a large amount of literature on the subject, which has been summarized in this section. Employees' safety is ensured both at work and at home. There are laws in place to help employees work in a safe environment and to compensate them for any injuries or accidents. It also provides for employees who are permanently unable to work. Employees should be safety conscious and work safely.

All organizations promote a culture of occupational safety and health for their employees. Researchers have argued that culture is a complex concept because of the attitudes people hold, making it difficult to change them. The following are some examples of how culture can be influenced: Organizational safety culture should be altered, focusing on policies, practices, and procedures. According to them, the way culture is perceived in an organization should change in all aspects. It is the way culture is handled, both officially and informally, that must change. The culture of an organization in dealing with safety issues is determined by how it has evolved over time. It refers to how employees, stakeholders, and leaders have enabled a company's safety culture. This relates to how supervisors perceive safety culture because it is based on their assumptions about it. This will become ingrained in their workplace safety culture and practices.

2.7 Research Gaps

A General Service Unit police officer was retired on medical grounds in the case of Anthony Kipkorir Sang vs. the Hon. Attorney General, Case 2408 of 2012 (2015), because he had been reduced to a wheel chair after being shot by thugs. Based on the findings of a medical board, the police department compensated him. This was done in accordance with Standing Orders Chapter 20(30) (C) and the Code of Regulations. The officer filed a case in court for disability discrimination and was awarded 3 million Kenya Shillings in damages.

Barrett (2016) suggests the following additional preventive strategies for workplace injuries and diseases: First and foremost, safety regulations should be followed in safe work environments. Furthermore, any compensation ratings should be based on previous experience. Furthermore, it was discovered that contributions were made based on previous records of the same and other claims. Finally, all safety stakeholders, such as workers, organizations, councils, and safety and health committees, should be engaged. The activities performed should be evaluated in terms of the risks they pose to other

stakeholders or even adjacent environmental occupants (Barrett, 2016). In the event of an accident, investigations should be conducted as soon as possible. This is done to avoid tampering with exhibits and to obtain witnesses with fresh memories of what happened. Safety inspectors must be well-trained and qualified for the job.

CHAPTER THREE

THE METHODOLOGY

3.1 Introduction

The research methodology is discussed in this chapter. This is a discussion of how the study was conducted. It concentrated on research design and philosophy. It also handles on the study's target population. Furthermore, the chapter discusses the sampling frame, sampling techniques and sample size used in the study. It also goes over the various data collection instruments that were used. They consisted of pilot testing, data analysis, and presentation. Finally, the study goes into detail about diagnostic tests or assumption tests.

3.2 Research Philosophy

It is argued that a research philosophy improves and evolves over time (Gog, 2015). According to this academician, a researcher can choose the style or method of conducting a study, as well as the style or even standard, based on one's opinion. It is further argued that the type of philosophy chosen by a researcher influences the outcome of a study. This occurs when attempting to solve the research problem under investigation.

Epistemology and ontology are the two types of research philosophies (Gog, 2015). The former is concerned with conducting an investigation in order to find answers to some research questions. Ontology, on the other hand, is concerned with the investigation of realistic social issues and how they are perceived. Positivism, post positivism, critical theory, scientific/critical realism, constructivism, and interpretivism are the research philosophies. In a study, each of these produced different results. Positivism is a philosophy that is beneficial to research (Gog, 2015). A positivism study involves making observations on real facts and values and verifying those using standard scientific methods (Ali & Chowdhury, 2015). The positivism philosophy was used in this study.

3.3 Research Design

According to reports, research designs are not standardized (Fusch & Ness, 2015). The best research designs can answer study research questions. When appropriate collection methods are used, the quantity and quality of data collected are maximized. They went on to say that research will be at its best when the data collected can be used by others. This occurs when data contains all of the necessary information.

A research design enables the collection and analysis of data (Gog, 2015). There are various types of research designs, according to this scholar. An experiment, a cross-sectional or social survey, a longitudinal study, a case study, and a comparative study are

some examples. An explanatory study attempts to determine how variables in a research are related to one another (Cudjoe, Anim & Nyanyofio, 2015). The study used a social descriptive survey design as well as descriptive-explanatory research. These were chosen in the study to allow the researcher to describe and explain various variables' characteristics and relationships to one another. A study by Makudza, Masengu and Mandongwe (2022) successfully used descripto-explanatory research design. These scholars stated that descriptions are done before making explanations.

3.4 Target Population

A target population is one that is relevant to a study or from which a sample will be drawn (Zikmund, Babin, Carr, Adhikari & Griffin, 2013). They went on to say that it could be in the form of all registered people a researcher is interested in, such as a team of sales people whose phone numbers are known. These are the elements from which a sample will be extracted. Zikmund *et al.,* (2013) defined a population as a group of people who share relevant characteristics that are similar in many ways.

The target population for this study was all police officers of the National Police Service in Nairobi County (2010) as shown in Table 3.1. The population was chosen based on proximity and information availability. Due to time constraints, it was not possible to cover the entire country in order for the research to be more comprehensive and accurate. Kenya's Nairobi County was chosen as a judgmental sample to represent all other counties. It was chosen because it has the most people of any county. When conducting a study at the national police headquarters and the Nairobi county headquarters, the officer in charge of the later stated that due to the sensitivity of the population size, the exact number of officers should not be provided, but only approximate figures for the study of 4,000 police officers. The unit of analysis of the study was Kenya Police Service (KPS), Nairobi County whose approximate population was 4,000. The unit of observation or items being measured or collected was the antecedents of occupational safety and health of police officers in Nairobi County.

Table 3.1: Distribution of Target Population

No.	Name of Police Station	Police Officers Population	No.	Name of Police Station	Police Officers Population
1	Buruburu	310	18	Langata	210
2	Central	300	19	Makongeni	65
3	Dagoretti	120	20	Muthaiga	55
4	Embakasi	130	21	Muthangari	60
5	Gigiri	250	22	Nairobi Qtrs.	170
6	Hardy	40	23	Ngomongo	50
7	Industrial Area	140	24	Pangani	85
8	Jamhuri	90	25	Parklands	105
9	Jogoo	70	26	Parliament	90
10	Kabete	90	27	Riruta	65

11	Kamukunji	115	28	Ruai	60
12	Karen	80	29	Ruaraka	70
13	Kasarani	265	30	Runda	74
14	Kayole	195	31	Shauri Moyo	56
15	KICC	70	32	Spring Valley	55
16	Kileleshwa	85	33	Starehe	110
17	Kilimani (Capitol Hill)	270			
	Subtotal	**2620**		**Subtotal**	**1380**
	Grand Total =	**4000**			

Source: National Police Service, Nairobi County Headquarters

3.5 Sampling Frame

A sampling frame is defined by Zikmund *et al.*, (2013) as the population from which a sample is drawn. The study here took into account the entire population. The study chose a sample from, for example, thirty-three police stations in Nairobi County with a target population of approximately 4,000 police officers. A 5% sample of that target population, which is 200 police officers, was studied as shown in table 3.2. This is as advocated for by Nassa *et al.,* (2016) when the population is in several thousands. Prior to the main study, only three police stations which represented a 10% of the total police stations in Nairobi County was used in the study for pilot studies.

3.6 Sampling Techniques

A sampling technique is a technique used by researchers to obtain a sample (Zikmund *et al.*, 2013). They went on to say that it is a skill used to determine the sample size of a study. They listed various sampling techniques. These include simple random, systematic random, stratified random, clustered random, and multistage random. The

study's goal was to cover the entire Nairobi County in Kenya. This was to be a complete reflection of the safety of security agencies. Kenya was divided into 47 counties according to the 2010 constitution (2010). Due to cost and time constraints, a study of the entire country was not possible; instead, a sample of this was used to be a true representative of the country. The study chose Nairobi as the seat of the national government. This was an accurate representation, and all thirty-three police stations provided the necessary information. The best way to collect data was through questionnaires and sample interviews. This was detailed.

3.7 Sample Size

A sample is defined as a subset of a population (Zikmund *et al.,* 2013). A sample is a small percentage of a larger target population in which a researcher is interested in (Gog, 2015). This scholar went on to say that sampling refers to the techniques that a researcher can use to determine a sample size. Researchers use this sample size to make generalizations about study findings. Sampling is a portion of a target population from which a study will be conducted that the researchers are interested in but from which concluding findings should be derived (Coners & Matthies, 2014).

Nassa *et al.,* (2016) recommend a sample size of 20% when the population is in the hundreds, 10% when the population is few thousands, and 5% or less when the population is in several thousands (quoting from Nwana, 1981). It is suggested that sample size be calculated as a percentage (Nwana, 1982). This researcher proposed that when the population is in the hundreds, the sample size should be 60 percent. The other samples, it is added, can use population rates sparingly as follows: some hundreds (40%), hundreds (20%), few thousands or greater than 1,000 (10%), and finally when its several thousands (5%) is chosen. The study used the latter, 5% (table 3.2), because the senior security police officer provided a target population size of 4,000. The sample size of the study therefore based on this 5% of the target population was 200 police officers.

Nzuve and Njeru (2013) chose a sample size of 10% for each stratum that was chosen in their study.

Table 3.2: Sample Size

No.	Name of Police Station	Size of Population (X)	Sample Size Xi =(05/100)*(X)	No.	Name of Police Station	Size of Population (X)	Sample Size Xi =(05/100)*(X)
1	Buruburu	310	15	18	Langata	210	11
2	Central	300	15	19	Makongeni	65	3
3	Dagoretti	120	6	20	Muthaiga	55	3
4	Embakasi	130	6	21	Muthangari	60	3
5	Gigiri	250	12	22	Nairobi HQ	170	9
6	Hardy	40	2	23	Ngomongo	50	3
7	Industrial Area	140	7	24	Pangani	85	4
8	Jamhuri	90	4	25	Parklands	105	5
9	Jogoo	70	3	26	Parliament	90	5
10	Kabete	90	4	27	Riruta	65	3
11	Kamukunji	115	5	28	Ruai	60	3
12	Karen	80	4	29	Ruaraka	70	4
13	Kasarani	265	13	30	Runda	74	4
14	Kayole	195	10	31	Shauri Moyo	56	3
15	KICC	70	4	32	Spring Valley	55	3

16	Kileleshwa	85	4	33	Starehe	110	6
17	Kilimani (Capitol Hill)	270	14				
	Total					**4000**	**200**

Source: Police, Nairobi County Headquarters

3.8 Data Collection Instruments

Researchers must describe the source of all data they collect (Sullivan *et al.,* 2014). They proposed that if anything is done to data, it should be clearly described, including any justification for any replication. They also argued that any methods and steps used in data collection should be clearly displayed. It includes anything not mentioned in the study. The sensitivity of the research made it necessary for the study to seek permission from National Police Service (NPS) headquarters by writing a request letter to the Deputy Inspector General (DIG). This was done before a research proposal was presented at the university. The study was issued with an approval letter by the DIG to carry out the research. With DIG's approval, the study then applied for a research permit from National Commission for Science, Technology and Innovation. The permit was issued without any reservations. The NACOSTI approval letter was copied to the Director General, Ministry of Education, Nairobi County Commissioner and Regional Police Commandant. The DIG and NACOSTI letters were used by the study to seek another approval from the Regional Commandant of Nairobi County, County Commissioner and Ministry of Education. They all gave their approvals for the study to be done. These permits made it possible for the study to be done with ease from concept, proposal stage until data collection as from February 2019 to November 2019. NACOSTI's one year permit expired on 21st February 2020.

Qualitative data can be gathered from various sources and be clearly stated (Coners & Matthies, 2014). It is critical that data is successfully collected in a study (Elo *et al.,* 2014). They hypothesized that it would imply that the researcher had adequately prepared to answer study questions and achieve the study's goal. They went on to argue that proper preparation will result in the collection of relevant data that will be of use in the analysis of the data. The study gathered qualitative data from primary and secondary sources. Data was gathered through questionnaires, interviews, and previous studies.

3.8.1 Primary Data

The primary data for the study was collected from respondents. These included gathering information about the number of police officers, for example, through interviews or questionnaires. The questionnaire used to collect primary data is critical to the success of any survey study (Krosnick & Presser, 2018). The variables of the study were used to create questionnaires. These were simple open-ended and closed-ended questions.

The Likert scale is a well-known and highly regarded tool for conducting human subject research (Langmack, Newton, Jordan, & Smith, 2015). Scales ranging from 1 to 5 are used. The scale ranges from 1 (strongly disagree), 2 (disagree), 3 (neither disagree nor agree), 4 (agree), and 5 (strongly agree). The negative questions are coded in reverse order (5=1, 4=2, 3=3, 2=4, and 1=5). The Likert scale was used in the study.

3.8.2 Secondary Data

Primary data is collected first, followed by secondary data. According to Johnston (2017), when secondary data that is already available is used in research, it demonstrates its importance to researchers. This enabled them to avoid wasting resources and time. These are statistics from academic journals or government offices, either published or unpublished. Secondary data is information that is used but was collected and stored by someone else (Johnston, 2017). Secondary data was also useful in the study of the police officers in Nairobi County. These statistics were obtained from academic journals in libraries or on the internet. These previous studies were examined in order to make comparisons with the current study.

3.9 Data Collection Procedure

There are several methods for gathering data in social research (Wildemuth, 2016). Surveys, interviews, historical and documentary studies, transaction log analysis, diaries, and participant observation are among them. Questionnaires were created and distributed

to all respondents through the method of drop and pick later. A pilot study was first conducted on 10% of the 33 police stations in this study. This aided in the verification of the research instruments' consistency and validity through analysis. The remaining 30 police stations including some 3 which were later identified were used for the final research. An appointment was first sought with all of the respondents, with suggested days they were available but taking into account the other respondents to be interviewed. The initial police stations used during pilot studies were not visited. The use of research assistants was extremely beneficial in this case. After obtaining an appointment, the researcher directed the assistants to complete the work. The coding of questions was completed.

The questionnaires that had been developed and corrections done after pilot studies were used in the study. In the research, questionnaires were dropped off and picked up later. These questionnaires had been thoroughly designed and tested. The study chose a stratified random sampling of police officers in Nairobi County police stations. In this case, questionnaires were delivered to each Officer Commanding Station (OCS), and they were required to contact the other police officers, who were to be administered questionnaires by research assistants or the commanders themselves. Officers on duty were then summoned for interviews and questionnaire filling to completion. They were first explained the purpose of the study and their consent was also sought and informed that they were even free to withdraw from the study as one progressed without any penalty. They were not required to write any of their names on the questionnaires and assured that any information collected would be held in confidence for academic purposes only. The name of any officer was not going to be mentioned in the findings.

3.10 Pilot Testing

A pilot study is an imitation of the actual research (Dikko, 2016). According to this scholar, it is usually done before the actual research. The goal is usually to try out and test research instruments. The pilot study is used to identify any instruments that will not

work or any problems that may arise and how to resolve them (Dikko, 2016). They are typically appropriate for all types of research, including qualitative and quantitative studies, according to the scholar.

Nairobi County had thirty-three police stations in the study. Three of them (10%), Industrial Area, Muthangari and Ngomongo were chosen to participate in pilot testing but were not included in the final study. They were randomly picked from the list of thirty three police stations. The police officers found on duty during the pilot study days were given questionnaires to answer in the three police stations. This was done to avoid any bias. The study was able to identify any errors in questionnaires and other research instruments through this pilot study and corrected. It was a useful tool for detecting and correcting problems prior to the main study.

During the pilot study, the researcher was able to double-check the research instruments to ensure that they were in good working order and could be used to collect data. The pilot study was instrumental in ensuring that the data collected was valid and reliable. The researcher identified all of the questions that covered all of the items required and how reasonable they were in terms of what was being measured through this study. The researcher conducted a pilot study, and errors were identified and corrected prior to the main study.

3.10.1 Reliability of Instruments

The study had previously discussed the instruments used in research. The instruments chosen ensured their accuracy. When this precaution is taken, it results in reliable instruments. When a research instrument is used multiple times and produces consistent results, it is considered reliable (Heale & Twycross, 2015). They argued that it is critical to test the reliability of research instruments used in data collection when conducting and critiquing research. They also suggested that we use Cronbach Alpha Coefficient scores ranging from 0 to 1. A reliable score of .7 or higher is permitted. Correlations are tested

using research instruments that show that they are strong when high and vice versa (Heale & Twycross, 2015).

It is critical in research to ensure that any data used is obtained in the most reliable way possible. The data gathered should also be trustworthy for other users. When collecting data, it is critical that the techniques used will bring in data that is relevant to other research objectives and hypotheses. The questionnaires were tested on 10% of the 33 police stations of Nairobi County in the study which were three police stations. This pre-testing was done to ensure the instruments' dependability and reliability.

Cronbach's alpha was used to calculate reliability in the study. SPSS version 28 was used to generate the findings. Table 4.2 displays the results of the reliability tests. The results in Table 4.2 show that the Cronbach's alpha for all items was greater than.7, indicating that the instrument was sufficiently reliable for measurement. Because all of the variables measured had a Cronbach's alpha greater than.7, they were all considered reliable and thus accepted. According to Sarmah and Hazarika (2012), the formulae to test reliability using Cronbach Alpha is given by:

$r_{k(\alpha)}=[k/(k-1)][1-\Sigma S_i^2/S_k^2]$

Where:

$r_k(\alpha)$ = reliability coefficient of the whole test

k = number of items in the test.

S_x^2 = variance of the test scores

ΣS_i^2 = the sum of the variables of the item scores

3.10.2 Validity of Instruments

Validity is defined as the degree to which a concept can be accurately measured in a quantitative study (Heale & Twycross, 2015). A 10% pretest on a target population was

performed to ensure the validity of questionnaires as research instruments (Cudjoe *et al.*, 2015). The goal of validity, it is argued, is to ensure that any research instrument tested has achieved its goal of measuring any given concept (Dikko, 2016). In other cases, there should be methods for determining validity. Validity, for example, can be built. In this case, a study can create a validity instrument to be used for measurement, such as 90%. When data reaches this level, it means that a data collection instrument has been developed. When data reaches this level, it means that a data collection instrument is valid. Some concepts may be difficult to quantify, but they can be observed.

The Kaiser-Meyer-Olkin (KMO) statistic for all variables (leadership style, legal framework, work environment, available resources, workload, government policies, occupational safety, and health) was greater than.5, which was significantly higher than the critical level of significance of the test, which was set at.5 (Field, 2013). In addition to the KMO test, the Bartlett's Test of Sphericity was significant (.000, at p.05) for all variables in the study. These findings provide excellent validation for additional statistical analysis. This allowed the researcher to conduct the primary research. This is due to the fact that the findings revealed that all of the variables were significant.

3.11 Data Analysis and Presentation

Descriptive statistics are useful in research because respondents' details must be shown, and data collected must be clear, meaningful, and easy to interpret (Cudjoe *et al.*, 2015). They went on to say that these statistics are a good way of accurately presenting data in meaningful, well-structured, and concise ways. Tables were used to present the findings, which included values such as errors, t, and p values, among others. The gender of OCSs serving as managers and police officers was also tested as a dummy variable. The study's goal was to conduct a quantitative data analysis. At the end of the study, the use of SPSS-type software was beneficial. The questions and variables had to be coded.

It is recommended that data or a unit of analysis be carefully chosen (Elo *et al.*, 2014). These scholars argued that this is done to ensure that any information gathered is

reliable. They contended that a unit of analysis can have multiple meanings. They proposed that a unit of analysis should not be too broad or too narrow. When it is too narrow, fragmentation problems will arise. There are numerous independent, dependent, and moderating variables. Several methods were used in the study to assess the relationship between variables. Because there are more than two variables in this study, ANOVA was used. This is known as analysis of variance.

3.11.1 Statistical Model Specifications

In simple regression models, these are situations where we have an explanatory independent variable, X that predicts Y a dependent variable (Gujarati & Porter, 2010).

In the study we used two models as follows:

$Y = ß_o+ß_1X_1+ß_2X_2+ß_3X_3+ß_4X_4+ ß_5X_5 +ε$

Where

Y = Occupational safety and health

$ß_o$ = Constant

$ß_1$, $ß_2$, $ß_3$, $ß_4$, $ß_5$ = Represents the coefficients of determinants

X_1 = Leadership Style

X_2 = Legal Framework

X_3 = Work Environment

X_4 = Resources

X_5 = Workload

ε = Error term

The second model that was used in moderation was:

$Y = ß_o + ß_1X_1M + ß_2X_2M + ß_3X_3M + ß_4X_4M + ß_5X_5M + \varepsilon$

Where

M = The Moderating variable (Government Policies, Practices and Procedures)

According to Pardo and Roman (2013), the model of Barron and Kenny (1986) on the methodology of using a moderation variable to moderate independent and dependent variables has been used for over 25 years. According to Yuan, Cheng, and Maxwell (2014), moderation during data analysis is highly applicable when conducting social and behavioral studies. They went on to say that the model, known as moderated multiple regression, is widely used (MMR). The explanatory variables in this model are product terms, and estimation is done using least squares (LS). In situations where there is heteroscedasticity, normal-distribution-based maximum likelihood (NML) is combined with the two-level model and produces good results in parameter estimation. The latter is correct. Unlike when using LS analysis, the latter will be efficient and accurate.

3.11.2 Hypothesis Testing

Statistical inference is a method of analysis that is also called hypothesis testing. It involves the testing of both null and alternative hypothesis. This is used especially in regression analysis. Variables should have a relationship for them to be tested. For example we can have $H_o = B_2 = 0$ as the null hypothesis and $H_1 = B_2 =$ or not equal to $= 0$. In the null hypothesis, we shall try to find out if there is a relationship between say Y and X. That is to find out if Y is related to X. The moment they do not have any relationship, it will then be of no use to test for any relationship, for example, $B_2 = -2$ or any other value (Gujarati & Porter, 2010).

On the other hand, if the null hypothesis is sustainable, then it is of no use to include X in the model developed. In this case, it will mean therefore that if X belongs to the model, it will have the expectation to reject the null hypothesis. In this regard, one chooses the alternative hypothesis, H_1. It will mean that B_2 is not equal to 0. Another

meaning is that the slope coefficient is different from zero for both negative and positive values (Gujarati & Porter, 2010). In the study, it employed the null hypothesis as opposed to the alternative one.

3.11.3 Diagnostic Tests/Test of Assumptions

Some research assumptions must be made during the course of a study. In research, the student t-test is used to identify any discrepancies in a study (Flores, Ocana & Sanchez, 2018). They stated that the assumptions of normality and homoscedasticity must be pretested for their validity. They also stated that if a null hypothesis is rejected, it means a departure from normalcy, and vice versa if accepted. When the null hypothesis of perfect normality is rejected, we will use the non-parametric Wilcoxon-Mann-Whitney test (Flores *et al.*, 2018).

Normality Test

Normality tests are also used in statistical analysis (Gujarati & Porter, 2010). They stated that the statistical testing is carried out under the assumption that the error term ui is normally distributed. The residue ei is known to be a proxy for ui. In this case, ei is used to determine ui's normalcy. Several tests, such as histograms, are performed. They stated that they are used to learn the shape of a random variable's probability density function (PDF). The x-axis values of a variable are plotted in the normal probability plot, while the y-axis shows the expected values of a variable if the distribution is normal. A Jacque-Beta test, on the other hand, has become quite common. It is used for asymptotic or large samples where tests are based on residuals from ordinary least squares (OLS). It begins by calculating the coefficients of skewness and kurtosis. The latter determines how flat or tall a PDF is in comparison to a normal distribution.

Fisher is a well-known statistician and scholar credited with discovering and developing normality tests (Nafiu, Ibitayo & Muyombya, 2017). They also stated that they are used in the study of how data are distributed when a mean and variables are known.

Furthermore, they stated that, regardless of the nature of the distribution for a given large sample size, Kolmogorov-Smirnove is the most powerful normality test, followed by Shapiro-Wick, Shapiro-Francia, Anderson-Darlin, Jaque-Bera, and finally D'Agostino-Pearson. When we have normality tests, they recommend the following treatments: Short-tail distributions, such as symmetric distributions, and correlation or regression-based tests should be used. When they are long-tailed, such as symmetric distributions, empirical-based normality tests should be used. Moment-based tests, on the other hand, should be used to test data kurtosis and skewness.

Linearity

There are several tests of assumptions (Gujarati & Porter, 2010). They posited that we have linearity test that means that there is a conditional mean value of the dependent variable whose function is linear in nature when it comes to the independent variables. According to them a function is similar to this one shown: $Y_i = bi+b_2x_i$. Y in this case is called the estimator of the population, while b1 is the estimator of B_1, b_2 is for B_2 and so forth. They added that estimators help us to estimate the population parameter. In addition, we can also add e_i that is a residual term. This is because data does not lie on the same line and hence the need for that estimator. We have the model as $Y_i = b_1 + b_2X_1 + \varepsilon_i$.

Multicollinearity

There are circumstances where we have perfect linear relationship or perfect multicollinearity among variables that are explanatory in nature leading to not having unique estimates of all their parameters (Gujarati & Porter, 2010). In such situations, they added that it will not be possible to make any statistical inferences from them in a given sample, that is, hypothesis testing. It becomes a dead end issue. They posited that it will require the following five remedies. One or more of the variables in the model has to be dropped. This is because they contribute to the development of models that contribute to errors and bias. Another option is to add variables or a new sample that is

costly. It is necessary because it normally reduces the effects of multicollinearity. This is because multicollinearity normally is obtained from a sample.

There are three other options, including rethinking the model used (Gujarati & Porter, 2010). According to these researchers, it could have been poorly developed, including the omission of necessary variables. According to them, it will also necessitate gathering prior information on parameters. It is possible that some information about the study was not accurately gathered. Finally, it will necessitate the transformation of some variables. This entails reserving some of them.

Heteroscedasticity

In heteroscedasticity, we have the classical linear regression that makes the following assumptions (Gujarati & Porter, 2010). They added that a regression model is linear when it comes to its parameters. In this case, the variables may or may not necessarily be linear in nature. The model is, Yi = B1 + B2Xi+Ui. In this model, we can add other explanatory variables. In this model, it means that X is not correlated with the disturbance u. If the X variable is non-stochastic where the value is fixed then the assumption is automatically fulfilled. Assumption is that the disturbance term u becomes zero since Xi is expected. It means that the factors or forces are not related to Xi.

CHAPTER FOUR

RESEARCH RESULTS AND DISCUSSION

4.1 Introduction

The study strived to find out on the antecedents of the occupational safety and health of police officers in Kenya. Data was analyzed using descriptive and inferential statistics. They were then presented using tables and graphs. The results were then interpreted in view of the conceptual framework. The sections of analysis were arranged according to the objectives of the study. A discussion of the analysis was also done.

4.2 Response Rate

The response rate of the study was established in order to ascertain the representation and the quality of responses for conclusion of the study. A total of two hundred (200) questionnaires were distributed to the sampled 200 respondents. Out of these, one hundred and fifty one (151) questionnaires were dully filled and returned. This translated to a response rate of 75.5% (Table 4.1). This was way above the conventionally acceptable rate for surveys. In earlier local doctoral studies, Awino (2007) cited earlier scholars and stated that the average response rate for empirical studies was 65% of the sample. Similarly, this was in line with Orodho (2009) who observed that a response rate above 50% contributes towards gathering of sufficient data that could be generalized to represent the opinions of respondents about the study problem in the target population. The results can therefore be generalized and considered representative of the population. Table 4.1 shows a summary of response rate and frequency of responses.

The preceding study concurs with another that found a response rate of 69.3% in 1071 patients (Fadaee, Gaszynski, Merret, and Fracs, 2023). It was discovered that 86% of students were satisfied with the amenities provided. In a different research, 246 of the 257 issued questionnaires were returned, yielding a 95.7% response rate (Chen, Han, Lv, Song, Zhang, and Li, 2023).

Table 4.1: Response Rate

Response	Frequency	Percent
Returned	151	75.5%
Unreturned	49	24.5%
Total	**200**	**100%**

4.3 Pilot Study Results

A pilot study entails performing studies on a restricted basis to learn more about the future of a study (Ullah, Khan, Hakal, Khalid & Hashmi, 2023). They add that pilot studies determine whether or not a study will be carried out. According to these scholars, a pilot provides assurance of whether or not to proceed. The same scholars state that it entails understanding the level of accuracy of a tool and its dependability in doing future research.

4.3.1 Reliability of the Research Instrument

Reliability is broadly defined as the degree at which measures are free from error and therefore yield consistent results (Thanasegaran, 2009). A reliability analysis is usually carried out on Likert questions. An internal consistency technique was applied using Cronbach's Alpha. The alpha value ranges between 0 and 1 with reliability increasing with the increase in value. According to Kothari (2014) Cronbach's Alpha coefficient of .6 and .7 is a commonly accepted rule of thumb that indicates acceptable reliability and .8 or higher indicates good reliability. In this study, .7 Cronbach's Alpha was considered acceptable. Thanasegaran (2009) argued that Cronbach alpha is a correlation coefficient between two sets of data. Field (2013) posited that scores of between .4 and .7 are considered to be of normal consistency while scores higher than .7 are considered of high consistency.

In the study, reliability was calculated using Cronbach's alpha formula. The results were generated with the aid of SPSS. The reliability test results are presented in Table 4.2. The findings show that Cronbach's alpha for all the items were all above .7 indicating that the instrument was adequately reliable for measurement. Since all the variables measured had a Cronbach's alpha above .7, they were all reliable and thus accepted.

In the study conducted by Safiyuddin, Abdull, Ago, and Kamarudin (2023), the reliability results were determined to be of a high level, ranging from.821 to.986. They

go on to assert that the recognized value of the cronbach reliability coefficient should be more than.78.

Table 4.2: Reliability Analysis

Variable	Number of items	Cronbach alpha	Comments
Leadership Style	8	.721	Reliable
Legal Framework	8	.838	Reliable
Work Environment	8	.850	Reliable
Available Resources	8	.836	Reliable
Workload	8	.825	Reliable
Government Policies	8	.787	Reliable
Occupational safety and health	8	.802	Reliable

4.3.2 Validity of the Research Instrument

Factor analysis was adopted to ascertain validity of the collection instruments. Tabachnick, Fidell & Ullman (2007) and Fidell (2013) validate the statement by arguing that Exploratory Factor Analysis (EFA) is used when a researcher wants to discover the number of factors influencing variables and to analyze which variables go together. This study considered loadings of .50 and above as the threshold for interpretations. A low value for communality less than .50 indicated that the variable does not fit well with the other variables in its component, and is undesirable according to Khoi (2007). The results in summary are as shown in Table 4.3. These finding showed that factor loadings were above the threshold of .50 adopted by the study which therefore implied that all the constructs were suitable for further analysis. A summary is provided in Table 4.3 for all items. Detailed Tables 4.4 to 4.10 shows the factor loading for each item.

Content validity has been defined as a measure to which aspects of an instrument for evaluation is relevant and reflective of the intended constructs (Soto, Nucci, Prunetti,

and Vicovaro, 2023). They claim that the importance and complexities of validity in research and therapeutic practice cannot be overstated. According to them, it is despite the importance of good measurements of psychological constructs, approaches for evaluating assessment instrument and content validity have received little attention.

Table 4.3: Factor Analysis for all Variables

Variable	Number of Items	Range of Factor Loading	Comment
Leadership Style	8	0.508-0.793	All items were accepted
Legal Framework	8	0.503-0.643	All items were accepted
Work Environment	8	0.584-0.684	All items were accepted
Available Resources	8	0.530-0.740	All items were accepted
Workload	8	0.517-0.796	All items were accepted
Government Policies	8	0.535-0.691	All items were accepted
Occupational, safety, and health	8	0.502-0.814	All items were accepted

4.4 Factor Analysis

According to Comrey and Lee (2013), factor analysis is a term that represents a large number of different mathematical procedures for analyzing the interrelationships among a set of variables and for explaining those relationships in terms of a reduced number of variables, called factors. In the study factor analysis was conducted on all items for each of the variables.

Cooper and Schindler (2011) suggested that variables with factor loading of .7 are acceptable. However a minimum of .4 value of factor loading is also allowed as suggested by other researchers. Similarly, Tabachinick and Fidell (2007) described factor loading as follows, that are, .32 (poor), .45 (fair), .5 (good), .63 (very good) or .7

(excellent). Factor analysis for the study was carried out in order to check for any correlated variables for redundancy in data to be reduced. It also helped to analyze the structure of the interrelationships by defining the factors.

Techniques for the analysis of data were employed by relevant statistical tools (Nag, & Ahmad, 2023). They go on to say that statistical techniques such as factor analysis, multiple regression, and ANOVA were used for both testing of hypothesis and analysis of data. To test behaviors, factor analysis was performed (Chen, Han, Lv, Song, Zhang, and Li, 2023).

Chen, Han, Lv, Song, Zhang, and Li (2023) suggested that the Kaiser-Meyer-Olkin (KMO) tests are employed to determine sample adequacy and the Bartletts Sphericity testing of criteria. They go on to say that the appropriate values of KMO were.536 NS.466 and Sphericity was.000.

4.4.1 Factor Loading for Leadership Style

Factor analysis was carried out on the statements of leadership style. According to Tabachinick and Fidell (2007), variables with factor loading and Eigen values greater than .5 are considered good. Factor loading for leadership style are presented in Table 4.4. The results on Table 4.4 show that all the statements on leadership style had factor loading values greater than .5 and therefore they were accepted and thus no sub variable was dropped. The highest item where a commander coerces or literary forces things to be done had factor loading of .793 and the lowest item that a commander dictates on how to do things or perform duties had a measure of .508. All the eight (8) items were therefore retained and a further analysis was done.

Table 4.4: Factor Analysis for Leadership Style

Statement	Factor Loading
My commander is visionary, deserves trust and respect.	.773

My commander inspires, motivates and promotes a good model.	.793
My commander dictates on how to do things or perform duties.	.508
My commander coerces or literary forces things to be done	.793
My commander allows others to participate in decision making	.784
My commander gives others the freedom of expression	.756
My commander sets eyes on targets to be achieved	.582
My commander takes advantage of his/her personality and the way to do things	.530

4.4.2 Factor Loading for Legal Framework

Factor analysis was carried out on the stated questions of legal framework. As indicated by Tabachinick and Fidell (2007), variables with factor loading having Eigen values greater than .5 are considered good. Factor loading for legal framework are presented in Table 4.5. The results in Table 4.5 show that all the stated questions on legal framework had factor loading values greater than .5 and therefore they were accepted and thus no sub variable was dropped. The highest item on the usefulness of KNHR Act in promoting very well the rights of police officers at all times and protecting or supporting their OSH had a factor loading of .643. The lowest item on the usefulness of Public Officer Ethics Act in promoting and doing jobs professionally but with integrity and in protecting or supporting officer's OSH had a measure of .503. All the eight (8) items were therefore retained and a further analysis was done.

Table 4.5: Factor Analysis for Legal Framework

Stated Questions	**Factor Loading**
How helpful is the new constitution which established Kenya Police and Administration Police with one command in protecting or supporting your OSH?	.597

How helpful is the Codes of Conduct in smooth running of operations and protecting or supporting your OSH?	.601
How helpful through NPSC, does IPOA as it manages or monitors Police activities like recruitment, qualifications & appointment in protecting or supporting your OSH?	.559
How helpful does KNHR Act in promoting very well the rights of Police Officers at all times & protecting or supporting your OSH?	.643
How helpful does the NPS Act in lifting the moral of Police Officers and protecting or supporting your OSH?	.572
How helpful is the Occupational Safety Health Act (OSHA) of Kenya in protecting or supporting your OSH?	.583
How helpful is the Public Officer Ethics Act which promotes doing a professional job with integrity and in protecting or supporting your OSH?	.503
How helpful has our laws effectively handled issues like Terrorism, sexual offences, Cyber Crimes & in protecting or supporting your OSH?	.628

4.4.3 Factor Loading for Work Environment

Factor analysis was carried out on the statements of work environment. As indicated by Tabachinick and Fidell (2007), variables with factor loading having Eigen values greater than .5 are considered good. In this study, factor loading was done to each statement. This was to determine their factor loading for comparison purposes. Factor loading for work environment are presented in Table 4.6.

Table 4.6: Factor Analysis for Work Environment

Statement	**Factor Loading**

As I work/perform my duties or do patrols in Nairobi County, I am aware about my level of safety (at work) to be …….	.619
After I have left a day's work or duties in Nairobi County and at home, I am aware about my level of safety (after work) to be …….	.641
I am exposed to risks at work during political rallies in Nairobi County (at work) and feel …..	.640
I am also exposed to risks after work during political rallies in Nairobi County (after work) and feel ……	.593
I am stressed at work by my colleagues or family members and feel ……..	.650
I am stressed after work by my family members and feel …….	.635
As I work, perform my duties or do patrol in Nairobi County I am aware about my level of security (at work) to be …….	.584
After I have left a day's work or duties in Nairobi County and at home, I am aware of my level of security (after work) to be ……..	.684

4.4.4 Factor Loading for Available Resources

Factor analysis was carried out on the statements of available resources. As indicated by Tabachinick and Fidell (2007), variables with factor loading having Eigen values greater than .5 are considered good. In the study, factor loading for available resources are presented in Table 4.7. The results on Table 4.7 show that all the statements on available resources had factor loading values greater than .5 and therefore they were accepted and thus no sub variable was dropped. The highest item which is the available government resources in bringing comfort like house of residence or accommodation and their feeling had factor loading of .740. On the other hand, the lowest item on the available government equipment to support police work, which are stationeries/books/pens and

their feelings had a measure of .530. All the eight (8) items were therefore retained and further analysis was done.

Table 4.7: Factor Analysis for Available Resources

Statement	Factor Loading
The quantity of available government equipment for my work like fire arms or ammunition makes me feel …….	.664
The quantity and quality of available government communication equipment for my work like walk talkie, ICT/phones make me feel……...	.655
The available government equipment for my work like stationeries (books, pens) make me feel ……..	.530
The provision of enough protective equipment for my work like uniforms,	.640

boots, and caps make me feel ……	
The available government equipment for my work like batons, belts, and whistles make me feel …….	.582
The available government resources for my work like office blocks make me feel ……	.633
The available government resources which bring comfort like house of residence or accommodation makes me feel ……	.740
The available & the condition of government equipment for my work like armored vehicles, and motorbikes make me feel …….	.644

4.4.5 Factor Loading for Workload

Factor analysis was carried out on the statements for workload. As indicated by Tabachinick and Fidell (2007), variables with factor loading having Eigen values greater than .5 are considered good. In the study, factor loading for workload are presented in Table 4.8. The results on Table 4.8 show that all the statements on work load had factor loading values greater than .5 and therefore they were accepted and thus no sub variable was dropped. The highest item on the ratio of police officers to the Kenyan population which was below international standards of 1:450 had factor loading of .796. The lowest item where police work involves spending more than 8 hours in a day had a measure of .517. All the eight (8) items were therefore retained and further analysis was done.

Table 4.8: Factor Analysis for Workload

Statement	Factor Loading
My duties are too heavy, too much to handle and is extremely exhaustive.	.686
My work load alone is too heavy to carry or perform causing me burnout.	.696
My work tasks are not shared even in adverse working conditions and expose me to injuries, dangers, anxiety, and depression.	.612

My work involves performing complex duties which cause psychological stress, strains and traumas which can lead me to suicide or kill others	.675
My work involves spending more than 8 hours in a day.	.517
My night shift duties or extra hours worked leads me to lack sleep during the day	.553
My duties or tasks which I perform do overwhelm me	.521
The ratio of Police Officers to the Kenyan population is below international standards of 1:450	.796

4.4.6 Factor Loading for Government Policies, Practices and Procedures

In this study, factor analysis was carried out on the statements for government policies which were the moderating variable. Tabachinick and Fidell (2007) affirmed that, variables with factor loading having Eigen values greater than .5 are considered good. The study's factor loading for government policies are presented in Table 4.9. The results on Table 4.9 show that all the statements on government policies had factor loading values greater than .5 and therefore they were accepted and thus no sub variable was dropped. The highest item on new laws, policies, practices, procedures and visions which lead to new lifestyles had factor loading of .691. The lowest item on government policies, practices and procedures which are not implemented by authorities and not useful to police during emergency situations had a measure of .535. All the eight (8) items were therefore retained and used during further analysis.

Table 4.9: Factor Analysis for Government Policies, Practices and Procedures

Statement	**Factor Loading**
Government Policies, Practices & Procedures help me to efficiently handle emergency situations.	.551
Government Policies, Practices & Procedures are not implemented by	.535

authorities and are not useful to me during emergency situations.	
When I have the qualifications I will then be promoted based on government policies, practices and procedures.	.606
I will not smoothly rise through the ranks until retirement because of corruption.	.633
I will at all times be compensated in case of injuries or accidents at work.	.577
I will not be well compensated because my welfare and rights are normally ignored.	.620
New laws, policies, practices, procedures and visions lead to new lifestyles.	.691
When new laws, policies, practices, procedures and visions are developed, they will not help all stakeholders.	.647

4.4.7 The Factor Loading for Occupational, Safety and Health

A factor analysis was carried out on the statements for an occupational, safety and health which was the dependent variable in this study. Tabachinick and Fidell (2007) affirmed that, when variables have a factor loading with Eigen values greater than .5 then they are considered good. In Table 4.10, factor loading for occupational, safety and health are presented. The results on this table show that all the statements on occupational, safety and health had factor loading values greater than .5. They were therefore accepted and thus no sub variable was dropped. On the other hand, the highest item is the one which dwelt with work satisfaction and the happiness one feels of it. It had factor loading of .814 and the lowest item on performance of one's duties in police stations/place of work or feelings during patrols had a measure of .502. All the eight (8) items were therefore retained and further analysis was done.

Table 4.10: Factor Analysis for Occupational, Safety and Health

Statement	**Factor Loading**

I am faced with a high level of distress during work hours or after work and I feel ……	.547
I am satisfied with my work, happy with it and I feel……..	.814
As officers we are faced with a frequent number of fatal accidents or injuries at work which makes me feel ……...	.715
I am always performing my duties in police stations/place of work or do patrols and I feel …….	.502
I am frequently sick or in poor health as caused by the nature of my work which makes me feel ……..	.723
I am frequently on sick offs to attend clinics for my treatment, under medication and I feel ……..	.607
I have a number of shifts which are manageable and there is no cause for alarm for I feel ……..	.647
I am having a demanding work and the times of shifts are not rotated which make me to be frequently tired leading to absenteeism and I feel …….	.660

4.5 Demographic Characteristics

The respondents' demographic information was captured in the first section of the data collection instrument. The main aspects of the background information were analyzed. These included gender of the respondent, highest level of education attained, rank of job, police department, age group and duration of service. These characteristics of respondents were determined and had an effect on the findings. The demographics were essential for the discussion regarding the sample size composition.

4.5.1 Gender of the Respondent

The researcher sought to establish the gender of each respondent. This was necessary to establish the general gender composition of the respondents. The gender distribution

results are presented in Table 4.11. Based on these results majority (62.9%) of the respondents were male while 37.1% were female. The results imply that most of the police officers in the Kenyan security are males. This could be as a result of the fact that for a long time in Kenya, the police have been viewed as a men's profession and not women's. In a study on attitudes towards women managers in DRC Congo, it was found out that aviation just like other professions was a man's job as that of the police (Nzuve & Kelwon, 2014).

The findings of the study done among the police in Nairobi are in agreement with another study done in USA among police officers who were known to have high suicide rates where 73% of those studied were men (Violanti, Andrew, Mnatsakanova, Hartley, Fekedulegn & Burchfiel, 2016). In this study, there were a lot of stereotypes on women even in the policing profession. The above findings also agree with another study among Malaysian traffic police where 88% of the respondents were men (Omar, Aluwi, Hussein, Mohd & Rusdi, 2020). It was also reported that 30 percent of women experienced violence and police women were also stereotyped (Lockwood & Prohaska, 2015). In professions dominated by women like nursing, 97 percent were female (Nantsupawat, Kunaviktikul, Faan, Wickaikhum, Thienthong & Poghosyan, 2017).

Table 4.11: Gender of the Respondent

Gender	Frequency	Percentage
Female	56	37.1
Male	95	62.9
Total	**151**	**100.0**

4.5.2 Highest Level of Education for the Respondents

The study established the highest level of education of the respondents in order to understand their perception. Table 4.12 indicates the breakdown of the highest level of education attained by the respondents. The results show that majority (66.9%) of the respondents were secondary school graduates, 15.2% of them possessed a bachelor's degree. In addition, 10.6% had a diploma as the highest level of education and 7.3% were primary school leavers.

The study findings also agree with another done among Malaysian police where 67% had attained secondary education (Omar, Aluwi, Hussein, Mohd & Rusdi, 2020). The results imply that most of the police officers that took part in the study had basic education, so they were able to respond to the questions that had been asked.

The above findings agree with a research in Nigeria on some 28 stress factors and the length of years spent in the police force that contributed to their enhanced distress at work (Parsekar, Singh & Bhumika, 2015). The participants in these studies showed that a quarter (95% confidence interval: .153, .347) had the levels of their psychological distress to be extremely high. These scholars concluded that it was only those police officers who had undergone some level of education and trained on handling distress that are able to withstand distress.

In another research, it was found out that those police officers who had been trained or educated on how to cope with violence and aggression led to a reduction in their absenteeism by 3 percent (Hassard, Teoh, Cox, Dewe, Cosmar, Grundler, … & Van den Broek., 2014). Moreover, research has consistently shown that education plays a crucial role in enhancing occupational safety and health outcomes. A study conducted by Anton and colleagues (2015) found that higher levels of education were associated with better safety practices and reduced occupational hazards among workers. This suggests that individuals with higher education levels may possess a deeper understanding of safety protocols, risk management strategies, and the importance of adhering to safety guidelines.

Table 4.12: Highest Level of Education

Highest Level	Frequency	Percentage
Primary Level	11	7.3
Secondary Level	101	66.9
Diploma Level	16	10.6
Bachelor's Degree	23	15.2
Total	**151**	**100**

4.5.3 Rank of the Respondents

In the study, the respondents were asked to indicate their job ranks and they responded as shown in Table 4.13. Based on these results, majority (32.5%) of the respondents were corporals. In other ranks, 23.8% indicated that they were constables. It was also noted that 18.5% of the respondents belonged to other ranks that were never specified. It was followed by 10.6% of the respondents who were sergeants. In addition, the results show that 8.6% of the respondents indicated that they were senior sergeants. For senior ranks, 4.0% of the respondents indicated that they were chief inspectors and only 2.0% of the respondents were assistant superintendents.

The results imply that most of the police officers in the Kenyan police force are of the rank of police corporal; so they had enough experience in the police force to be able to respond to the statements in the questionnaire. This study had both sergeants and senior sergeants of 19.2%. It agrees with other studies where 18% of police officers had a rank of sergeant and above (He, Zhao & Lovrich, 2002). Studies have shown that higher-ranked officers typically have different roles and responsibilities than lower-ranked officers, leading to different exposures to risk factors. For instance, patrol officers may be more exposed to physical dangers and confrontations than higher-ranking officers who perform more administrative or supervisory duties (Violanti *et al*., 2011). Research has found that stress and mental health outcomes can differ significantly among police

officers of different ranks, with both higher and lower ranks having unique stressors. This has implications for OSH strategies tailored to different ranks (Violanti *et al.*, 2017). It is also in agreement with a study among Malaysian police where majority of them (44%) were of the rank corporal (Omar, Aluwi, Hussein, Mohd & Rusdi, 2020).

Table 4.13: Rank of Job

Rank	Frequency	Percent
Constable	36	23.8
Corporal	49	32.5
Sergeant	16	10.6
Senior Sergeant	13	8.6
Chief Inspector	6	4.0
Assistant Superintendent	3	2.0
Other	28	18.5
Total	**151**	**100**

4.5.4 Police Department

The study was concerned about capturing the information on the respondents' police departments of deployment so as to assess the responses per department. The results on police department of deployment are presented in Table 4.14. Based on these results, majority (87.4%) of the respondents were in the department of Kenya Police College (KPC). For others, 7.9% indicated that they were working in Traffic Police Department (TPD). The results also show that 4.0% of the respondents were from the General Service Unit Department (GSU) while only .7% of the respondents were from Kenya Police Dog Unit Department (KPDU). The results imply that most of the Police Officers in Kenya were trained in Kenya Police College (KPC). However, none of the respondents indicated to have been trained to only work in the other departments such as the Presidential Escort Unit (PEU), Kenya Tourist Police Unit, Kenya Airport Police Unit (KAPU), Kenya Railways Police Unit (KRPU), Diplomatic Police Unit, Maritime

Police Unit and National Disaster Management Unit (NDMU). This therefore justifies why only four departments were captured in the Table 4.14.

In a research done in Sudan among traffic police officers, it was found out that 88.9% were knowledgeable on the effects of working in a hot environment (Ibrahim, Ahmed & Salim, 2015). Out of the officers studied, 33.3% had experienced the stress caused by heat. They added that the level of training on first aid in handling the stress caused by heat was low.

Table 4.14: Police Department

Department	Frequency	Percent
General Service Unit (GSU)	6	4.0
Kenya Police College (KPC)	132	87.4
Traffic Police Department (TPD)	12	7.9
Kenya Police Dog Unit (KPDU)	1	0.7
Total	**151**	**100**

4.5.5 Age Group of the Respondents

The study sought to establish the age group of each respondent. The age group was necessary to establish the level of experience and general composition of the respondents. Based on the results in table 4.15, majority (35.1%) of the respondents were between the ages of 26-33 years, 31.1% of the respondents indicated that they were between 34-41 years old with 15.9% others inducing that they were falling in the age

group of between 42-49. The results further show that 13.9% of the respondents were between 18-25 years old while only 4.0% of the respondents were between 50-57 years old. These results on the age group of the respondents imply that most of the police officers in the Kenyan police are between the ages of 26-33 years. The implication of this was that, they were old enough and had a long time to serve in the police and therefore the issues under investigation were of interest to them and were able to respond well to the statements presented to them.

Older officers often have more experience and training, potentially enabling them to navigate risks more effectively. Conversely, younger, less experienced officers might be more prone to occupational accidents due to a lack of experience (Bishu et al., 2017). Age can influence physical health, fitness, and stamina, as well as mental health and resilience, all of which can impact OSH outcomes. Older officers may be more vulnerable to physical injuries, while younger officers may be more susceptible to stress and mental health issues due to their relative lack of experience and seniority (Violanti *et al.*, 2011).The findings agree with a study among Malaysian police where majority (42%) of them had their ages between 21 to 30 years (Omar, Aluwi, Hussein, Mohd & Rusdi, 2020). The study is in agreement with another done with the police in USA whose mean age was 41.5 years (Violanti, Andrew, Mnatsakanova, Hartley, Fekedulegn & Burchfiel, 2015).

Table 4.15: Age Group of the Respondents

Age Group	Frequency	Percent
18-25 years	21	13.9
26-33 years	53	35.1
34-41 years	47	31.1
42-49 years	24	15.9
50-57 years	6	4.0
Total	**151**	**100**

4.5.6 Length of Service of the Respondents

As part of the background information of this study, it had also sought to establish the length of service for each respondent. The results of length of service are presented in Table 4.16. The results show that majority (36.4%) of the respondents had served in the Kenya Police Service for at least between 6 and 10 years, 25.2% of the respondents had served for a period between 1 and 5 years while 19.2% of the respondents had worked for 11 to 15 years. The results further show that 13.2% of the respondents had served for between 16 and 20 years, 3.3% of the respondents had worked for more than 21 years. Only 2.6% of the respondents had worked for less than 1 year. The results imply that majority of the respondents had a working experience of 6-10 years implying therefore that they understood and were well conversant with the statements regarding the issue under study.

The above study was slightly different with another research of police officers in USA where the years of service had a mean of 15.1 and a SD of 7.2 (Violanti, Andrew, Mnatsakanova, Hartley, Fekedulegn & Burchfiel, 2015). The number of years that an officer had worked significantly affected their distress levels (Parsekar, Singh & Bhumika, 2015). In a Kenyan study, 92% of those studied indicated they had not prepared to retire while 56% had the view that it interrupted their profession (Muthondeki, Sirera & Mwenje, 2014).

In an earlier research, the average number of years that police officers had worked was 12 years (He, Zhao & Lovrich, 2002). Long-serving officers have more experience, which might enable them to navigate occupational hazards more effectively. However, they also have longer exposure to job-related stressors and risks, which could negatively impact their physical and mental health over time (Brough *et al.,* 2013; Violanti *et al.,* 2012). Long-serving officers may experience a cumulative effect of stressors associated with organizational and operational aspects of police work, leading to health problems such as burnout, cardiovascular diseases, and PTSD (Hartley *et al.,* 2011; Violanti *et al.,* 2008).

Table 4.16: Length of Service in Kenya Police Service

Length of Service	Frequency	Percentage
Under 1 year	4	2.6
1-5 years	38	25.2
6-10 years	55	36.4
11-15 years	29	19.2
16-20 years	20	13.2
Above 21 years	5	3.3
Total	**151**	**100**

4.5.7 Level of Police Facility and Name of Police Station

The respondents were asked to indicate the levels of their police facilities. In response, all the respondents indicated that their police facilities were at the level of police station. The respondents were then asked to indicate the names of the police stations they were working and their responses were analyzed and shown in Table 4.17. The results show that 6% of the respondents were drawn from Central, Kilimani (Capitol Hill) and 5.3% from Buruburu police stations. The police stations with 4.0% response were Gigiri, Kayole, Langata, Starehe and Traffic headquarters. The other stations like JKIA, Kabete, Kasarani and Parklands showed that 3.3% of the respondents worked there. The police stations represented by the least number of respondents (2.0%) were Dagoreti, Hardy, Makongeni, Muthaiga, Parliament, Riruta, Ruai, Shauri Moyo and Spring Valley.

Table 4.17: Response Rate per Police Station

Station Name	Filled Questionnaires (Response)	% Percent	Station Name	Filled Questionnaires (Response)	% Percent
Buruburu	8	5.3	Langata	6	4.0
Central	9	6.0	Makongeni	3	2.0
Dagoretti	3	2.0	Muthaiga	3	2.0
Embakasi	4	2.6	Nairobi HQ	4	2.6
Gigiri	6	4.0	Pangani	4	2.6
Hardy	3	2.0	Parklands	5	3.3
Jamhuri	4	2.6	Parliament	3	2.0
JKIA	5	3.3	Railways	4	2.6
Jogoo	4	2.6	Riruta	3	2.0
Kabete	5	3.3	Ruai	3	2.0
Kamukunji	4	2.6	Ruaraka	4	2.6
Karen	4	2.6	Runda	4	2.6
			Shauri		
Kasarani	5	3.3	Moyo	3	2.0

Kayole	6	4.0	Starehe	6	4.0
KICC	4	2.6	Traffic police	6	4.0
Kileleshwa	4	2.6	Spring Valley	3	2.0
Kilimani(Capitol Hill)	9	6.0			
Total				**151**	**100**

4.5.8 Marital Status of the Respondents

The respondents were also asked to indicate their marital status and their responses were as presented in Table 4.18. Based on these results, majority (82.1%) of the respondents were married, 13.9% indicated that they were single while 4.0% of them were divorced, widowed or separated. The results on marital status imply that most of the police officers in the Kenya Police Service were married and so they were old enough to understand the issues under investigation.

The above findings are in agreement with a study done in USA on police officers where 74.3% were married ((Violanti, Andrew, Mnatsakanova, Hartley, Fekedulegn & Burchfiel, 2015). The findings also agree with a Malaysian study among police officers that showed that 71% of them were married (Omar, Aluwi, Hussein, Mohd & Rusdi, 2020). In other studies, it was found out that 60% the police officers were married (He, Zhao, & Lovrich, 2002).

Table 4.18: Marital Status of the Respondent

Marital Status	Frequency	Percent
Married	124	82.1
Single	21	13.9

Divorced, widowed or separated	6	4.0
Total	**151**	**100**

4.6 Descriptive Results

In this section the study presents findings from Likert scale questions where respondents were asked to indicate their opinions on various statements that relate with antecedents of the occupational safety and health of police officers. Descriptive statistics are used to depict the feature of the data in a study. They provide simple summaries about the sample picked and the measures used. Descriptive analysis simply forms the basis of every quantitative analysis of data and includes the mean and standard deviation (Conradie & Paduri, 2014).

4.6.1 Leadership Styles

This section determined how leadership style affected the occupational safety and health of police officers. The descrriptive statistics for leadership style are presented in Table 4.19. Based on the results, majority of the police respondents (85.50%) agreed that their commanders were visionary and were the ones who deserved trust and respect (Mean=3.97). In addition, the results show that (80.80%) of the respondents were in agreement with the statement that their commanders inspired, motivated and promoted a good model (Mean=3.98). Moreover, the results show that a big percentage (73.50%) of the respondents agreed that their commanders give others the freedom of expression (Mean=3.80). The results also show that (68.90%) of the police officers affirmed that their commanders always dictated on how they did things or performed their duties (Mean=3.75).

The study in addition shows that (67.60%) of the respondents were positive that their commanders allow others to participate in decision making (Mean=3.66). Similarly, the results show that (64.90%) of the respondents were in agreement with the fact that their commanders set eyes on targets to be achieved (Mean=3.65). The study further indicated

that (60.30%) of the police officers agreed that their commanders coerced or literary forced things to be done (Mean=3.46). Finally, the results indicated that (45.70%) of the respondents were in agreement with the statement that their commanders normally take advantage of their personality and the way to they do things (Mean=3.21).

The above findings are in agreement with other studies done by other scholars. It has been found out through research that good leaders lead others using many different styles (Nanjundeswaraswamy & Swamy, 2014). They posited that with a good leadership style in place, it will benefit employees. Employers will experience low employee turnover, high productivity and performance enhanced. They are also in agreement with another research done on police officers in Kenya. It was found out that the health and safety of police officers affect their job performance by 95% (Nderi & Kirai, 2017). Other scholars also found out through research that the other factors that affected police performance are their housing conditions (98%), rewarding systems (85%) with a mean of 1.67, standard deviation of 1.32 and communication had 52% of influence on performance. Destructive leadership enhanced by unsatisfied leaders is also dangerous for organizations (Krasikova, Green & LeBreton, 2013).

The police respondents were additionally asked to indicate or write down only one leadership style of their OCPD or Officer Commanding Station (OCS). In response, majority of the respondents indicated that the leadership styles of their OCPD or Officer Commanding Station (OCS) were transformational, democratic, charismatic and leading by example. In addition to that, the study asked the respondents to list only one of the ways that their commander's leadership style influenced either positively or negatively their occupational safety and health as police officers of their rank. All the respondents indicated that the leadership styles exhibited by their commanders influence their occupational safety and health as police officers positively since they feel the sense of belonging when they are involved in planning and execution of plans.

Table 4.19: Statements Depicting Leadership Styles

Statement	SD	D	UD	A	SA	Mean	Std. Dev
My commander is visionary, deserves trust and respect.	4.60%	1.30%	8.60%	63.60%	21.90%	3.97	.88
My commander inspires, motivates and promotes a good model.	0.70%	4.60%	13.90%	57.60%	23.20%	3.98	.79
My commander dictates on how to do things or perform duties.	2.60%	7.30%	21.20%	49.70%	19.20%	3.75	.94
My commander coerces or literary forces things to be done	5.30%	15.90%	18.50%	47.70%	12.60%	3.46	1.07
My commander allows others to participate in decision making	7.30%	3.30%	21.90%	51.00%	16.60%	3.66	1.03
My commander gives others the freedom of expression	3.30%	9.90%	13.20%	50.30%	23.20%	3.80	1.01
My commander sets eyes on targets to be achieved	3.30%	7.30%	24.50%	51.00%	13.90%	3.65	.93
My commander	7.90%	19.20%	27.20%	35.10%	10.60%		

takes advantage of his/her personality and the way to do things	3.21	1.12
Overall Mean	**3.69**	

4.6.2 Legal Framework

The study had sought to analyze how a given legal framework affected the occupational safety and health of police officers. The descrriptive statistics for legal framework are presented in Table 4.20. The results also show that majority (68.20%) of the respondents indicated as good for the question that had asked on the helpfulness of the Codes of Conduct on the smooth running of operations and protecting or supporting the OSH of police officers (Mean=3.84). The results also show that (65.50%) of the respondents indicated as good for the question that had asked on the helpfulness of the KNHR Act in promoting very well the rights of police officers at all times and protecting or supporting their OSH (Mean=3.76). In addition, the results show that (61.60%) of the respondents responded by indicating as good to the question that had asked on the helpfulness of the Occupational Safety Health Act (OSHA) of Kenya in protecting or supporting their OSH (Mean=3.64).

The results further show that (60.20%) of the police respondents indicated as good for the question that asked on the helpfulness of the new constitution that established Kenya Police Service and Administration Police Service with one command in protecting or supporting their OSH (Mean=3.56). The results also show that (59.60%) of the respondents responded by indicating as good to the question that had asked on the helpfulness of the Kenyan laws in effectively handling issues like terrorism, sexual offences, cyber-crimes and in protecting or supporting their OSH (Mean=3.61). Furthermore, (59.00%) of the respondents responded by indicating good for the question that had asked on the helpfulness of the NPS Act in lifting the moral of police officers and protecting or supporting their OSH (Mean=3.58).

Similarly, the results show that (52.30%) of the respondents indicated as good to the question that had asked on the helpfulness of the Public Officer Ethics Act that promotes doing a professional job with integrity and in protecting or supporting their OSH (Mean=3.49). Finally, the results indicate that (51.00%) of the respondents responded by indicating as good for the question that had asked on the helpfulness of IPOA through NPSC as it manages or monitors police activities like recruitment, qualifications and appointment in protecting or supporting their OSH (Mean=3.46).

In addition to the above results, the respondents were asked to indicate only one of the Kenyan Acts/laws that protect or support their occupational safety and health as police officers. In response, majority of the respondents cited Police Act and National Police Service Act as the only Kenyan Acts/laws that protect or support their occupational safety and health as police officers. They were further asked to list only one of the ways that the Kenyan Act/law influences either positively or negatively their occupational safety and health as police officers. While responding to the question, the respondents indicated that the National Police Service Act was influencing their occupational safety and health as police officers positively without giving any explanation on how it was doing that to them.

The study is in agreement with previous findings on police officers. It was found out through research that employees liked making compensation claims of 6.7 for every a million hours a worker had worked. In these claims it was discovered that 90 percent were related to injuries and musculoskeletal problems (Australia, 2014). It added that diseases and mental problems in those claims had a share of 10 and 6 percent respectively. Police officers and other military personnel were not part of the claims for theirs fell on a different legislation. In another research, metropolitan police rated it fair on their rules and regulations that were not clear (Tengpongsthorn, 2017). This scholar added that such rules led to their suppression and it needed to be revised. In the study, company policy was rated r=.367 and p=0 ($p<.01$) that was significant.

Studies done in the United Kingdom on the effectiveness of a legal framework as compared to Nigeria, established that UK's places of work had become much safe in such developed countries throughout the years (Abubakar, 2015). The scholar stated that the accidents that were fatal per year at the rate per 100,000 full time work equivalents had reduced from .8 in 2003 to .74 in 2011 as a result of occupational safety and health regulations. In this way, regulations and enforcement frameworks helped in making employees safer at their work places

Table 4.20: Legal Framework

Statement	Very Poor	Poor	Acceptable	Good	Very Good	Mean	Std. Dev.
Helpfulness of new constitution in protecting or supporting OSH.	1.30%	15.20%	23.20%	47.00%	13.20%	3.56	.95
Helpfulness of Codes of Conduct in protecting or supporting OSH.	0.70%	8.60%	22.50%	42.40%	25.80%	3.84	.93
Helpfulness of IPOA in protecting or supporting OSH.	4.00%	6.60%	38.40%	41.10%	9.90%	3.49	.91
Helpfulness of KNHR Act in protecting or supporting OSH.	2.60%	2.60%	29.10%	47.00%	18.50%	3.76	.88
Helpfulness of NPS Act in protecting or supporting OSH.	2.00%	7.90%	31.10%	47.70%	11.30%	3.58	.87
Helpfulness of OSHA of Kenya in protecting or supporting OSH.	3.30%	7.30%	27.80%	45.70%	15.90%	3.64	.95
Helpfulness of Public Officer Ethics Act in protecting or	2.60%	10.60%	34.40%	39.70%	12.60%	3.49	.94

supporting. Helpfulness of Kenyan laws in handling Terrorism, sexual offences, Cyber Crimes & protecting or supporting OSH.	7.30%	6.60%	26.50%	37.10%	22.50%	3.61	1.13
Overall Mean						**3.62**	

4.6.3 Nature of Work Environment

The study sought to evaluate how the nature of work environment affected the occupational safety and health of police officers. The descriptive statistics for nature of work environment are presented in Table 4.21. Based on the results, majority (49.70%) of the respondents indicated that, as they work/perform their duties or do patrols in Nairobi county, and they are aware about their level of safety (at work) to be, unsafe (Mean=2.67). The results in addition indicated that (48.30%) of the respondents indicated that, they are also exposed to risks after work during political rallies in Nairobi County (after work) and feel unsafe (Mean=2.63).

The study further found that (40.40%) of the respondents were neutral on their level of stress after work by their family members (Mean=2.98). Similarly, the results showed that (39.70%) of the respondents indicated that as they work, perform their duties or do patrols in Nairobi County, they are aware about their level of security (at work) to be unsafe (Mean=2.74). Finally, (39.10%) of the respondents were neutral on their security after they have left a day's work or duties in Nairobi County and at home (after work) (Mean=3.11). The results also show that (38.4%) of the respondents were neutral on their level of awareness of their safety at work (Mean=3.07). Similarly, (36.40%) of the respondents indicated that, they were stressed at work by their colleagues or family members and feel unsafe (Mean=2.86).

In relation to work environment, the respondents were further asked to indicate or write down only one state of their work environment that fully protects or supports their occupational safety and health as police officers. In response, majority of the respondents cited arms and protective gears such as bullet proofs, proper leadership and administration of resources. The respondents were further asked to list down only one of the ways that the work environment was influencing either positively or negatively their occupational safety and health as police officers. A good number of the respondents indicated that such work environments were influencing their occupational safety and health positively since they were always feeling secured and protected.

The above study findings agree with a similar research in a police environment where work accidents more than doubled in 2009 as compared to the previous year (Achim, 2018). The scholar added that those who got incapacitated from accidents were 97%. In addition, there was consistency of those who died from 2008 to 2009 where 5 of them in 2009 resulted from shootings. In this research, accidents increased by 60% in 2009 unlike in 2010 that was 25% but the police officers incapacitated was 96%. In the years that followed, there were accident reports in two consecutive years of 2011 (4 fatalities), 2012 (256 accidents where 229 were work related, 27 from accidents and 97% incapacitated). In 2013, there were 233 injuries as compared with 2014 that had 286 of them who were all incapacitated (Achim, 2018).

The study agrees with other studies that had a significant positive correlation r of .533 between work environment and police performance (Baraza, 2017). The study also agrees with other similar studies on police hopelessness as a result of stress that is caused by the nature of their work environment. It was found out that as administrative stress increased, hopelessness of police also went up in the range of 1.64-2.65 and $P< .006$ (Violanti, Andrew, Mnatsakanova, Hartley, Fekedulegn & Burchfiel, 2016). They added that with a lack of support, stress also increases as hopelessness in the range of 1.60 - 2.80 and $P< .001$. It was not applicable for physical danger stress that had $P=.124$. These scholars added that police officers faced hopelessness because of their work

environment, and the perception they have on their work. Their stress is caused by their exposure to dangerous accidents, criminals, those who kill themselves or rape and all sorts of their possibility of death at any time.

Table 4.21: Work Environment

Statement	Very Unsafe	Unsafe	Neutral	Safe	Very Safe	Mean	SD
My level of awareness in my safety at work	14.60%	35.10%	23.80%	21.90%	4.60%	2.67	1.11
My level of awareness in my safety after work	5.30%	21.20%	38.40%	31.10%	4.00%	3.07	.95
My level of exposure to risks during political rallies while working	30.50%	20.50%	27.20%	17.20%	4.60%	2.45	1.22
My level of exposure to risks during political rallies after work	19.20%	29.10%	27.20%	18.50%	6.00%	2.63	1.16
My level of stress at work by colleagues and family	9.90%	26.50%	34.40%	25.80%	3.30%	2.86	1.02
My level of stress after work by colleagues and family	7.30%	21.90%	40.40%	26.50%	4.00%	2.98	.97
Awareness of my level of security at work	11.90%	27.80%	38.40%	17.90%	4.00%	2.74	1.02
Awareness of	5.30%	19.90%	39.10%	30.50%	5.30%		

my level of security after work	3.11	.96
Overall Mean	**2.81**	

4.6.4 Available Resources

Available Resources was the fourth independent variable of this study. The study sought to establish how the available resources affect the occupational safety and health of police officers. The descriptive statistics for nature of available resources are presented in Table 4.22. The results show that majority (61.60%) of the police respondents indicated that the quantity of available government equipment for their work like fire arms or ammunition make them feel, satisfied (Mean=3.51). Similarly, the results show that majority (61.60%) of the respondents indicated that the available government resources for their work like office blocks were making them feel satisfied (Mean=3.66).

The results further show that (59.60%) of the respondents indicated that the available and condition of government equipment for their work like armored vehicles, and motorbikes make them feel satisfied (Mean=3.65). Furthermore, (59.00%) of the respondents indicated that the provision of enough protective equipment for their work like uniforms, boots, and caps make them feel satisfied (Mean=3.56). The results show that (57.60%) of the respondents indicated that the available government equipment for their work like batons, belts and whistles make them feel satisfied (Mean=3.62).

The results further show that (56.90%) of the respondents believed that the quantity and quality of available government communication equipment for their work like walk talkie, ICT/phones make them feel satisfied (Mean=3.48). In addition, (51.00%) of the respondents indicated that the available government equipment for their work like stationeries (books, pens) was making them feel satisfied (Mean=3.50). The results show that (47.30%) of the respondents indicated that the available government resources that

bring comfort like house of residence or accommodation make them feel satisfied (Mean=3.21).

The respondents were in addition asked to indicate or write down only one of the government resources that fully supported their occupational safety and health as police officers. Majority of them responded by indicating that the resources were; medical cover, housing program, well updated ICT equipment, finger print equipment, motor vehicles and availability of fire arms and ammunitions. They were further asked to list one of the ways in which the government resources above either positively or negatively influences their occupational safety and health as police officers. Most of the respondents indicated that the resources were influencing their work positively since they were able to effect arrests with minimal resistance, they were able to pay their hospital bills easily, reduced stress, and their work has been made easy generally and performance of their duties with a lot of ease.

The above studies are in agreement with another study on the perceived comfort of using protective gear by police officers. In this study, it was found out that all types of armour used by officers affected their job performance at work (Schram, Hinton, Orr, Pope & Norris, 2018). They posited that it affects their performance because of their size, discomfort caused and hinders efffective use of other police supporting items like handcuffs, belts and magazines. According to them, they stated that the nature of a police job requires that they put on a normal wear and individual light armour vests (ILAV). In the findings, all types of armour were negatively evaluated by police officers. ILAV B type were rated lowly while some other types had positive evaluation on their perforamnce and comfort.

The study is also in agreement with a Nairobi research which found out that the condition of housing has a positive relationship with how police officers perform their duties as shown by a P-value =.050 level of significance (Nderi & Kirai, 2017). It adds that the health of police is affected if provided with small rooms, a lack of medical cover

and with poor conditions of work. Resources are important for employees (Freedy & Hoffo, 2017; Schaufeli & Taris, 2014).

Table 4.22: Available Resources

Statement	Very Dissatisfied	Dissatisfied	Neutral	Satisfied	Very Satisfied	Mean	SD
Quantity of government equipment like fire arms or ammunition.	3.30%	11.30%	23.80%	54.30%	7.30%	3.51	.91
Quantity and Quality of government equipment like walk talkie, ICT/phones.	4.60%	9.30%	29.10%	47.00%	9.90%	3.48	.96
Government equipment like stationeries.	2.00%	13.20%	33.80%	34.40%	16.60%	3.50	.99
Provision of equipment like uniforms, boots, and caps.	4.00%	7.30%	29.80%	46.40%	12.60%	3.56	.94
Government equipment like batons, belts, and whistles.	1.30%	10.60%	30.50%	39.70%	17.90%	3.62	.94
Government resources like office blocks.	2.60%	5.30%	30.50%	47.00%	14.60%	3.66	.89
Government resources like house of residence or accommodation.	14.00%	12.70%	26.00%	33.30%	14.00%	3.21	1.24

Condition of government equipment like armored vehicles, and motorbikes.	4.00%	9.90%	26.50%	36.40%	23.20%	3.65	1.07
Overall Mean						**3.52**	

4.6.5 Workload

The study had sought to determine if the amount of workload influences the occupational safety and health of police officers. The descriptive statistics for workload are presented in Table 4.23. The study show that majority (58.30%) of the respondents were in agreement with the statement that their work involves spending more than 8 hours in a day (Mean=3.65). The results also indicated that (46.40%) of the respondents were in agreement with the fact that their duties or tasks that they perform did overwhelm them (Mean=3.27). The results further show that (42.40%) of the respondents agreed that their work involves performing complex duties that cause psychological stress, strains and traumas that can lead them to commit suicide or kill others (Mean=3.04).

The results also show that (40.60%) of the respondents disagreed with the statement that their workload alone was too heavy to carry or perform causing them burnout (Mean=2.85). The results further show that (39.70%) of the respondents were undecided about the statement that their night shift duties or extra hours worked lead them to lack sleep during the day (Mean=3.23). In addition, the results show that (38.50%) of the respondents disagreed with the statement that their work tasks were not shared even in adverse working conditions and exposed them to injuries, dangers, anxiety, and depression (Mean=2.93). Based on the results, (37.10%) of the respondents disagreed that their duties were too heavy, too much to handle, and was extremely exhaustive (Mean=2.89). Finally, (36.40%) of the respondents agreed that the ratio of police

officers to the Kenyan population was below international standards of 1:450 (Mean=3.07).

Further, the respondents were asked to indicate or write down only one of the workload that fully supports or protects their occupational safety and health as police officers of their ranks. In response, most of the respondents highlighted issues such as; working for more than 12 hours a day with no compensation at all, apprehension of offenders and conducting investigation on facts, working in inquiry section and being overworked. In addition, the respondents were asked to list down only one of the ways that the workload either positively or negatively influences their occupational safety and health as police officers of their ranks. In response they indicated that they felt the workload was influencing their lives negatively since at the end of the day they were stressed, they felt exposed to dangerous life. So many of them indicated that they were fearing for their health condition moving forward while others indicated that due to the workload they had, they hardly got time for their families and loved ones.

The study also agrees with other findings that indicated that the type of work done by employees affect their occupational safety and health (Steege, Baron, Marsh, Menendez & Myers, 2014; Hollnagel, 2018; Swiger, Vance & Patrician, 2016; Tan & Netessine, 2014). In another research done in Italy on flying column police officers, it was found out that their personalities moderate the effect on the sources of workloads and tasks like training (Garbarino, Chiorri & Magnavita, 2015). According to them, three traits, extraversion, conscientiousness, and emotional stability determined how the workload is perceived as shown by χ^3 =16.47 and P-value=.006. It meant that when a task is not considered and the source of workload, higher levels of extraversion leads to higher workload while conscientiousness and emotional stability leads to lower workload.

Table 4.23: Workload

Statement	Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	Mean	Std. Dev.
My duties are too heavy, too much to handle, and are extremely exhaustive.	17.20%	19.90%	29.80%	23.2%	9.90%	2.89	1.23
My workload alone is too heavy to carry or perform causing me burnout.	11.30%	29.30%	29.30%	22.7%	7.30%	2.85	1.12
My work tasks are not shared even in adverse working conditions and expose me to injuries, dangers, anxiety, and depression.	11.30%	27.20%	23.20%	33.8%	4.60%	2.93	1.12
My work involves performing complex duties that cause psychological stress, strains, and traumas that can lead me to suicide or kill others	14.60%	21.90%	21.20%	29.8%	12.60%	3.04	1.27
My work involves spending more than 8 hours in a day.	2.00%	6.00%	33.80%	41.7%	16.60%	3.65	.90
My night shift duties or extra hours worked leads me to lack sleep during the day	1.30%	21.20%	39.70%	28.5%	9.30%	3.23	.93
My duties or tasks	5.30%	19.20%	29.10%	35.8%	10.60%		

that I perform do overwhelm me						3.27	1.06
The ratio of Police Officers to the Kenyan population is below international standards of 1:450	13.90%	16.60%	33.10%	21.20%	15.20%	3.07	1.24
Overall Mean						**3.12**	

4.6.6 Government Policies, Practices, and Procedures

The study had sought to find out the moderating effect of government policies, practices and procedures on the antecedents of occupational safety and health of police officers. The descriptive statistics for government policies are presented in Table 4.24. The results show that, majority (45.00%) of the respondents indicated that sometimes new laws, policies, practices, procedures and visions lead to new lifestyles (Mean=3.25). Based on these results, (42.40%) of the police respondents indicated that government policies, practices and procedures are often helpful to them in efficiently handling emergency situations (Mean=3.50). In addition, the results show that (41.70%) of the respondents agreed they were sometimes at all times compensated in case of injuries or accidents at work (Mean=3.35).

The study also shows that (41.1%) of the respondents were sometimes not well compensated because their welfare and rights are ignored (Mean=3.25). In addition, the results show that (40.40%) of the respondents indicated that often when they had the qualifications they then get promoted based on government policies, practices and procedures (Mean=3.52). The results also show that (37.20%) of the respondents indicated that often when new laws, policies, practices, procedures and visions are developed, they do not help all stakeholders (Mean=3.29). The study results further show that (37.10%) of the respondents indicated that they often do not smoothly rise through the ranks until retirement because of corruption (Mean=3.54). Finally the results show that (32.50%) of the respondents agreed that sometimes government policies,

practices and procedures were not implemented by authorities and were not useful to them during emergency situations (Mean=3.21).

In addition to the above responses, the respondents were also asked to indicate or write down only one of the government policies, practices and procedures that fully protect or support their occupational safety and health as police officers. In response, majority of the respondents indicated that government policies, practices and procedures that fully protect or support their occupational safety and health as police officers included; promotion on the basis of personal working records, increase of wages, promotions based on merits, use of firearm to protect themselves and colleagues when under attack, policies on medical cover and police right protection and medical insurance. They were therefore asked to list down only one of the ways in that the government policy, practice and procedure above either positively or negatively influences their occupational safety and health as police officers. In response, most of them indicated that the policies were influencing their lives positively since they felt protected at all times when they are out on duty knowing that, in case they get injured, they will be treated for free and incase of death their families will be compensated.

The above study agrees with another that was done in Romania. In this research, when risk management was done on occupational safety and health, it meant the management of policies, procedures and practices were used to identify risks (Achim, 2014). The scholar added that the risks of police officers included hazards they face at work, risks of the hazards, looking for the steps to control them and revise the same process. This academician posited further that the effects on the health of police officers include physical and mental health that arise from work. Other effects arise due to the kind of work done (shifts, poor feeding, lack of offs or rests, the use of force causing stress or tension, and moral issues in using guns) (Achim, 2014; Cook & Pollack, 2017). It is added that police officers are also affected by the strategies they use and consequences, hostility from clients, fear of mingling with criminals, threats of death, family influence and other pressures of work. In this research, it was found out that all the above effects

lead to diverse diseases that include caardiovascular, digestive, osteo-articular system, endocrine and infectious and parasitic ailments (Achim, 2014).

The study agrees with a research of military soldiers' hardiness as a mediator in achieving their readiness. It was found by scholars that there are high levels of hardiness with a mean of 3.26 and standard deviation of 0.49 (Shinga & Dyk, 2015). They added that the correlation between soldiers' RWS ($P< .01$), RWU ($P< .01$) and Hardiness ($P< .01$) are significantly related with CR. These are the soldiers' style of readiness, unit of belonging and hardiness or resistance to stress. Combat Readiness (CR) is the state that a soldiers' mind affected their occupational safety and health. In the study, its findings also agree with other studies that showed that policies on operations, organization and reward systems of the police force are a cause of their stress (Turker, 2015). In addition, when officers are trained on stress, it will make them to use services that reduce the same. Due to policy, 30 percent of women report violence (Lockwood & Prohaska, 2015).

Table 4.24: Government Policies, Practices and Procedures

Statement	Never	Seldom	Sometimes	Often	Almost Always	Mean	SD
Government Policies, Practices & Procedures help me to efficiently handle emergency situations	3.30%	6.00%	38.40%	42.40%	9.90%	3.50	.88
Government Policies, Practices & Procedures are not implemented by authorities and are not useful to me during emergency situations	6.60%	20.50%	32.50%	25.80%	14.60%	3.21	1.13
When I have the qualifications I will then be promoted based on government policies, practices and procedures	2.60%	6.00%	39.70%	40.40%	11.30%	3.52	.87
I will not smoothly rise through the ranks until retirement because of corruption	6.00%	5.30%	34.40%	37.10%	17.20%	3.54	1.03
I will at all times be compensated in case of injuries or accidents at work	4.60%	9.30%	41.70%	35.10%	9.30%	3.35	.94
I will not be well compensated because my welfare and rights are normally ignored	5.30%	13.90%	41.10%	30.50%	9.30%	3.25	.99
New laws, policies, practices, procedures	9.30%	5.30%	45.00%	31.80%	8.60%	3.25	1.01

and visions lead to new lifestyles							
When new laws, policies, practices, procedures and visions are developed, they will not help all stakeholders.	6.10%	14.90%	32.40%	37.20%	9.50%	3.29	1.03
Overall Mean						**3.32**	

4.6.7 Occupational Safety and Health

Occupational safety and health was the dependent variable of this study. This section presents descriptive analysis results on occupational safety and health. The descriptive statistics for occupational safety and health are presented in Table 4.25. The results showed that majority (52.30%) of the respondents were faced with a frequent number of fatal accidents or injuries at work that could make them feel insecure (Mean=2.49). The results show that (50.30%) of the respondents were normally faced with a high level of distress during working hours or after work (Mean=2.54). The results also show that (47.70%) of the respondents indicated that they had a number of shifts but are manageable and there is no cause for alarm but feel secure (Mean=3.34). The results also show that (46.30%) of the respondents were satisfied with their work, happy with it and always felt secure (Mean=3.36).

Furthermore, (42.40%) of the respondents feel neutral when they were always performing their duties in police stations/place of work or do patrols (Mean=3.13). The study in addition shows that (41.00%) of the respondents indicated that they were frequently on sick offs to attend clinics for their treatment or under medication but they feel secure (Mean=3.17). Moreover, the results show that (37.80%) of the respondents indicated that they were frequently sick or in poor health that is caused by the nature of their work but makes them feel insecure (Mean=2.79). Finally, the results show that most (35.80%) of the respondents indicated neutrality despite them having a demanding

work and there are times their shifts were not rotated that make them to be frequently tired leading to absenteeism (Mean=2.99). The work then leaves them feeling insecure.

Regarding occupational safety and health (OSH), the respondents were further asked to indicate or write down only one of the OSH items that fully support their job performance or work as police officers of their respective ranks. In response, majority cited items such as; reflective jackets, good working environment and living in one designated place as a police community. They were also asked to list down only one of the ways the item of OSH indicated above either positively or negatively influences their job performance or work as police officers. In response they indicated that reflective jackets were making them visible to the motorists from far hence they feel safe, they are able to work longer time because they are motivated, and in case of an attack there is quick response for reinforcement.

Additionally, the study was of the opinion that police officers during working hours spend a lot of their time using mobile phones in social media or surf the internet and yet such habit is not safe. The police respondents were therefore asked to give one reason that such a lifestyle can expose them by affecting their occupational safety and health. Majority of the respondents responded by indicating that:

''...Not all police officers spend a lot of time on their phones since it was against the police work ethics and that it is dangerous for police officers to spend time on their phones. Police officer spending a lot on social media creates opportunities for criminals to take advantage and to hurt them even before terrorizing the public''.

Many police officers, military officers, government officials and civilians have lost their lives as a result of the work of terrorists especially on our roads. Terrorists have been planting improvised Explosive Devices (IED) on roads. Many vehicles have been severally mangled after stepping on these devices planted by terrorists on the roads killing several people. It is recommended that security agencies, transport companies and even civilians should not reveal their travel plans so that these enemies do not plan to

exterminate lives. Revealing travel plans or operations through phone, for example, will be used by the Al Shabab and other terrorists to cause destruction. The study sought to find out if the use of phone can be disadvantageous to the security officers which some confirmed. Phones can be a medium which can expose the police to vulnerabilities especially those using social media. The officers need to be trained so that they may be ICT wizards and be able to tame any dangers from the internet. The Kenya National Police Service is cognizant to all these and many are trained on cyber security.

Other respondents denied the statement by indicating that:

''...it is not allowed in the code of conduct of the police service to spend time on your phone while on duty since it may lead to security lapse hence leading to them being attacked easily additionally, the use of phones while on duty is totally unacceptable in police service since phones steals the attention of an individual which may results into the risk of being attacked by criminals''.

The respondents were furthermore asked to indicate whether they were OCPD/OCS/Commander or not and their responses and results were recorded. Based on the results it was found out that only 23% of the respondents indicated that they were OCPD/OCS/Commander. The majority (77%) indicated that they were neither OCPD/OCS nor Commander. The study also tried to find out on the number of women who were either OCPD, OCS or in Charge. It was found out through interview that there were 8 of them across Nairobi County during the study period. The stations with women leaders during the study were Capitol Hill/Kilimani, Karen, Huruma, Starehe (OCPD), KICC, Runda, and Riruta-Mutuini (In Charge). Some respondents claimed that women leaders were excellent in performing their duties as compared with their men counterparts. The respondents, who indicated that they were OCPD/OCS/Commander, were then asked to provide an approximate number of police officers involved in fatal or non-fatal accidents or diseases related to their work but over a number of years. The majority failed to provide these data and the study used some secondary statistics from the records of National Police Service (Appendix I and II).

With regards to safety and security, the respondents were asked to kindly mention or list any of the occupational safety and health hazards or dangers they were exposed at work. The respondents listed the hazards chronologically as follows: The majority of the respondents indicated that long working hours (94.8%) as a major OSH hazard, it was followed by lack of some equipment like bullet proofs (91%), easy targets for criminals (89.4%), accidents (87.7%), (87.2%) of them listed diseases, being at the front line without any proper protection (80.6%), reporting systems (77.9%), attack by criminals (72.9%), accidental weapon discharge (68.1%), suicide (57.9%), contagious diseases (55.4%), TB (33.2%), and HIV (25.8%) respectively.

The respondents were further asked to do a comparison of the causes of insecurity and rank them. Each cause was given a number (position) that would not be repeated. Majority of the respondents ranked them from the highest to the lowest as follows: political activities, radicalized youth, terrorism, cattle rustling, conflicts among communities or tribes, drug trafficking, proliferation of small arms and light weapons, smuggling illegal goods, illicit brews and illegal immigrants.

Finally, the respondents were asked to do a comparison of the causes of police officers' deaths or killings in Nairobi County. Each cause of death is given a number (position) that should not be repeated. The respondents ranked them from position one downwards as follows: robbers kill police officers while helping victims being robbed, terrorists, commit suicide, shot or killed by other police officers, road accidents, political activities, police killed as they help in fire rescues missions, diseases caused by nature of job or police work and finally cattle rustling or bandits.

The study above agrees with another earlier done by other scholars. The police officers face a lot of stressful events while performing their duties (Ma, Andrew, Fekedukegn, Gu, Hartley, Charles, Violanti & Burchfiel, 2015). They posited that 60.5% of the stressful events in the previous year were not to do with threats. They added that those events were to do with the nature of their profession. Those events entailed administrative issues, pressure from work, shifts and their rotation among others.

Table 4.25: Occupational safety and health

Statement	Very insecure	Insecure	Neutral	Secure	Very Secure	Mean	SD
I am faced with a high level of distress during work hours or after work and I feel.	18.50%	31.80%	28.50%	19.90%	1.30%	2.54	1.05
I am satisfied with my work, happy with it and I feel.	4.00%	10.60%	39.10%	38.40%	7.90%	3.36	.92
As officers we are faced with a frequent number of fatal accidents or injuries at work that makes me feel.	26.50%	25.80%	23.20%	21.20%	3.30%	2.49	1.19
I am always performing my duties in police stations/place of work or do patrols and I feel.	4.60%	17.90%	42.40%	29.80%	5.30%	3.13	.93
I am frequently sick or in poor health as caused by the nature of my work that makes me feel.	15.90%	21.90%	33.10%	25.20%	4.00%	2.79	1.11
I am frequently on sick offs to attend clinics for my treatment, under medication and I feel.	7.30%	13.20%	38.40%	37.70%	3.30%	3.17	.96
I have a number of shifts that are	4.00%	9.30%	39.10%	43.70%	4.00%		

manageable and there is no cause for alarm for I feel.						3.34	.86
I am having a demanding work and the times of shifts are not rotated that make me to be frequently tired leading to absenteeism and I feel.	5.30%	27.80%	35.80%	24.50%	6.60%	2.99	1.00
Overall Mean						**2.98**	

4.7 Diagnostic Tests

Before computing multiple regression analysis, the study tested whether the data met the assumptions for regression analysis. The assumptions that were tested were linear relationship, normality, multicollinearity, heteroscedasticity and auto-correlation.

4.7.1 Normality Test

This study used Shapiro Wilk test to test for normality. The null-hypothesis for Shapiro Wilk test was that the population is not normally distributed; thus, if the selected alpha value is greater than the p-value, we accept the alternative hypothesis since there is enough evidence that the data is normally distributed. From the findings in Table 4.26, all the variables were seen to have p-values greater than .05. This suggests that the null hypothesis had to be rejected and conclude that the data is from a normal population; i.e. it is normally distributed hence the normality assumption is met. If the tests are non-normal, then the data has outliers, multiple modes, incorrect measuring tools, incorrect distributions, zero/infinite limits, or scanty collections (Singh & Masuku, 2014). A variable is said to be normally distributed if most of its points are lying on the theoretical quartile line that is fitted from the normal QQ plot (Shenoy & Pant, 1994).

Outliers in a study are observations that are distinct and distinct from others due to anomalies (Galkowski & Cader, 2018). They stated that it is necessary to conduct observations in order to identify true observations and outliers. This is especially true when large amounts of data are generated by computers. Outliers are defined as results that are outside of a given model in a study (Ahmed, 2017).

Table 4.26: Shapiro-Wilk Test of Normality

	Shapiro-Wilk[a]		
	Statistic	**Df**	**Sig.**
Occupational safety and health	.971	151	.203

a. Lilliefors Significance Correction

4.7.2 Linearity Test

In this study, linearity test was important because most parts of the General Linear Model (GLM) such as correlation and regression assume the linearity. The analysis of the variance (ANOVA) Table 4.27 was used in this study to test for linearity. As rule of thumb, if the F significance (i.e. P value) for the non-linear element is greater the critical value of (>.05), then there is significant non linearity. If the value of significance of output (P value) is (<.05), then the relationship between the independent and dependent variables are linearly dependent. The test revealed f=139.998 (p=.000) which informed that the relationship between the independent and dependent variables are linearly dependent. This is when the F statistic (calculated) 139.998 is greater than the F critical obtained from F distribution tables with degree of freedoms 1, 2 and alpha = 0.05.

Linearity assumes a straight-line relationship between the predictor variables and the target variable. In this study, all the independent variables depicted a straight-line relationship with the dependent variable. The variables leadership style, work environment, legal framework, resources and work load depicted a straight-line relationship with occupational safety and health when graphically drawn. ANOVA analysis is done when one wants to compare some groups which are 3 or more (Mishra[1], P., Singh, Pandey, C.M., Mishra[2], P. & Pandey, G., 2019).

Table 4.27: ANOVA for Regression Analysis

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	58.867	5	11.773	139.998	.000[b]
	Residual	12.194	145	.084		
	Total	71.062	150			

a. Dependent Variable: Occupational Safety and Health
b. Predictors: (Constant), Workload, Legal Framework, Available Resources, Work Environment, Leadership Style

4.7.3 Multicollinearity Test

The first test conducted by the study was multicollinearity test using Variance Inflation Factor (VIF). Multicollinearity exists in situations where there are high levels of inter-correlation among two or more independent variables, in a way that makes it difficult to separate the effect of the independents (Garson, 2012). The study adopted a VIF threshold of 5, if VIF is less than 5, this is an indication that multicollinearity is absent while large VIF indicated the presence of multicollinearity.

The findings presented in Table 4.28 indicate that all the variables had VIF of less the 5 which implied that multicollinearity is absent hence all the variables could be used in the regression analysis. The tolerance for all the variables is also greater than .2. There are some three main strategies which are applied while trying to determine existence of

multicollinearity as follows: Correlation coefficient is one of them. Secondly is variance inflation factor and Eigenvalue method (λ) (Shrestha, 2020).

Table 4.28: Multicollinearity Test Using Tolerance and VIF

	Collinearity Statistics	
	Tolerance	**VIF**
Leadership Style	.390	2.561
Legal Framework	.611	1.637
Work Environment	.551	1.814
Available Resources	.487	2.052
Workload	.553	1.807
Government Policies	.695	1.439

4.7.4 Heteroscedasticity Test

Vinod (2018), states that Heteroscedasticity means a situation whereby the variable variability is unequal across several values for the variable predicting. Breusch-Pagan / Cook-Weisberg test was used to test for Heteroscedasticity. The null hypothesis for this test is that the variances of error terms are equal (Vinod, 2018). If "Prob > Chi-squared" is greater than .05 it suggests existence of homoscedasticity (Park, 2018). The findings presented in Table 4.29 shows Chi2 = .6668 has a p-value (P=.280) greater than which suggests insignificance. We therefore reject the null hypothesis and conclude that there is no heteroscedasticity.

Table 4.29: Breusch-Pagan / Cook-Weisberg test for heteroscedasticity

Ho: Constant variance				
Statistics	Df	Stat value	P-value	N=151
Chi-squared	5	.6668	.28	

4.7.5 Autocorrelation Test

Autocorrelation was checked using Durbin-Watson test. The null hypothesis for the Durbin-Watson's d tests is that the residuals are not linearly autocorrelated. The d value ranges from 0 and 4; if the value is found to be within 2 then it implies absence of autocorrelation. If the d values are; $1.5 < d < 2.5$ it implies absence of autocorrelation in the data. Findings presented in Table 4.30 show that the d-value was 2.114; since the value lies within the range $1.5 < d < 2.5$, then we conclude that there is no autocorrelation in the data and therefore regression analysis can be computed using the data. There are proposals of an alternative to make estimate and assess the efficiency of the properties they have (King, 2018).

Table 4.30: Durbin-Watson Autocorrelation Test

Model	Durbin-Watson
1	2.114

4.8 Inferential Results

Relationship between study variables was determined by computing inferential statistics. The study computed correlation and regression analysis. The correlation was adopted to test the association that existed between independent variables and dependent variable while multivariate regression analysis was used to test whether independent variables significantly predicted changes in the dependent variables.

4.8.1 Correlation Results

Correlation is a term used to denote the association between two (or more) quantitative variables. This analysis is fundamentally based on the assumption of a straight – line linear relationship between the quantitative variables and it measures the strength or the extent of an association between the variables and also its direction. The end result of a correlation analysis is a correlation coefficient whose values range from -1 to +1. A correlation coefficient of +1 indicates that the two variables are perfectly related in a positive (linear) manner, a correlation coefficient of -1 indicates that the two variables are perfectly related in a negative (linear) manner, while a correlation coefficient of zero indicates that there is no linear relationship between the two variables being studied (Gogtay & Thatte, 2017).

Correlation analysis was conducted to ascertain the relationship between the study variables of leadership style, legal framework, work environment, available resources, workload, government policies and occupational safety and health. Pearson correlation for each of the variables was generated using SPSS software version 28. Correlation coefficient was computed and used to test whether there existed interdependency between independent variables and also whether the independent variables were related to the dependent variable. Scholars argued that correlation coefficients greater than .5 are strong, .3 to .5 (moderate), and less than .3 (weak) (Heale & Twycross, 2015).

The results for the correlation in the study are as presented on Table 4.31. The results revealed that there was a strong positive relationship between leadership style and occupational safety and health of police officers (r=.789, P-value=.000). Secondly the results show that there was a strong positive and significant relationship between legal framework and occupational safety and health of police officers (r=.683, P-value=.000). The results further indicate that there was a strong positive and significant relationship between work environment and occupational safety and health of police officers (r=.721, P-value=.000). In addition, the results indicate that there was a strong positive and significant relationship between available resources and occupational safety and health

of police officers (r=.722, P-value=.000). Further, the results indicate that there was a strong negative and significant relationship between workload and occupational safety and health of police officers (r=-.577, P-value=.000). Finally, the results indicate that there was a strong positive and significant relationship between government policies and occupational safety and health of police officers (r=.913, P-value=.000).

The above study agrees with another done on police officers in Kisumu on how related the causes of occupational stress and levels (Oweke, Muola & Ngumi, 2014). These causes included work environment, workload, bureaucracy, work schedules and interpersonal relationships. Based on Chi Square tests, it was found out in the research that the following had the highest level of stress: Work environment (inadequate equipment: 105.629), workload (going to court: 88.667), bureaucracy (inconsistent leadership styles: 108.571), work schedule (working overtime: 88.667) and interpersonal relationship (lack of enough time with family: 161.048). They added that these causes of occupational stress were all greater than the critical values that were found to be 24.943 and .05 alpha level of significance (degree of freedom).

Table 4.31: Correlation Matrix

		Occupational safety and health	Leadership Style	Legal Framework	Work Environment	Available Resources	Workload	Government Policy
Occupational safety and health	Pearson Correlation	1.000						
	Sig. (2-tailed)							
Leadership Style	Pearson Correlation	.789**	1.000					
	Sig. (2-tailed)	.000						
Legal Framework	Pearson Correlation	.683**	.515**	1.000				
	Sig. (2-tailed)	.000	.000					
Work Environment	Pearson Correlation	.721**	.590**	.509**	1.000			
	Sig. (2-tailed)	.000	.000	.000				
Available Resources	Pearson Correlation	.722**	.677**	.486**	.553**	1.000		
	Sig. (2-tailed)	.000	.000	.000	.000			
Workload	Pearson Correlation	-.577**	-.438**	-.363**	-.392**	.505**	1.000	
	Sig. (2-tailed)	.000	.000	.000	.000	.000		
Government	Pearson	.913**	.709**	.606**	.681**	.678**	.396*	1.000

Policy	Correlation						*
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000

** Correlation is significant at the .01 level (2-tailed)

4.8.2 Simple Linear Regression

Regression Analysis for Leadership Styles and Occupational, Safety and Health (OSH) of Police Officers.

Regression analysis was conducted to determine the relationship between leadership styles in general and occupational safety and health of police officers. Table 4.32 presents the regression model on leadership styles versus occupational safety and health of police officers. As presented in Table 4.32, the coefficient of determination R Square is .622 and R is .789 at .000 significance level. The model indicates that leadership style explains 62.2% of the variation in occupational safety and health of police officers. This means 62.2% of the occupational safety and health of police officers are influenced by leadership style.

This study agrees with other studies among police officers in Nairobi on work environment and performance. In this study, the performance of employees is affected by issues like health and safety, reward systems, communication and how they are housed (Nderi & Kirai, 2017). In this study, 60.84% of these issues explain employee performance. Performance also in terms of occupational safety and health is dependent on leadership.

Table 4.32: Model Fitness for Leadership Style on OSH

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.789[a]	.622	.619	.42467

a. Predictors: (Constant), Leadership Style

Table 4.33 shows the ANOVA results for leadership style on occupational safety and health of police officers. The ANOVA results presented in Table 4.33 show that the model was statistically significant in explaining the influence of leadership style on occupational safety and health of police officers in Kenya as indicated by a p-value of .000. This study agrees with that done by (Nderi & Kirai, 2017) whose ANOVA calculations showed a P-value of .000.

Table 4.33: ANOVA for Leadership Style on OSH

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	44.191	1	44.191	245.036	.000[b]
	Residual	26.871	149	.180		
	Total	71.062	150			

a. Dependent Variable: Occupational, Safety and Health

b. Predictors: (Constant), Leadership Style

The regression coefficient results for leadership style on OSH of police officers are presented in Table 4.34. The regression coefficient results in Table 4.34 show that there was a positive and significant relationship between leadership style and OSH of police officers in Kenya (β=.772, p=.000). The gradient coefficient shows the extent to which a unit change in the independent variable causes a change in the dependent variable which is the change in Occupational, Safety and Health of Police Officers due to a unit change in leadership style. This implies that a unit change in leadership style results into an improvement in OSH of police officers in Kenya by .772 units.

Table 4.34: Regression Coefficient Results for Leadership Style on OSH

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	.534	.156		3.409	.001
	Leadership Style	.772	.049	.789	15.654	.000

a. Dependent Variable: Occupational, Safety and Health

LS= .534+ .772X_1

Where **X_1**= Leadership Style

Regression Analysis for Legal Framework and Occupational, Safety and Health (OSH) of Police Officers.

Regression analysis was conducted to determine the relationship between legal framework and OSH of police officers. Table 4.35 presents the regression model fitness on legal framework versus OSH of police officers. As presented in Table 4.35, the coefficient of determination R Square is .466 and R is .683 at .000 significance level. The model indicates that legal framework explains 46.6% of the variation in Occupational, Safety and Health of Police Officers. This means 46.6% of the OSH of police officers is influenced by legal framework.

Table 4.35: Model Fitness for Legal Framework on OSH

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.683[a]	.466	.463	.50461

a. Predictors: (Constant), Legal Framework

Table 4.36 shows the ANOVA results for legal framework on OSH of police officers. The ANOVA results presented in Table 4.36 show that the model was statistically significant in explaining the influence of legal framework on OSH of police officers in Kenya as indicated by a p-value of .000.

Table 4.36: ANOVA for Legal Framework on OSH

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	33.121	1	33.121	130.074	.000[b]
	Residual	37.940	149	.255		
	Total	71.062	150			

a. Dependent Variable: Occupational, Safety and Health

b. Predictors: (Constant), Legal Framework

The regression coefficient results for the effect of legal framework on OSH of police officers are presented in Table 4.37. The regression coefficient results in Table 4.37 show that there was a positive and significant relationship between legal framework and OSH of police officers in Kenya (β=.587, p=.000). The gradient coefficient shows the extent to which a unit change in the independent variable causes a change in the dependent variable which is the change in OSH of police officers due to a unit change in legal framework. This implies that a unit change in legal framework results into an improvement in OSH of police officers in Kenya by .587 units.

Table 4.37: Regression Coefficient Results for Legal Framework on OSH

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.006	.173		5.817	.000
	Legal Framework	.587	.051	.683	11.405	.000

a. Dependent Variable: Occupational, Safety and Health

LF= 1.006+ .587X_2

Where **X_2**= Legal Framework

Regression Analysis for Nature of Work Environment and Occupational, Safety and Health (OSH) of Police Officers.

Regression analysis was conducted to determine the relationship between nature of work environment and OSH of police officers in Kenya. Table 4.38 presents the regression model fitness on nature of work environment versus OSH of police officers. As presented in Table 4.38, the coefficient of determination R Square is .520 and R is .721 at .000 significance level. The model indicates that the nature of work environment explains 52.0% of the variation in OSH of police officers. This means 52.0% of the OSH of police officers in Kenya is influenced by the nature of their work environment.

The above study agrees with another on the influence of work environment and performance among police officers in Nairobi (Baraza, 2017). It was found out that 58.9% change in employee performance is explained by work environment. When the environment is conducive, employees will perform well.

Table 4.38: Model Fitness for Nature of Work Environment on OSH

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.721[a]	.520	.517	.47854

a. Predictors: (Constant), Nature of Work Environment

Table 4.39 shows the ANOVA results for the nature of work environment on OSH of police officers in Kenya. The ANOVA results presented in Table 4.39 show that the

model was statistically significant in explaining the influence of the nature of work environment on OSH of police officers in Kenya as indicated by a p-value of .000. It also agrees with that of (Were, 2017) whose ANOVA results showed that work environment influences performance of employees as indicated by P-value of .000.

Table 4.39: ANOVA for Nature of Work Environment on OSH

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	36.940	1	36.940	161.308	.000[b]
	Residual	34.122	149	.229		
	Total	71.062	150			

a. Dependent Variable: Occupational, Safety and Health

b. Predictors: (Constant), Nature of Work Environment

The regression coefficient results for the effect of nature of work environment (W/E) on OSH of police officers are presented in Table 4.40. The regression coefficient results in Table 4.40 show that there was a positive and significant relationship between nature of work environment and OSH of police officers in Kenya (β=.646, p=.000). The gradient coefficient shows the extent to which a unit change in the independent variable causes a change in the dependent variable which is the change in OSH of police officers due to a unit change in the nature of work environment. This implies that a unit change in nature of work environment results into an improvement in OSH of police officers in Kenya by .646 units.

Table 4.40: Regression Coefficient Results for the Nature of W/E on OSH

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.875	.166		5.275	.000

Nature of Work Environment	.646	.051	.721	12.701	.000

a. Dependent Variable: Occupational, Safety and Health

WE= .875+ .646X_3

Where **X_3**= Work Environment

Regression Analysis for Available Resources and Occupational, Safety and Health (OSH) of Police Officers.

Regression analysis was conducted to determine the relationship between available resources for police officers and their OSH. Table 4.41 presents the regression model fitness on available resources versus OSH of police officers. As presented in Table 4.41, the coefficient of determination R Square is .522 and R is .722 at .000 significance level. The model indicates that the available resources explain 52.2% of the variation in OSH of police officers. This means 52.2% of the OSH of police officers in Kenya is influenced by the resources made available to the police officers.

Table 4.41: Model Fitness for Available Resources on OSH

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.722[a]	.522	.519	.47760

a. Predictors: (Constant), Available Resources

Table 4.42 shows the ANOVA results for the available resources on OSH of police officers in Kenya. The ANOVA results presented in Table 4.42 show that the model was statistically significant in explaining the effect of available resources on OSH of police officers in Kenya as indicated by a p-value of .000.

Table 4.42: ANOVA for Available Resources on OSH

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	37.075	1	37.075	162.535	.000[b]
	Residual	33.987	149	.228		
	Total	71.062	150			

a. Dependent Variable: Occupational, Safety and Health

b. Predictors: (Constant), Available Resources

The regression coefficient results for the effect of available resources on OSH of police officers are presented in Table 4.43. The regression coefficient results in Table 4.43 show that there was a positive and significant relationship between available resources and OSH of police officers in Kenya (β=.681, p=.000). The gradient coefficient shows the extent to which a unit change in the independent variable causes a change in the dependent variable which is the change in OSH of police officers due to a unit change in the available resources. This implies that a unit change in available resources results into an improvement in OSH of police officers in Kenya by .681 units.

Table 4.43: Regression Coefficient Results for Available Resources on OSH

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	.807	.170		4.731	.000
	Available Resources	.681	.053	.722	12.749	.000

a. Dependent Variable: Occupational, Safety and Health

AR= .807+ .681X_4

Where **X_4**= Available Resources

Regression Analysis for Workload and Occupational, Safety and Health (OSH) of Police Officers.

Regression analysis was conducted to determine the relationship between workload and the OSH of police officers in Kenya. Table 4.44 presents the regression model fitness on workload versus OSH of police officers. As presented in Table 4.44, the coefficient of determination R Square is .333 and R is .577 at .000 significance level. The model indicates that workload for the police officers explain 33.3% of the variation in OSH of police officers. This means 33.3% of the OSH of police officers in Kenya is influenced by the workload for the police officers. This study almost agrees with studies by other scholars where 25.8% of performance is influenced by motivation (Were, Gakure, Kiraithe, & Waititu, 2012).

Table 4.44: Model Fitness for Workload on OSH

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.577[a]	.333	.329	.56389

a. Predictors: (Constant), Workload

Table 4.45 shows the ANOVA results for workload on OSH of police officers in Kenya. The ANOVA results presented in Table 4.45 show that the model was statistically significant in explaining the effect of workload on OSH of police officers in Kenya as indicated by a p-value of .000. This is also in agreement with another study on police officers in Nairobi whose P-value is .000 (Were, Gakure, Kiraithe, & Waititu, 2012).

Table 4.45: ANOVA for Workload on OSH

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	23.684	1	23.684	74.486	.000[b]

	Residual	47.377	149	.318
	Total	71.062	150	

a. Dependent Variable: Occupational, Safety and Health

b. Predictors: (Constant), Workload

The regression coefficient results for the effect of workload on OSH of police officers are presented in Table 4.46. The regression coefficient results in Table 4.46 show that there was a negative and significant relationship between workload and OSH of police officers in Kenya (β=-.295, p=.000). The gradient coefficient shows the extent to which a unit change in the independent variable causes a change in the dependent variable which is the change in OSH of police officers due to a unit change in workload. This implies that a unit change in workload to the police officers results into a negative change in the OSH of police officers in Kenya by .295 units.

Table 4.46: Regression Coefficient Results for Workload on OSH

Model		**Unstandardized Coefficients**		**Standardized Coefficients**	**T**	**Sig.**
		B	**Std. Error**	**Beta**		
1	(Constant)	3.979	.131		30.436	.000
	Work Load	-.295	.034	-.577	-8.631	.000

a. Dependent Variable: Occupational, Safety and Health

WL= 3.979 -.295X_5

Where **X_5**= Workload

4.8.3 Multiple Regression Analysis

Multiple regression models were fitted to the data in order to determine how the predictor variables affect the response variable. This study used a multiple regression

model to measure the influence of independent variables on the dependent variable. It was also used to test research hypothesis.

A model summary is used to show the amount of variation in the dependent variable that can be explained by changes in the independent variables. In this study, it was sought to establish the amount of variation in occupational safety and health of police officers as a result of changes in leadership style, legal framework, work environment, available resources and workload.

From the findings presented in Table 4.47, model show that the value of R square is .828. This suggests that 82.8% variation in occupational safety and health of police officers in Kenya can be explained by changes in leadership style, legal framework, work environment, available resources and workload. The remaining 17.2% suggests that there are other factors that can be used to explain variation in occupational safety and health of police officers that were not discussed in this study. The findings also show that the independent variables (leadership style, legal framework, work environment, available resources and workload) and the dependent variable (occupational safety and health of police) are strongly and positively related as indicated by correlation coefficient value (R) of .910.

Table 4.47: Overall Model Fitness

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.910[a]	.828	.822	.29000

a. Predictors: (Constant), Workload, Legal Framework, Available Resources, Work Environment, Leadership Style

Analysis of variance is used to test the significance of the model. The significance of both models, un-moderated and the moderated regression models were tested at 5% level of significance. For the un-moderated regression model, the significance of the model was .000 which is less than the selected level of significance .05. This therefore suggests that the model was significant. The findings as presented in Table 4.48 further show that the F-calculated value (139.998, p=.000) was greater than the F-critical value

(F5,145=3.823); this suggests that the variables, leadership style, legal framework, nature of work environment, available resources and workload can be used to predict occupational safety and health of police officers in Kenya.

Table 4.48: Overall Analysis of Variance (ANOVA)

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	58.867	5	11.773	139.998	.000[b]
	Residual	12.194	145	.084		
	Total	71.062	150			

a. Dependent Variable: Occupational, Safety, and Health
b. Predictors: (Constant), Workload, Legal Framework, Available Resources, Work Environment, Leadership Style

The regression coefficients of the overall model are presented in Table 4.49. Regression coefficients results show that there was a positive and significant relationship between leadership style and occupational safety and health of police officers (β=.306, p=.000). The results also show that there was a positive and significant relationship between legal framework and occupational safety and health of police officers (β=.206, p=.000). Furthermore, there was a positive and significant relationship between nature of work environment and occupational safety and health of police officers (β=.208, p=.000). Similarly, the results revealed that there was a positive and significant relationship between available resources and occupational safety and health of police officers (β=.185, p=.000). Lastly, the results indicate that there was a negative and significant relationship between workload and occupational safety and health of police officers (β=-.097, p=.000). This implies that an improvement in leadership style, legal framework, and nature of work environment, available resources and workload leads to an improvement in occupational safety and health of police officers.

Based on the findings shown in Table 4.49, the results of the hypotheses are summarized and presented in Table 4.50.

Table 4.49: A Beta Regression of Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	.420	.187		2.251	.026
	Leadership Style	.306	.051	.312	6.033	.000
	Legal Framework	.206	.037	.239	5.581	.000
	Work Environment	.208	.041	.232	5.034	.000
	Available Resources	.185	.046	.196	4.009	.000
	Workload	-.097	.020	-.190	-4.841	.000

a. Dependent Variable: Occupational Safety and Health

The regression model therefore became;

$Y = .420 + .306X_1 + .206X_2 + .208X_3 + .185X_4 - .097X_5$

Where: Y = Occupational safety and health

X_1 = Leadership Style

X_2 = Legal Framework

X_3 = Nature of Work Environment

X_4 = Available Resources

X_5 = Workload

The first hypothesis of the study was: H_{01} There is no significant relationship between leadership style and occupational safety and health of police officers in Kenya.

The findings also show that leadership style has significant influence on occupational safety and health of police officers in Kenya (p=.000). The findings also show that the influence of leadership style on occupational safety and health of police officers in Kenya is positive (β=.306). Based on these findings, the null hypothesis that H_{01} there is no significant relationship between leadership style and occupational safety and health of

police officers in Kenya was rejected hence the study found that leadership style positively and significantly affects occupational safety and health of police officers in Kenya.

The second hypothesis was: H_{02} there is no significant relationship between legal framework and occupational safety and health of police officers in Kenya.

The findings also show that legal framework has significant influence on occupational safety and health of police officers in Kenya (p=.000). The findings also show that the influence of legal framework on occupational safety and health of police officers in Kenya is positive (β=.206). Based on these findings, the null hypothesis that H_{02} there is no significant relationship between legal framework and occupational safety and health of police officers in Kenya was rejected hence the study found that legal framework positively and significantly affects occupational safety and health of police officers in Kenya.

The third hypothesis was: H_{03}: there is no significant relationship between work environment and occupational safety and health of police officers in Kenya.

The findings also show that work environment has significant influence on occupational safety and health of police officers in Kenya (p=.000). The findings also show that the influence of work environment on occupational safety and health of police officers in Kenya is positive (β=.208). Based on these findings, the null hypothesis that H_{03} there is no significant relationship between work environment and occupational safety and health of police officers in Kenya was rejected hence the study found that work environment positively and significantly affects occupational safety and health of police officers in Kenya.

The fourth hypothesis was: H_{05}: There is no significant relationship between available resources and occupational safety and health of police officers in Kenya.

The findings also show that available resources has significant influence on occupational safety and health of police officers in Kenya (p=.000). The findings also show that the influence of available resources on occupational safety and health of police officers in Kenya is positive (β=.185). Based on these findings, the null hypothesis that H_{04} there is no significant relationship between available resources and occupational safety and health of police officers in Kenya was rejected hence the study found that available resources positively and significantly affects occupational safety and health of police officers in Kenya.

The fifth null hypothesis tested was: H_{05} There is no significant relationship between workload and occupational safety and health of police officers in Kenya.

The findings also show that workload has significant influence on occupational safety and health of police officers in Kenya (p=.000). The findings also show that the influence of workload on occupational safety and health of police officers in Kenya is negative (β=-.097). Based on these findings, the null hypothesis that H_{05} there is no significant relationship between workload and occupational safety and health of police officers in Kenya was rejected hence the study found that workload negatively and significantly affects occupational safety and health of police officers in Kenya.

The sixth null hypothesis tested was: H_{06}: There is no significant moderating effect of government policies, practices, procedures on the relationship between antecedents and occupational, safety and health among police officers in Kenya.

The hypothesis was tested using a multiple regression analysis and determined using p-value. The acceptance/rejection criterion was that, if the p value was less than .05, H_{06} is rejected, but if it was more than .05, then H_{06} is not rejected. Government policies, was a positive and significant moderating variable for leadership style .000<.05, legal framework .000<.05, work environment .000<.05, available resources .015<.05 and work load .001<.05. The null hypothesis was therefore rejected adopted the alternative

hypothesis that there was a significant moderating relationship between government policies on relationship between antecedents and OSH among police officers in Kenya.

Table 4.50: Summary of Hypotheses

Objective No	Objective	Research Hypothesis	Rule	p-value	Comment
Objective 1	To determine on how leadership style affected the occupational, safety and health of police officers.	H_{01}: There is no significant relationship between leadership style and occupational, safety and health of police officers in Kenya	Reject H_{01}if p-value <.05 t-statistics>1.96	p<.05	The null hypothesis was rejected; therefore, There is a significant relationship between leadership style and Occupational, Safety and Health of police officers in Kenya.
Objective 2	To analyze how a legal framework affected the occupational, safety and health of police officers.	H_{02}: There is no significant relationship between legal framework and occupational, safety and health of police officers in Kenya	Reject H_{02} if p-value <.05 t-statistics>1.96	p<.05	The null hypothesis was rejected; therefore, there is a significant relationship between legal framework and Occupational, Safety and Health of police officers in Kenya.
Objective 3	To evaluate how the nature of work environment affected the occupational, safety and health of police officers.	H_{03}: There is no significant relationship between work environment and occupational, safety and health of police officers in Kenya	Reject H_{03} if p-value <.05 t-statistics>1.96	p<.05	The null hypothesis was rejected; therefore, there is a significant relationship between work environment and Occupational, Safety and Health of police officers in Kenya.
Objective 4	To establish how the available resources affected the	H_{04}: There is a significant relationship between available	Reject H_{04} if p-value <.05 t-	p<.05	The null hypothesis was rejected; therefore, there is a significant relationship between available resources and Occupational, Safety and Health of police

Objective No	Objective	Research Hypothesis	Rule	p-value	Comment
	occupational, safety and health of Police Officers.	resources and occupational, safety and health of police officers in Kenya	statistics>1.96		officers in Kenya.
Objective 5	To find out how the amount of work load influenced the occupational, safety and health of police officers.	H_{05}: There is no significant relationship between workload and occupational, safety and health of police officers in Kenya	Reject H_{05} if p-value <.05 t-statistics>1.96	p<.05	The null hypothesis was rejected; therefore, there is a significant relationship between work load and Occupational, Safety and Health of police officers in Kenya.
Objective 6	To determine on the moderating effect of governmment policies, practices and procedures on the relationship between antecedents and occupational, safety and health of police officers	H_{06}: There is no significant moderating effect of government policies, practices, procedures on the relationship between antecedents and occupational, safety and health among police officers in Kenya.	Reject H_{06} if p-value <.05 t-statistics>1.96	p<.05	The null hypothesis was rejected; therefore, there is a significant moderating effect of government policies, practices, procedures on the relationship between antecedents and occupational, safety and health among police officers in Kenya.

Objective No	Objective	Research Hypothesis	Rule	p-value	Comment

4.8.4 Moderated Multiple Regression Analysis

The study computed the moderated model to test the sixth research hypothesis. The sixth objective of the study had sought out on the moderating effect of government policies, practices and procedures on the antecedents of occupational safety and health of police officers. All the independent variables were moderated by the variable government policies, practices, and procedures to give a composite variables.

Model Summary for Moderated Regression Analysis

The results in Table 4.51 show the goodness of fit for the moderating effect of government policies, practices, and procedures. The R squared was used to check how well the model fitted the data after moderation. The results show that the R squared after moderation by government policies, practices, and procedures was .903 that was higher than the non-moderated effect that had its R square being .828. This means that government policies, practices and procedures moderates the relationship between leadership style, legal framework, nature of work environment, available resources and workload and occupational safety and health of police officers and explain 90.3% of the variations in occupational safety and health of police officers in Kenya.

Table 4.51: Model Summary for Moderated Regression Analysis

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.950[a]	.903	.900	.21810

a. Predictors: (Constant), Workload*Government Policies, Available Resources* Government Policies, Legal Framework* Government Policies, Work Environment*Government Policies, Leadership Style*Government Policies

Analysis of Variance for Moderated Regression Analysis

The results presented in Table 4.52 show the analysis of variance (ANOVA) results on the moderating effect of government policies, practices and procedures. The results in Table 4.52 confirm that the regression model of moderating effect of government

policies, practices and procedures on the effects of the antecedents on occupational safety and health of police officers in Kenya index is significant and supported by (F=269.770, p<.000) since p-values was .000 that is less than .05. The results affirm the importance of government policies, practices and procedures in occupational safety and health of police officers in Kenya.

Table 4.52: ANOVA for Moderated Regression Analysis

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	64.164	5	12.833	269.770	.000[b]
	Residual	6.898	145	.048		
	Total	71.062	150			

a. Dependent Variable: Occupational, safety, and health

b. Predictors: (Constant), Workload*Government Policies, Available Resources* Government Policies, Legal Framework* Government Policies, Work Environment*Government Policies, Leadership Style*Government Policies

Coefficients for the Moderated Regression Analysis

The results in Table 4.53 show the regression coefficients after moderation using government policies, practices, and procedures. Based on the results in Table 4.53, leadership style was significant after moderation with P value .000<.05. This implies that government policies, practices and procedures moderate the relationship between the leadership style and occupational safety and health of police officers in Kenya. The results also show that legal framework was significant after moderation with P-value .000<.05. This implies that government policies, practices and procedures moderate the relationship between the legal framework and occupational safety and health of police officers in Kenya.

The results further show that work environment was significant after moderation with P-value .000<.05. This implies that government policies, practices, and procedures moderate the relationship between the work environment and occupational safety and health of police officers in Kenya. The results in addition show that the available

resources was significant after moderation with P-value .015<.05. This implies that government policies, practices and procedures moderate the relationship between the available resources and occupational safety and health of police officers in Kenya. Finally, the results show that workload was significant after moderation with P-value .001<.05. In addition to this the value of R squared increased from .828 before moderation to .903 after moderation. This implies that government policies, practices, and procedures moderate the relationship between the workload and occupational safety and health of police officers in Kenya. Therefore, rejected the null hypothesis H_{06} and conclude that there is significant moderating relationship between government policies, practices, procedures on the relationship between antecedents and occupational safety and health among police officers in Kenya. The combined model effect is given as:

$Y = 1.452+.055X_1*M+.047X_2*M+.038X_3*M+.026X_4*M -.016X_5*M$

Table 4.53: Coefficients for Moderated Regression Analysis

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.452	.067		21.533	.000
	Leadership Style*Government Policies	.055	.012	.326	4.607	.000
	Legal Framework*Government Policies	.047	.009	.290	5.238	.000
	Work Environment*Government Policies	.038	.010	.229	3.816	.000
	Available Resources*Government Policies	.026	.011	.158	2.459	.015
	Workload*Government Policies	-.016	.005	-.086	-3.315	.001

a. Dependent Variable: Occupational, safety, and health

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter contains a summary of the major findings of this study, as well as conclusions and recommendations for practice, policy, and future research. The study sought and established a link between the independent and dependent variables. The latter was concerned with occupational safety and health. Leadership style, legal framework, workload, work environment, and resources were all independent variables.

5.2 Summary of Major Findings

The summary of findings was presented on each specific objective of the study. The specific objectives of the study were to: Determine on how a leadership style affected the occupational safety and health of police officers, analyze how a legal framework affected the occupational safety and health of police officers, evaluate how the nature of work environment affected the occupational safety and health of police officers, establish how the available resources affected the occupational safety and health of police officers, find out how the amount of workload influenced the occupational safety and health of police officers and determine on the moderating effects of government policies, practices, and procedures on the antecedents of occupational safety and health of police officers.

5.2.1 Leadership Style and Occupational Safety and Health

The first independent variable in the study was leadership style. The study sought to ascertain how a leadership style affects police officers' occupational safety and health. The results of the correlation analysis revealed a strong positive and significant relationship between leadership style and the occupational safety and health of police officers.

The regression analysis results indicated that there was a positive and a significant relationship between leadership style and occupational safety and health of police officers in Kenya. The findings indicated that, a unit change in leadership style results into an improvement in occupational safety and health of police officers in Kenya. The findings of the study also indicated that transformational, democratic, and charismatic leadership styles positively and significantly influences occupational safety and health of police officers in Kenya respectively. It also indicated that autocratic leadership style negatively and significantly influences occupational safety and health of police officers in Kenya.

5.2.2 Legal Framework and Occupational Safety and Health

Legal Framework was the second independent variable of the study. The study sought to analyze on how a given legal framework can affect the occupational safety and health of police officers. The correlation analysis results revealed that there was a strong positive and significant relationship between legal framework and occupational safety and health of police officers. In addition, the regression analysis results of the study showed that there was a positive and significant relationship between legal framework and occupational safety and health of police officers in Kenya. The findings of the study indicated that a unit change in legal framework results into an improvement in occupational safety and health of police officers in Kenya.

5.2.3 Work Environment and Occupational Safety and Health

Nature of work environment was the third independent variable of the study. The study sought to evaluate how the nature of work environment affects the occupational safety and health of police officers. The correlation analysis results established that there was a strong positive and a significant relationship between work environment and occupational safety and health of police officers. Further, the regression analysis findings of the study revealed that there was a positive and a significant relationship between nature of work environment and occupational safety and health of police

officers in Kenya. The findings revealed that a unit change in nature of work environment results into an improvement in occupational safety and health of police officers in Kenya.

5.2.4 Available Resources and Occupational Safety and Health

The available resources was the fourth independent variable of the study. The study had sought to establish how the available resources affect the occupational safety and health of police officers. The correlation analysis results revealed that there was a strong positive and significant relationship between the available resources and occupational safety and health of police officers. In addition, the regression analysis findings of the study revealed that there was a positive and a significant relationship between the available resources and occupational safety and health of police officers in Kenya. The findings indicated that, a unit change in the available resources results into an improvement in occupational safety and health of police officers in Kenya.

5.2.5 Workload and Occupational Safety and Health

A workload was the fifth independent variable of the study. The study had sought to determine if the amount of workload influences the occupational safety and health of police officers. The findings of the correlation analysis revealed that there was a negative and significant relationship between workload and occupational safety and health of police officers. In addition, the regression analysis results indicated that there was a negative and a significant relationship between workload and occupational safety and health of police officers in Kenya. The findings pointed out that a unit change in the workload to the police officers results in a negative change in occupational safety and health of police officers in Kenya.

5.2.6 Moderating Effect of Government Policies, Practices and Procedures

The sixth objective of the study was to find out the moderating effect of government policies, practices and procedures on the antecedents of occupational safety and health of police officers. The R squared after moderation by government policies, practices and procedures was higher than the non-moderated effect. This meant that government policies, practices and procedures moderated the relationship between leadership style, legal framework, nature of work environment, available resources and workload and occupational safety and health of police officers. In addition the results indicated that, leadership style was significant after moderation. This implies that government policies, practices and procedures moderate the relationship between the leadership style and occupational safety and health of police officers in Kenya. The results also show that legal framework was significant after moderation. This implies that government policies, practices and procedures moderate the relationship between the legal framework and occupational safety and health of police officers in Kenya.

The results further showed that work environment was significant after moderation. This implies that government policies, practices and procedures moderate the relationship between the work environment and occupational safety and health of police officers in Kenya. The results in addition show that available resources were significant after moderation. This implies that government policies, practices and procedures moderate the relationship between the available resources and occupational safety and health of police officers in Kenya. Finally, the results show that workload was significant after moderation. This implies that government policies, practices and procedures moderate the relationship between the workload and occupational safety and health of police officers in Kenya.

5.3 Conclusion

5.3.1 Leadership Style

The first independent variable in the study was leadership style. The study sought to determine how leadership style affects police officers' occupational safety and health. Based on the findings, the study concludes that the four leadership style indicators, namely transformational leadership style, autocratic leadership style, democratic leadership style, and charismatic leadership style, each have a positive and significant influence on the occupational safety and health of Kenyan police officers. According to the findings, transformational leadership style is the most effective form of leadership style, followed by democratic leadership style, charismatic leadership style, and finally autocratic leadership style, which influence the occupational safety and health of police officers in Kenya.

In general, leadership style is positively and significantly related to the occupational safety and health of Kenyan police officers. Finally, the study concludes that an improvement in police officers' leadership styles leads to an improvement in their occupational safety and health.

5.3.2 Legal Framework

The study's second independent variable was the legal framework. The study sought to analyze how a legal framework can affect police officers' occupational safety and health. Based on these findings, the study concludes that a legal framework has a positive and significant impact on the occupational safety and health of Kenyan police officers. An improvement in the legal framework results in an improvement in the occupational safety and health of police officers. The study also concludes that in order for police officers to be satisfied in their jobs, feel safe while performing their duties, and be in good enough health to do their jobs effectively, the Kenya Police Service's legal framework must be improved.

5.3.3 Work Environment

The third independent variable in the study was the nature of the work environment. The study sought to evaluate how the nature of the work environment affects the occupational safety and health of police officers. According to these findings, the majority of Kenyan police officers are unsure about the state of the environment in which they work. Furthermore, the study concludes that the nature of the work environment has a positive and significant influence on the occupational safety and health of Kenyan police officers.

5.3.4 Available Resources

The fourth independent variable in the study was the available resources. The study sought to establish how available resources affect police officers' occupational safety and health. Based on the descriptive statistics findings, the study concludes that the majority of Kenyan police officers are satisfied with the resources provided by the government to carry out their duties. Furthermore, the study concludes that available resources have a positive and significant impact on the occupational safety and health of police officers. This was confirmed by one of the station's OCS, who argued that their station was in good condition and that the officer was willing to be detained in their cells if the law was broken by that officer. Considering it was a security issue, the officers could not possibly admit that they lacked enough resources.

5.3.5 Workload

Workload was the study's fifth independent variable. The study sought to determine whether the amount of workload affects police officers' occupational safety and health. According to the findings, the amount of workload has a significant and negative impact on the occupational safety and health of Kenyan police officers. The study also concludes that police officers in Kenya perform complex duties that cause psychological stress, strains, and trauma that can lead to suicide or the killing of others. The study

concludes, however, based on the findings that the ratio of police officers to the Kenyan population is less than international standards of 1:450, causing police officers themselves to be overworked, leading to job-related injuries and stress.

5.3.6 Government Policies, Practices, and Procedures

The study's sixth goal was to determine the moderating effect of government policies, practices, and procedures on the antecedents of occupational safety and health issues among police officers. The study concludes, based on the findings, that the government policies, practices, and procedures have a moderating effect on the relationship between leadership style, legal framework, nature of work environment, available resources, and workload on the occupational safety and health of Kenyan police officers. Furthermore, the study concludes that police officers in Kenya are promoted based on government policies, practices, and procedures and only if they possess the necessary qualifications. Finally, the study concludes that police officers in Kenya are frequently underpaid because the government disregards their welfare and rights.

5.4 Recommendations

5.4.1 Managerial Recommendation

The study makes a number of recommendations based on its findings and conclusions. The study makes the following recommendations to the Kenya Police Service in the Ministry of Security, Interior and Coordination: They should strive to provide the best leadership that can have a positive impact on the occupational safety and health of police officers. According to the study, department heads in the police service should strive to put in place clear legal frameworks that can ensure that police officers feel fulfilled while performing their duties. Commanders should not autocratically direct how their junior officers do things or carry out their responsibilities.

The findings revealed a positive and significant relationship between the nature of the work environment and the occupational safety and health of Kenyan police officers. As a result, the study recommends that the top leadership of the National Police Service's various departments create an enabling environment for police officers to perform their duties. The police should also be availed an environment needed to do their jobs effectively. The study also recommends that OCPDs and police commandants should always ensure that more police officers are deployed in areas considered to be hotspots in criminal activity.

The study found that the availability of resources has a positive and significant impact on the occupational safety and health of Kenyan police officers. As a result, the study recommends that police officers be provided with the equipment they need to carry out their day-to-day duties of providing security and maintaining law and order for Kenyans among others. They should also be provided with communication equipment such as walkie-talkies and ICT/phones because they have been shown to make police officers feel safer while performing their duties. To ensure their safety, police officers should be provided with an adequate supply of firearms and ammunition at all times while on patrol. The study also suggests that police officers be given armored high-speed vehicles to help combat crime and banditry attacks in the country. This is especially common in Nairobi and banditry prone areas of North Eastern and Rift Valley.

The findings also revealed a negative and significant relationship between workload and the occupational safety and health of Kenyan police officers. As a result, the study recommends that the police should be assigned enough duties to keep them from feeling stressed. Police chiefs should ensure that officers work all shifts so that no officer ever feels overworked especially junior ones who are normally assigned afternoon and night shifts. Shifts should be evenly distributed to both young and old officers.

5.4.2 Policy Recommendation

Based on the study's findings, it is recommended that efforts be made to ensure that Kenya's police receive the best leadership and that police officers are inspired to do their jobs diligently. Policymakers must develop policies, procedures, and practices to ensure that there is a proper legal framework to guide how police officers perform their duties in a way that does not violate their rights. The study also suggests that the government's legislative arm draft legislation to ensure that police officers in Kenya work in an environment free of intimidation from their superiors, where they are not attacked by the public, and where they can carry out their duties effectively.

The study found that available resources have a positive and significant impact on the occupational safety and health of Kenyan police officers. As a result, the study recommends to policymakers that they enact laws that will ensure that police officers receive adequate funding in the national budget to enable them to carry out their duties. Furthermore, the Kenyan government, through the Ministry of Interior and National Coordination, should ensure that police officers are well accommodated by providing them adequate housing allowances to enable them to live in good conditions with their families. Finally, the study suggests that policymakers develop clear structures on how police officers' duties should be assigned so that no officer feels oppressed or overworked.

5.5 Areas for Further Studies

The study looked into the factors that influence the occupational safety and health of Kenyan police officers. The study also looked at the moderating effect of government policies, practices, and procedures on the antecedents of police officers' occupational safety and health. The research looked at the effects of leadership style, legal framework, work environment, available resources, and workload on the occupational safety and health of Kenyan police officers, specifically in Nairobi County. As a result, it is suggested that another study be conducted on the state of mental health of police

officers. This has emerged as a new issue. The study could also be conducted in sectors that are not necessarily concerned with the occupational safety and health of police officers, such as the government, private companies, and the media. The study found that the value of R square was .828, suggesting that 82.8% variation in occupational safety and health of police officers in Kenya can be explained by changes in leadership style, legal framework, work environment, available resources and workload. The remaining 17.2% suggests that there are other factors that can be used to explain variation in occupational safety and health of police officers that were not discussed in this study. The study thus recommends that future researchers try to find out the other factors that may be responsible for the remaining 17.2%.

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APPENDICES

Appendix I: Police Officers Injured 2014, 2015, 2018 to 2021

No.	Region	Police Officers Injured 2014	Percent (%)	Police Officers Injured 2015	Percent (%)	Police Officers Injured 2018	Percent (%)	Police Officers Injured 2019	Percent (%)	Police Officers Injured 2020	Percent (%)	Police Officers Injured 2021	Percent (%)	
1	Central	9	11.7							122	11.6	94	12.5	
2	North Eastern	2	2.6							87	8.3	92	12.2	
3	Nairobi	16	20.8							194	18.4	90	11.97	
4	Coast	13	16.9							69	6.6	49	6.5	
5	Nyanza	4	5.2							145	13.8	99	13.2	
6	Western	10	13							88	8.4	64	8.5	
7	Eastern	3	3.9							171	16.3	91	12.1	
8	Rift Valley	20	26							176	16.7	173	23.0	
Total		**77**	**100**	**102***	**100**	**536***	**100**	**608***	**100**	**1052**	**100**	**752**	**100**	**3,127**

Source: National Police Service Website

*Total given but details of injured police officers not provided per region.

Appendix II: Police Officers Killed Per Region from 2014 TO 2021

No.	Region	Police Officers Killed 2014	Police Officers Killed 2015	Police Officers Killed 2016	Police Officers Killed 2017	Police Officers Killed 2018	Police Officers Killed 2019	Police Officers Killed 2020	Police Officers Killed 2021	**Grand Total**
1	Central	1	*	6	3	3	3	7	10	
2	North Eastern	2	*	6	17	14	16	4	4	
3	Nairobi	7	*	8	10	11	6	11	23	
4	Coast	3	*	9	16	8	5	5	5	
5	Nyanza	0	*	2	2	3	3	11	9	
6	Western	0	*	3	2	6	4	8	6	
7	Eastern	0	*	6	8	8	9	10	16	
8	Rift Valley	34	*	30	18	12	16	28	31	
Total		**47**	**28***	**70**	**78**	**65**	**62**	**84**	**104**	**538**

Source: National Police Service, Website.

*The number of police officers killed per region was not given. It was reported that killings of police officers dropped in 2015 as compared to 2014.

Appendix III: Letter of Introduction to Respondents

The Jomo Kenyatta University of Agriculture and Technology,

Central Business District (CBD) Campus,

Department of Entrepreneurship and Procurement,

College of Human Resources Management,

P.O Box 62,000-0200,

Nairobi.

2nd February 2018.

To: Whom It May Concern

Dear Sir/Madam,

RE: ACADEMIC RESEARCH

I am a PhD student in the above esteemed institution of higher learning. I plan to do a research as a requirement for my studies. The research study to be carried out is entitled: Antecedents of Occupational, safety, and health among the Police Officers in Nairobi City County, Kenya. The study will only be for academic purposes. There shall be no mention of names for the persons interviewed at all times unless with their consent. A copy of the findings shall be availed to you on request. Your assistance towards this task is highly appreciated. Thanks and kind regards

Solomon Kelwon,

Academic Researcher.

(Email: scckelwon@yahoo.com)

Appendix IV: Questionnaire

Kindly mark the correct answer as per your opinion or view for the following questions.

SECTION A: DEMOGRAPHIC DATA

Kindly tick (√) in the blank spaces given below:

DD.1. Indicate your gender. Tick the correct one (√)

Female (01) ……..…… ☐

Male (02) ……. ☐

Other (03) ……. ☐

DD.2. What is your highest level of education? Tick the correct one (√)

Didn't attend school (01) ……..… ☐

Primary level (02) ……..... ☐

Secondary level (03) ……..... ☐

Diploma level (04) ……... ☐

Bachelor's Degree (05) …… ☐

Master's Degree (06) ……..... ☐

PhD Degree (07) …….. ☐

DD.3. What is the rank of your job? Tick the correct one (√)

Constable (01) ……... ☐

Corporal (02) ……. ☐

Sergeant (03) ……. ☐

Senior Sergeant (04) ……. ☐

Inspector (05) ……... ☐

Chief Inspector (06) ……. ☐

Assistant Superintendent (07) ….....☐

Superintendent (08) ……. ☐

Senior Superintendent (09) ……. ☐

Assistant I.G. (10) ……... ☐

Senior Assistant I.G. (11) ……. ☐

Other (write) (12) _____

DD.4. Kindly tick (√) the police department that you belong.

General Service Unit (GSU) ……..☐

Kenya Police College (KPC) …….☐

Traffic Police Department (TPD) ……..☐

Presidential Escort Unit (PEU) ……..☐

Kenya Police Dog Unit (KPDU) …….☐

Kenya Airports Police Unit (KAPU) …….☐

Kenya Railways Police Unit (KRPU) ……☐

Kenya Tourist Police Unit …….☐

Diplomatic Police Unit ……..☐

Maritime Police Unit …….☐

National Disaster Management Unit (NDMU).

DD.5. What is your age group? Tick the correct one (√)

18 to 25 years (01) ……..…….. ☐

26 to 33 years (02) …… ☐

34 to 41 years (03) …… ☐

42 to 49 years (04) …… ☐

50 to 57 years (05) …… ☐

58 years and above (06) ……... ☐

DD.6. For how long have you worked in the National Police Service? Tick the correct one (√)

Under 1 year (01)……... ☐

1 to 5 years (02) …… ☐

6 to 10 years (03) ……. ☐

11 to 15 years (04) …….. ☐

16 to 20 years (05) …….. ☐

Above 21 years (06) …… ☐

DD.7. State (tick√) the level of your police facility.

Police Station (01) ☐ Police Post (02) ☐ Police Base (03) ☐ Police Unit/formation (04) ☐

DD.8. Police Officers during working hours spend a lot of their time using mobile phones in social media or surf the internet and yet not safe. Give one reason that such a lifestyle can expose them by affecting their occupational, safety, and health.

_____

_____

_____

DD.9. (i) What is the name of your Police Station/Post or Base?

_____

(ii) What is the name of the Sub-County that your police facility is located in Nairobi?

_____

DD.10. What is your marital status? Tick the correct one (√)

Married (01) …… ☐

Single (02) ……... ☐

Divorced, Widowed, or Separated (03) …..... ☐

INSTRUCTIONS: The following are rating scales to be used in sections B to D.

Strongly Disagree = SD = 01; Very Unsafe = VU = 01**; Very Dissatisfied = VD = 01;**

Disagree= DA = 02;	Unsafe = US = 02**;**	**Dissatisfied = DS = 02;**
Undecided = U = 03;	Neutral = N = 03**;**	**Undecided = U = 03;**
Agree = AG = 04;	Safe = SE = 04**;**	**Satisfied = ST = 04;**
Strongly Agree = SAG = 05;	Very Safe = VSE = 05**;**	**Very Satisfied = VST = 05;**
Very Insecure=VI=01;	Never=NR=01;	**Very Poor=VP=01**
Insecure=IN=02;	Seldom=SM=02;	**Poor=PR=02**
Neutral=N=03;	Sometimes=S=03;	**Acceptable=A=03**
Secure=SC=04;	Often=OF=04;	**Good=GD=04**
Very Secure=VSC;	Almost Always=AAS=05;	**Very Good=VGD=05**

SECTION B: INDEPENDENT VARIABLES

LS. 11 Leadership Style of Police Officers of your rank in relation to your Occupational,	**Strongly Disagree**	**Disagree**	**Undecided**	**Agree**	**Strongly Agree**

safety, and health (OSH)/ (Likert scale).					
Kindly rate and (tick√) each statement according to the level you agree or disagree.	**SD=01**	**DA = 02**	**U = 03**	**AG = 04**	**SAG=05**
1. My commander is visionary, deserves trust and respect	**Transformational**				
2. My commander inspires, motivates and promotes a good model.					

3. My commander dictates on how to do things or perform duties.	**Autocratic**				
4. My commander coerces or literary forces things to be done.					

5. My commander allows others to participate in decision making.	**Democratic**				
6. My commander gives others the freedom of expression.					

7. My commander sets eyes on targets to be achieved.	**Charismatic**				
8. My commander takes advantage of his/her personality and the way to do things.					

9. In your opinion indicate or write down only one leadership style of your OCPD or Officer Commanding Station (OCS)? _____

10. List only one of the ways in that your commander's leadership style as indicated in no. 9 above influences either positively or negatively your Occupational Safety and Health as a Police Officer of your rank.

_____

LF. 12 Legal Framework for Police Officers of your rank in relation to your occupational, safety, and health (OSH)/Likert scale.	**Very Poor**	**Poor**	**Acceptable**	**Good**	**Very Good**
Kindly rate and (tick√) each statement according to the level of performance in supporting/protecting your OSH.	**VP=01**	**PR = 02**	**A = 03**	**GD=04**	**VGD=05**
1. How helpful is the new constitution that established Kenya Police and Administration Police with one command in protecting or supporting your OSH?	**Constitution & Codes of Conduct**				
2. How helpful is the Codes of Conduct in smooth running of operations and protecting or supporting your OSH?					
3. How helpful through NPSC, does IPOA as it manages or monitors Police activities like recruitment, qualifications & appointment in protecting or supporting your OSH?	**IPOA, NPSC, KNHR Acts**				
4. How helpful does KNHR Act in promoting very well the rights of Police Officers at all times & protecting or supporting your OSH?					
5. How helpful does the NPS Act in lifting the moral of Police Officers and protecting or supporting your OSH?	**National Police Service (NPS)/OSHA Acts**				
6. How helpful is the Occupational Safety Health Act (OSHA) of Kenya in protecting or supporting your OSH?					

7. How helpful is the Public Officer Ethics Act	**Public Officer Ethics Act, Emerging Issues**

that promotes doing a professional job with integrity and in protecting or supporting your OSH?					
8. How helpful has our laws effectively handled issues like Terrorism, sexual offences, Cyber Crimes & in protecting or supporting your OSH?					

9. In your opinion indicate only one of the Kenyan Acts/laws that protect or supports your occupational, safety, and health as a police officer of your rank.

_____

10. List only one of the ways in that the Kenyan Act/law you indicated in no. 9 above influences either positively or negatively your Occupational, safety, and health as a Police Officer of your rank.

_____

WE. 13. Work Environment for police officers of your rank in relation to your occupational, safety, and health (OSH)/Likert scale.	**Very Unsafe**	**Unsafe**	**Neutral**	**Safe**	**Very Safe**
Kindly rate (tick√) each statement according to how you feel on your level of safety.	**VU=01**	**US=02**	**N=03**	**SE=04**	**VSE=05**
1. As I work/perform my duties or do patrols in Nairobi County, I am aware about my level of safety (**at work**) to be …….	**Work Safety**				
2. After I have left a day's work or duties in Nairobi County and at home, I am aware about my level of safety (**after work)** to be …….					
3. I am exposed to risks at work during political rallies in Nairobi County (**at work**) and feel …..	**Work Risks**				
4. I am also exposed to risks after work during political rallies in Nairobi County (**after work**)					

and feel ……					

5. I am stressed **at work** by my colleagues or family members and feel ……..	**State of your Health at Work**				
6. I am stressed **after work** by my family members and feel …….					

7. As I work, perform my duties or do patrol in Nairobi County I am aware about my level of security (**at work**) to be …….	**Work Security**				
8. After I have left a day's work or duties in Nairobi County and at home, I am aware of my level of security (**after work**) to be ……..					

9. In your opinion indicate or write down only one state of your work environment that fully protects or supports your Occupational, safety, and health as a Police Officer of your rank.

_____

10. List down only one of the ways that the workload you indicated in no. 9 above influences either positively or negatively your Occupational, safety, and health as a Police Officer of your rank.

_____

RS. 14. Resources for police officers of your rank in relation to your occupational, safety, and health (OSH)/Likert scale.	**Very Dissatisfied**	**Dissatisfied**	**Undecided**	**Satisfied**	**Very Satisfied**
Kindly rate and (tick√) each statement according to your level of satisfaction or	**VD=01**	**DS = 02**	**N = 03**	**ST=04**	**VST=05**

dissatisfaction.					
1. The quantity of available government equipment for my work like fire arms or ammunition makes me feel …….	**Arms, Ammunition and ICT Equipment**				
2. The quantity and quality of available government communication equipment for my work like walk talkie, ICT/phones make me feel……...					

3. The available government equipment for my work like stationeries (books, pens) make me feel ……..	**Stationeries, Uniforms, Boots, and Caps**				
4. The provision of enough protective equipment for my work like uniforms, boots, and caps make me feel ……					
5. The available government equipment for my work like batons, belts, and whistles make me feel …….	**Batons, Belts, Whistle, Office Block**				
6. The available government resources for my work like office blocks make me feel ……					

7. The available government resources that bring comfort like house of residence or accommodation makes me feel ……	**House of Residence, Vehicles, Motorbikes**				
8. The available & the condition of government equipment for my work like armored vehicles, and motorbikes make me feel …….					

9. In your opinion indicate or write down only one of the government resources that fully supports your Occupational, safety, and health as a Police Officer of your rank.

_____

_____

10. List down one of the ways that the government resource you indicated in no. 9 above either positively or negatively influences your occupational, safety, and health as a Police Officer of your rank. _____

WL. 15. Workload for police officers of your rank in relation to your occupational, safety, and health (OSH)/Likert scale.	**Strongly Disagree**	**Disagree**	**Undecided**	**Agree**	**Strongly Agree**
Kindly rate and (tick√) each statement according to the level you agree or disagree.	**SD=01**	**DA=02**	**N=03**	**AG=04**	**SAG=05**
1. My duties are too heavy, too much to handle and is extremely exhaustive.	**Work Burnout**				
2. My workload alone is too heavy to carry or perform causing me burnout.					

3. My work tasks are not shared even in adverse working conditions and expose me to injuries, dangers, anxiety, and depression.	**Number of Shared Tasks**				
4. My work involves performing complex duties that cause psychological stress, strains and traumas that can lead me to suicide or kill others.					

5. My work involves spending more than 8 hours in a day.	**Number of Hours Worked**				

6. My night shift duties or extra hours worked leads me to lack sleep during the day.					
7. My duties or tasks that I perform do overwhelm me.	**Ration of Police Officers and Population**				
8. The ratio of Police Officers to the Kenyan population is below international standards of 1:450.					

9. In your opinion indicate or write down only one of the workloads that fully support or protect your occupational, safety, and health as a police officer of your rank.

_____

_____

10. List down only one of the ways in that the workload indicated in no. 9 above either positively or negatively influences your Occupational, safety, and health as a Police Officer of your rank.

_____

SECTION C: MODERATING VARIABLE

GP. 16. Government Policies, Practices & Procedures for Police Officers of your rank in relation to your occupational, safety, and health (OSH) & leadership/Legal/work Environment or Load/Resources (Likert scale).	**Never**	**Seldom**	**Sometimes**	**Often**	**Almost Always**
Kindly rate and (tick√) each statement according to the level of frequency that happens.	**NR=01**	**SM=02**	**S=03**	**OF=04**	**AAS=05**
1. Government Policies, Practices & Procedures help me to efficiently handle emergency situations.	**Efficiency in Handling Emergencies**				

2. Government Policies, Practices & Procedures are not implemented by authorities and are not useful to me during emergency situations.					

3. When I have the qualifications I will then be promoted based on government policies, practices and procedures.	**Qualifications and Promotions**				
4. I will not smoothly rise through the ranks until retirement because of corruption.					

5. I will at all times be compensated in case of injuries or accidents at work.	**Efficiency in Compensation**				
6. I will not be well compensated because my welfare and rights are normally ignored.					

7. New laws, policies, practices, procedures and visions lead to new lifestyles.	**Rate of New Laws, Policies and Visions**				
8. When new laws, policies, practices, procedures and visions are developed, they will not help all stakeholders.					

9. In your opinion indicate or write down only one of the government policies, practices and procedures that fully protects or supports your Occupational, safety, and health as a Police Officer of your rank.

_____

10. List down only one of the ways in that the government policy, practice and procedure indicated in no. 9 above either positively or negatively influences your occupational safety and health as a police officer of your rank.

SECTION D: DEPENDABLE VARIABLE

OS. 17. Occupational, safety, and health (OSH) for Police Officers of your rank and effects of leader styles, legal framework, resources and workload/environment/Likert scale.	**Very Insecure**	**Insecure**	**Neutral**	**Secure**	**Very Secure**
Kindly rate and (tick√) each statement according to your level of security or insecurity.	**VI=01**	**IN=02**	**N=03**	**SC = 04**	**VSC=05**
1. I am faced with a high level of distress during work hours or after work and I feel ……	**Level of Job Distress**				
2. I am satisfied with my work, happy with it and I feel……..					

3. As officers we are faced with a frequent number of fatal accidents or injuries at work that makes me feel ……...	**Number of Fatal Accidents and Injuries**				
4. I am always performing my duties in police stations/place of work or do patrols and I feel …….					
5. I am frequently sick or in poor health as caused by the nature of my work that makes me feel ……..	**Frequency of Sick offs/Attend Clinics**				
6. I am frequently on sick offs to attend clinics for my treatment, under medication and I feel ……..					

7. I have a number of shifts that are manageable and there is no cause for alarm for I feel ……..	**Number of Shifts/Change of Shift Times**				
8. I am having a demanding work and the times of shifts are not rotated that make me to be frequently tired leading to absenteeism and I feel …….					

9. In your opinion indicate or write down only one of the Occupational, safety, and health Items that fully supports your job performance or work as a Police Officer of your rank.

_____

10. List down only one of the ways the item of occupational, safety, and Health indicated in no. 9 above either positively or negatively influences your job performance or work as a police officer of your rank.

_____

SECTION E: TRAINING OF POLICE OFFICERS ON ACTS AND LAWS OF KENYA

LT. 18. Kindly confirm if you have received any training or orientation on the following Kenyan legal frameworks Acts or Laws in relation to your job in the last 12 months or earlier.

Kindly rate and (tick√) in each Act according to how you have been trained.

Rate using the scale 01, 02, 03, 04 or 05 as shown below.

No.	Your training and knowledge on Acts	Very Poor	Below Average	Average	Above Average	Excellent
	Kindly rate (tick√) your level of training/knowledge on each Act	VP=01	BA=02	A=03	AA=04	EXC=05
1.	The Constitution of Kenya					
2.	Codes of Conduct					

3.	**Independent Policing Oversight Act (IPOA)**					
4.	**National Police Service Act (NPSA)**					
5.	**National Police Service Commission Act (NPSCA)**					
6.	**Occupational Safety Health Act (OSHA)**					
7.	**Public Officer Ethics Act (POEA)**					
8.	**Issues emerging like terrorism, cybercrimes, sexual offences**					

SECTION F: SECONDARY DATA (For: OCPD/OCS/Commander Only)

SD.19. Are you OCPD/OCS/Commander of your Police Station/Base?

Yes (01) ☐ No (02) ☐

SD.20. If your answer in number SD. 19 above is Yes, kindly give an approximate total number of Kenya police officers in your police station/post/base this month. _____

SD.21. If you are in charge of a police station as you indicated in number SD.19 above, kindly provide an approximate number of Police Officers involved in fatal or non-fatal accidents or diseases in the following years that are related to work. Fatal work-related accidents or diseases are those that led to death. These should not include those officers who die out of unrelated sickness or age.

-A- YEAR	**-B- Number of Accidents that led to absenteeism from work for more than 4 days (01)**	**-C- (DEATHS) Number of Fatal Accidents related to work (02)**	**-D- (DEATHS) Number of Fatal Diseases related to work (03)**	**(ALL DEATHS) E=C+D Total number of Fatal Accidents & Diseases related to work (04)**
2013				
2014				
2015				
2016				
2017				
2018				

SECTION G: SAFETY/SECURITY

SD.22. As a police officer, kindly mention or list any of the occupational, safety, and health hazards or dangers you are exposed at work.

(i). Occupational
Hazards_____

(ii). Safety Hazards
_____

(iii). Health Hazards _____

(iv). List any danger you might face when your residence or accommodation is outside your police station living with civilians.
_____

SD.23. Do a comparison of the causes of insecurity and rank them. Each cause is given a number (position) that should not be repeated. They are in a scale of ranking (position) 1, 2, 3, 4, 5, 6, 7, 8, 9, and 10. The highest cause is 1 and lowest is 10.

Causes of Insecurity in Kenya	Ranking Causes of Insecurity in Kenya
	Ranking (position) from highest 1, 2,3,4,5,6,7,8,9, to Lowest cause 10
Conflicts among Communities or Tribes	
Political Activities	
Illegal Immigrants	
Radicalized Youth	
Cattle Rustling	
Terrorism	
Proliferation of Small Arms & Light Weapons	
Illicit Brews	
Drug Trafficking	
Smuggling Illegal Goods	

SD.24. Do a comparison of the causes of Police Officers killed or deaths in Nairobi County. Each cause of death is given a number (position) that should not be repeated. They are in a scale of 1, 2, 3, 4, 5, 6, 7, 8, 9, and 10. The highest cause of death is 1 and lowest is 10.

Causes of Police Officers **Killed in Nairobi County**	**Ranking** **Causes of Police Deaths**
	Ranking (position) from Highest cause 1, 2,3,4,5,6,7,8,9 to Lowest 10
Cattle Rustling/Bandits	
Political Activities	
Commit Suicide	
Shot/Killed by other Police Officers	
Road Accidents	
Terrorists	
Robbers Kill Police While Helping Victims robbed	
Police Killed as They Help in Fire Rescues missions	
Diseases Caused by Nature of Job or Police Work	

Appendix V: Research Request Letter to Deputy Inspector General of Police

The Jomo Kenyatta University of Agriculture and Technology.

Nairobi CBD Campus.

Entrepreneurship & Procurement Department,

P.O Box 62000-0200

Nairobi

KENYA POLICE HE...
RECEIVED
03 APR 2018
P.O Box 30083 - 00100, ...

25[th] March 2018,

The Deputy Inspector General,

Kenya Police Service,

P.O. Box 30083,

Nairobi.

Dear Sir/Madam,

RE: ACADEMIC RESEARCH

I am a PhD candidate in the above esteemed institution of learning. My area of doing research is in Human Resources Management. Please find my attached letter from department chair. I intend to present a research proposal in April 2018. The research study we intend to do is entitled: "*Antecedents of Occupational Safety and Health among the Police Officers in Nairobi City County, Kenya.*" The study will be for academic purposes only. There shall be no mention of any names of officers or employees at all times.

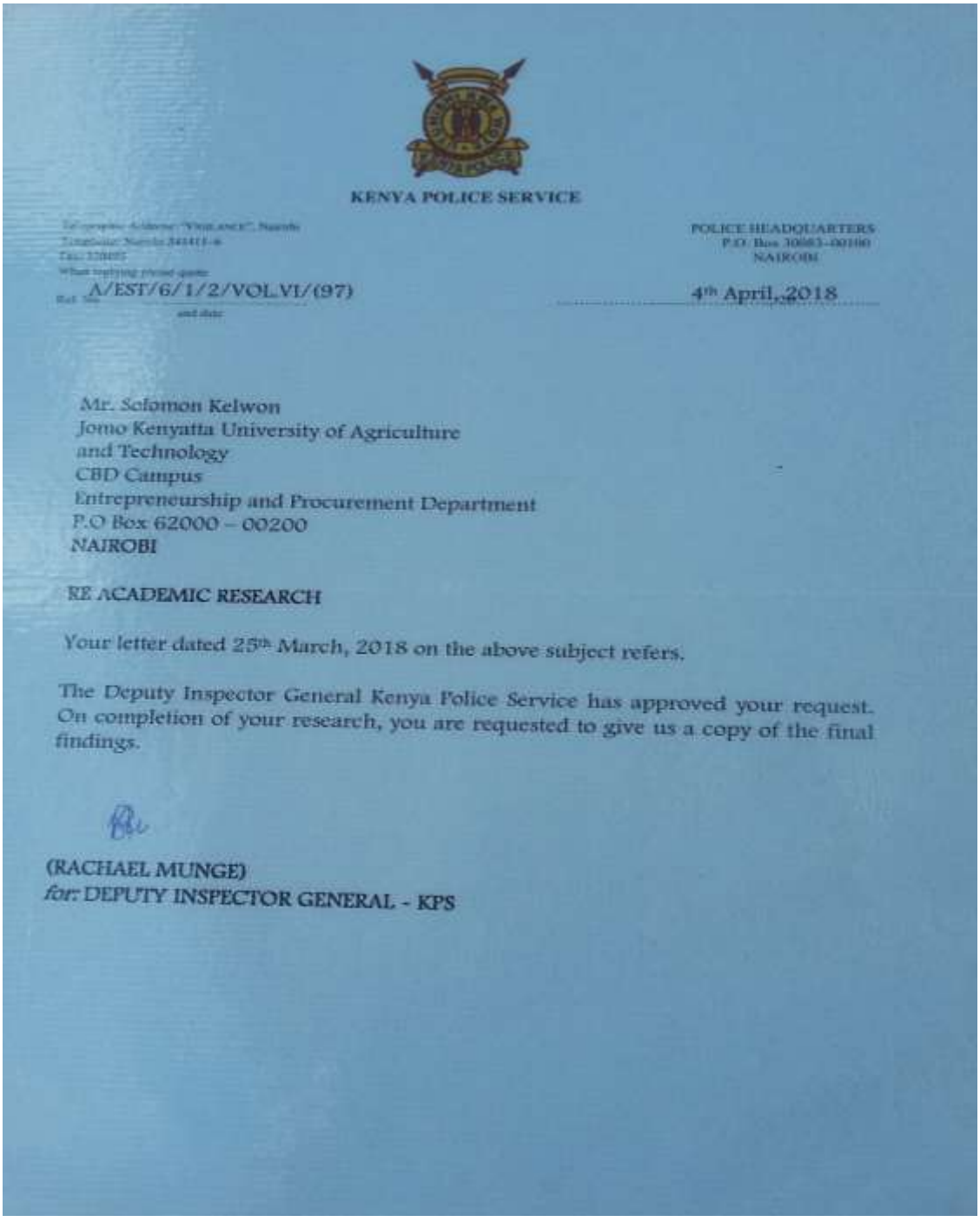
We hereby request your esteemed office to guide and allow us to do the research. A copy of the final research findings shall be availed to you on request.

Your assistance and approval towards this task is highly appreciated. Thanks and kind regards

Solomon Kelwon

Student.

Appendix VI: Research Approval Letter by Deputy Inspector General of Police (DIG)



KENYA POLICE SERVICE

POLICE HEADQUARTERS
P.O. Box 30083-00100
NAIROBI

Ref. No. A/EST/6/1/2/VOL.VI/(97)

4th April, 2018

Mr. Solomon Kelwon
Jomo Kenyatta University of Agriculture
and Technology
CBD Campus
Entrepreneurship and Procurement Department
P.O Box 62000 – 00200
NAIROBI

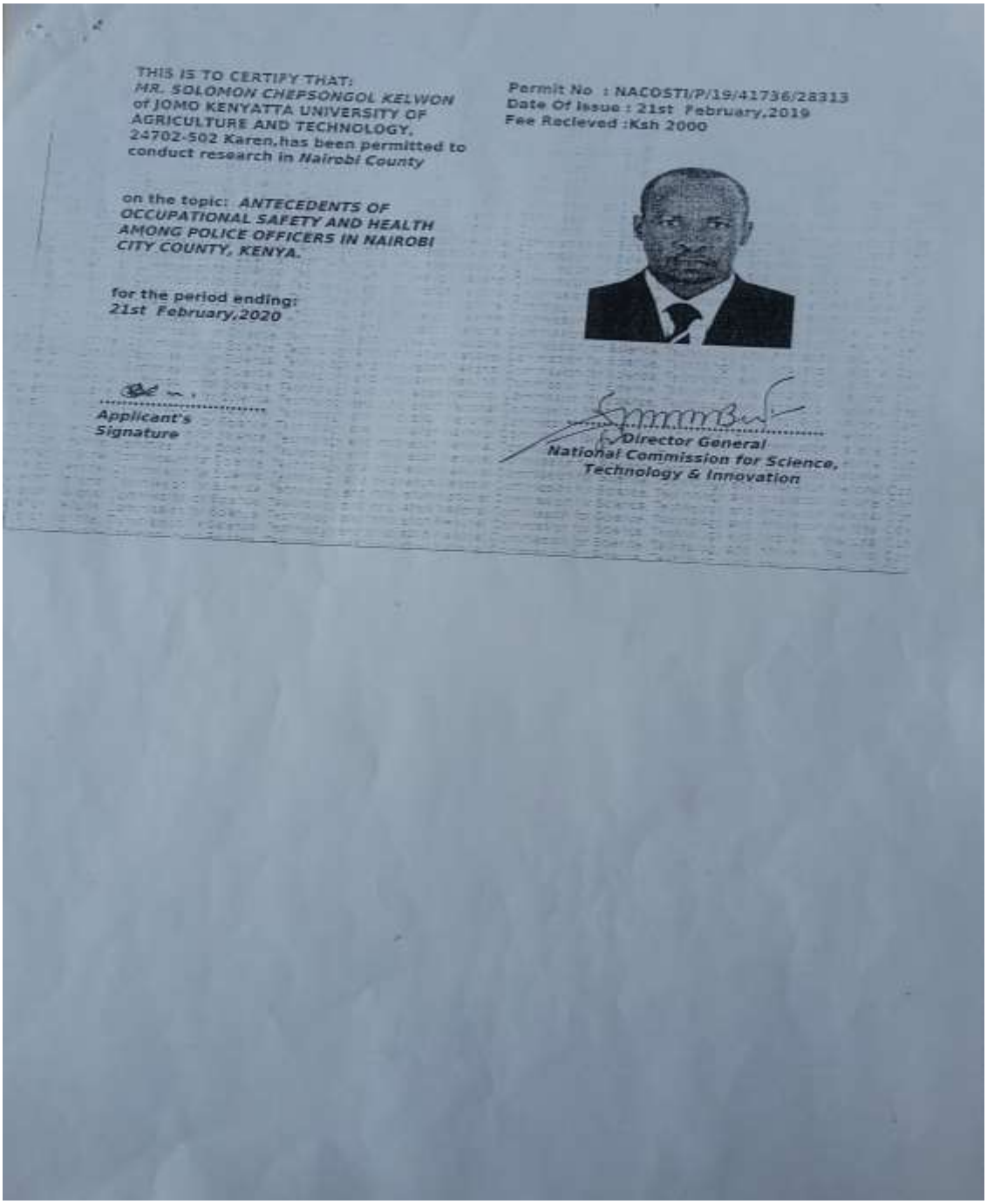
RE ACADEMIC RESEARCH

Your letter dated 25th March, 2018 on the above subject refers.

The Deputy Inspector General Kenya Police Service has approved your request. On completion of your research, you are requested to give us a copy of the final findings.

(RACHAEL MUNGE)
for: DEPUTY INSPECTOR GENERAL - KPS

Appendix VII: NACOSTI Research Permit (NACOSTI/P/19/41736/28313)



THIS IS TO CERTIFY THAT:
MR. SOLOMON CHEPSONGOL KELWON
of JOMO KENYATTA UNIVERSITY OF AGRICULTURE AND TECHNOLOGY, 24702-502 Karen,has been permitted to conduct research in *Nairobi County*

on the topic: *ANTECEDENTS OF OCCUPATIONAL SAFETY AND HEALTH AMONG POLICE OFFICERS IN NAIROBI CITY COUNTY, KENYA.*

for the period ending:
21st February,2020

Applicant's Signature

Permit No : NACOSTI/P/19/41736/28313
Date Of Issue : 21st February,2019
Fee Recieved :Ksh 2000

Director General
National Commission for Science, Technology & Innovation

Appendix VIII: NACOSTI Authorization Letter and Approval by the County Commissioner of Nairobi

NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY AND INNOVATION

Telephone: +254-20-2213471, 2241349,3310571,2219420
Fax: +254-20-318243,318249
Email: dg@nacosti.go.ke
Website : www.nacosti.go.ke
When replying please quote

NACOSTI, Upper Kabete
Off Waiyaki Way
P.O. Box 30623-00100
NAIROBI-KENYA

Ref No. **NACOSTI/P/19/41736/28313**

Date: **22nd February, 2019**

Solomon Chepsongol Kelwon
Jomo Kenyatta University of Agriculture and Technology
62000-00200
NAIROBI.

RE: RESEARCH AUTHORIZATION

Following your application for authority to carry out research on ***"Antecedents of Occupational Safety and Health among Police Officers in Nairobi City County, Kenya."*** I am pleased to inform you that you have been authorized to undertake research in **Nairobi County** for the period ending **21st February, 2020.**

You are advised to report to **the County Commissioner and the County Director of Education, Nairobi County** before embarking on the research project.

Kindly note that, as an applicant who has been licensed under the Science, Technology and Innovation Act, 2013 to conduct research in Kenya, you shall deposit **a copy** of the final research report to the Commission within **one year** of completion. The soft copy of the same should be submitted through the Online Research Information System.

BONIFACE WANYAMA
FOR: DIRECTOR-GENERAL/CEO

Copy to:

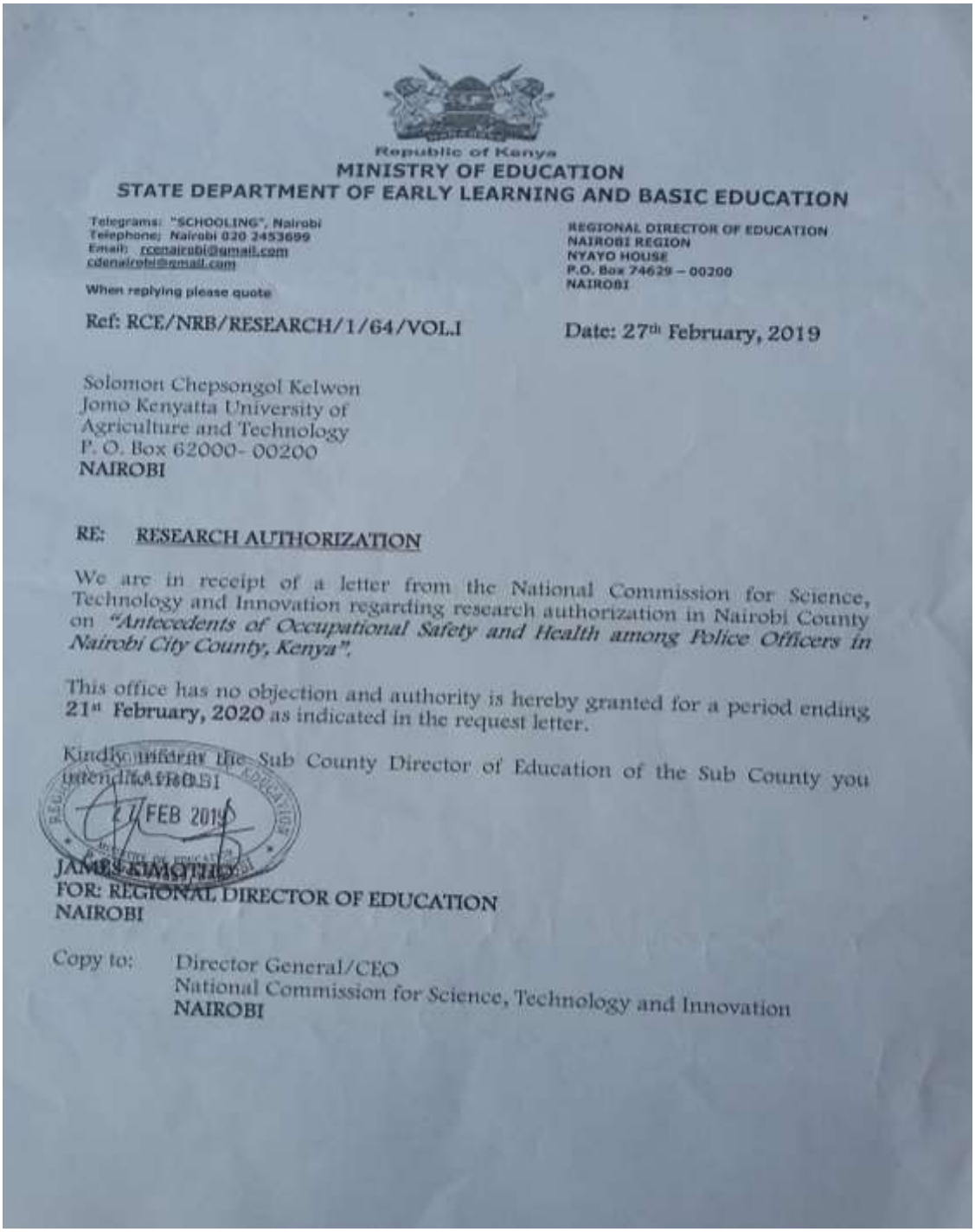
The County Commissioner
Nairobi County.

27/02/2019

COUNTY COMMISSIONER
NAIROBI COUNTY
P. O. Box 30124-00100, NBI.

The County Director of Education
Nairobi County.

Appendix IX: Ministry of Education Authorization Letter



Republic of Kenya

MINISTRY OF EDUCATION

STATE DEPARTMENT OF EARLY LEARNING AND BASIC EDUCATION

Telegrams: "SCHOOLING", Nairobi
Telephone: Nairobi 020 2453699
Email: rcenairobi@gmail.com
cdenairobi@gmail.com

When replying please quote

REGIONAL DIRECTOR OF EDUCATION
NAIROBI REGION
NYAYO HOUSE
P.O. Box 74629 – 00200
NAIROBI

Ref: RCE/NRB/RESEARCH/1/64/VOL.I

Date: 27th February, 2019

Solomon Chepsongol Kelwon
Jomo Kenyatta University of
Agriculture and Technology
P. O. Box 62000- 00200
NAIROBI

RE: RESEARCH AUTHORIZATION

We are in receipt of a letter from the National Commission for Science, Technology and Innovation regarding research authorization in Nairobi County on *"Antecedents of Occupational Safety and Health among Police Officers in Nairobi City County, Kenya"*.

This office has no objection and authority is hereby granted for a period ending 21st **February, 2020** as indicated in the request letter.

Kindly inform the Sub County Director of Education of the Sub County you intend to visit.

FEB 2019

JAMES KIMOTHO
FOR: REGIONAL DIRECTOR OF EDUCATION
NAIROBI

Copy to: Director General/CEO
National Commission for Science, Technology and Innovation
NAIROBI

Appendix X: Deputy Inspector General (DIG) of Police Letter to Regional Police Commander

KENYA POLICE SERVICE

Telegraphic Address: "Vigilance", Nairobi
Telephone: Nairobi 341411-6
Fax: 330005
When replying please quote

POLICE HEADQUARTERS
P.O. Box 30083-00100
NAIROBI

Ref. No. A/EST/6/1/2/VOL.2/(14) and date 8th April, 2019

Copy

Regional Police Commander
Nairobi Region
P.O Box 30051
NAIROBI

RE ACADEMIC RESEARCH - MR. SOLOMON KELWON

The Deputy Inspector General Kenya Police Service approved the request of the above mentioned to carry out research according to his request in his letter dated 25th March, 2018.

On completion of the research, he is hereby requested to give us a copy of the final findings.

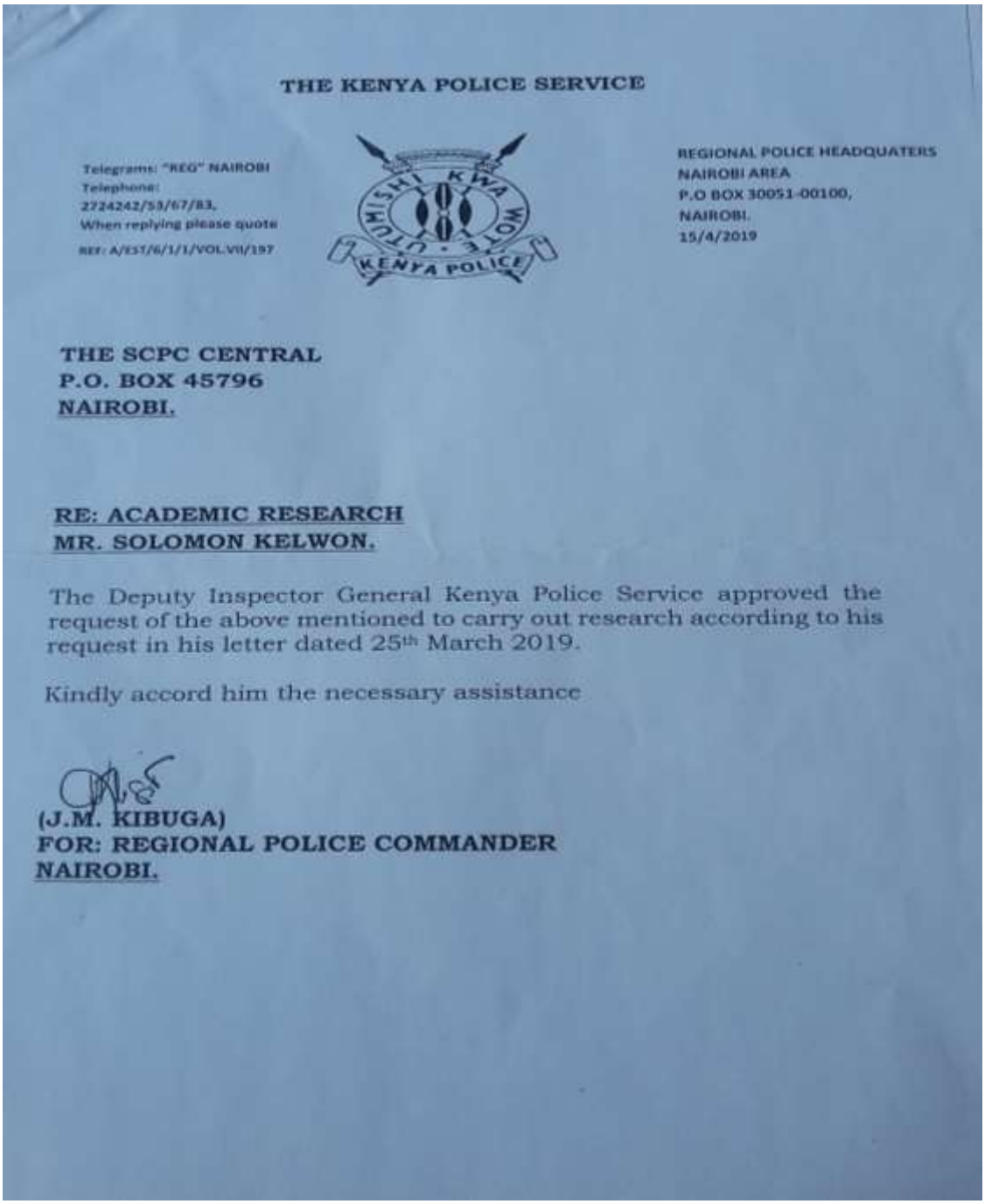
(DAVID BIRECH) psc (R)
***for:* DEPUTY INSPECTOR GENERAL – KPS**

cc

Mr. Solomon Kelwon
Jomo Kenyatta University of Agriculture
and Technology
CBD Campus
Entrepreneurship and Procurement Department
P.O Box 62000 – 00200
NAIROBI

(Please see the Regional Commander for assistance)

Appendix XI: Regional Police Commander Letter to Sub County Police Commander (SCPC)



THE KENYA POLICE SERVICE

Telegrams: "REG" NAIROBI
Telephone:
2724242/53/67/83,
When replying please quote
REF: A/EST/6/1/1/VOL.VII/197

KENYA POLICE

REGIONAL POLICE HEADQUATERS
NAIROBI AREA
P.O BOX 30051-00100,
NAIROBI.
15/4/2019

THE SCPC CENTRAL
P.O. BOX 45796
NAIROBI.

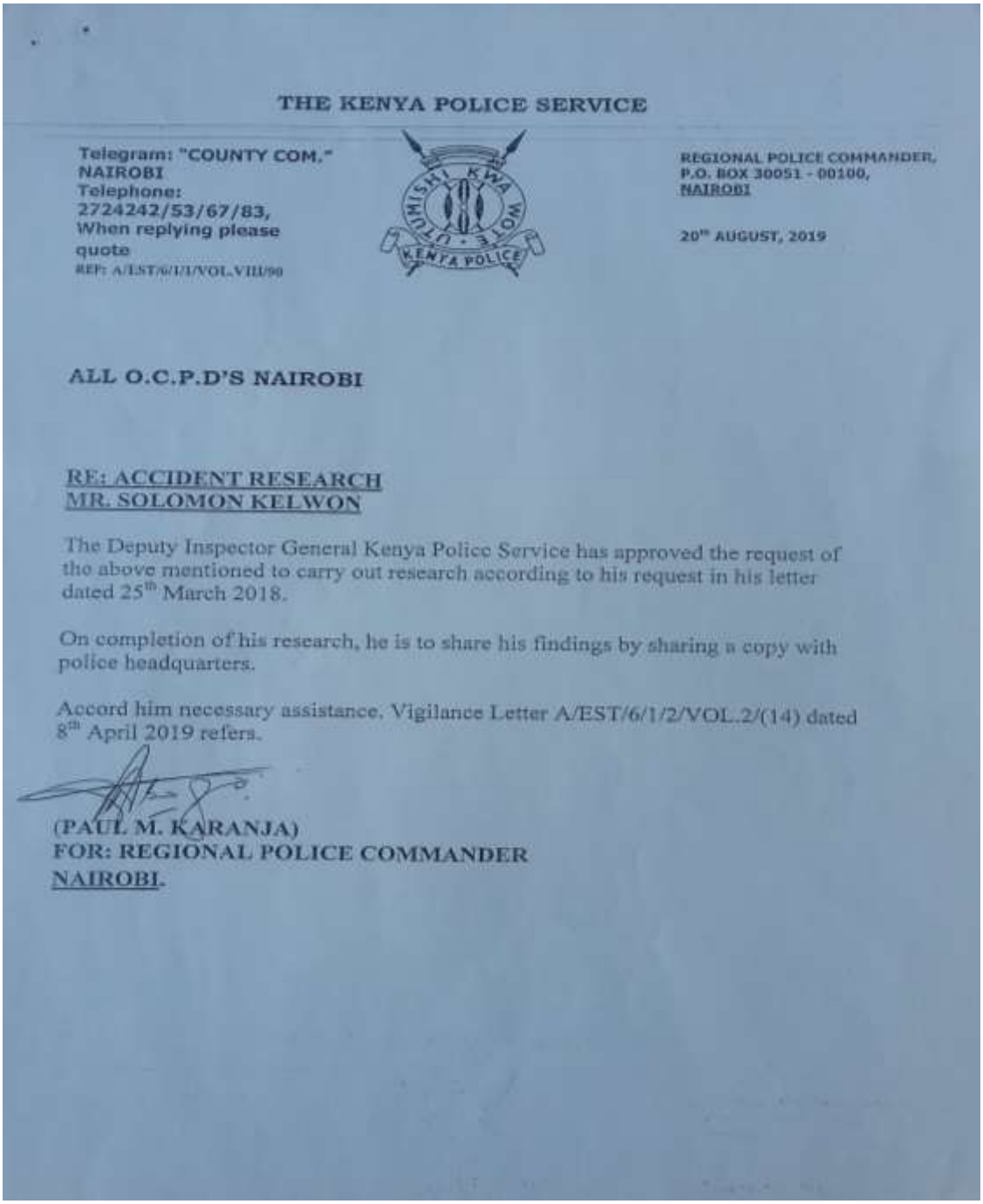
RE: ACADEMIC RESEARCH
MR. SOLOMON KELWON.

The Deputy Inspector General Kenya Police Service approved the request of the above mentioned to carry out research according to his request in his letter dated 25th March 2019.

Kindly accord him the necessary assistance

(J.M. KIBUGA)
FOR: REGIONAL POLICE COMMANDER
NAIROBI.

Appendix XII: Regional Police Commander Letter to Nairobi OCPD's



THE KENYA POLICE SERVICE

Telegram: "COUNTY COM," NAIROBI
Telephone: 2724242/53/67/83,
When replying please quote
REF: A/EST/6/1/1/VOL.VIII/90

REGIONAL POLICE COMMANDER,
P.O. BOX 30051 - 00100,
NAIROBI

20th AUGUST, 2019

ALL O.C.P.D'S NAIROBI

RE: ACCIDENT RESEARCH
MR. SOLOMON KELWON

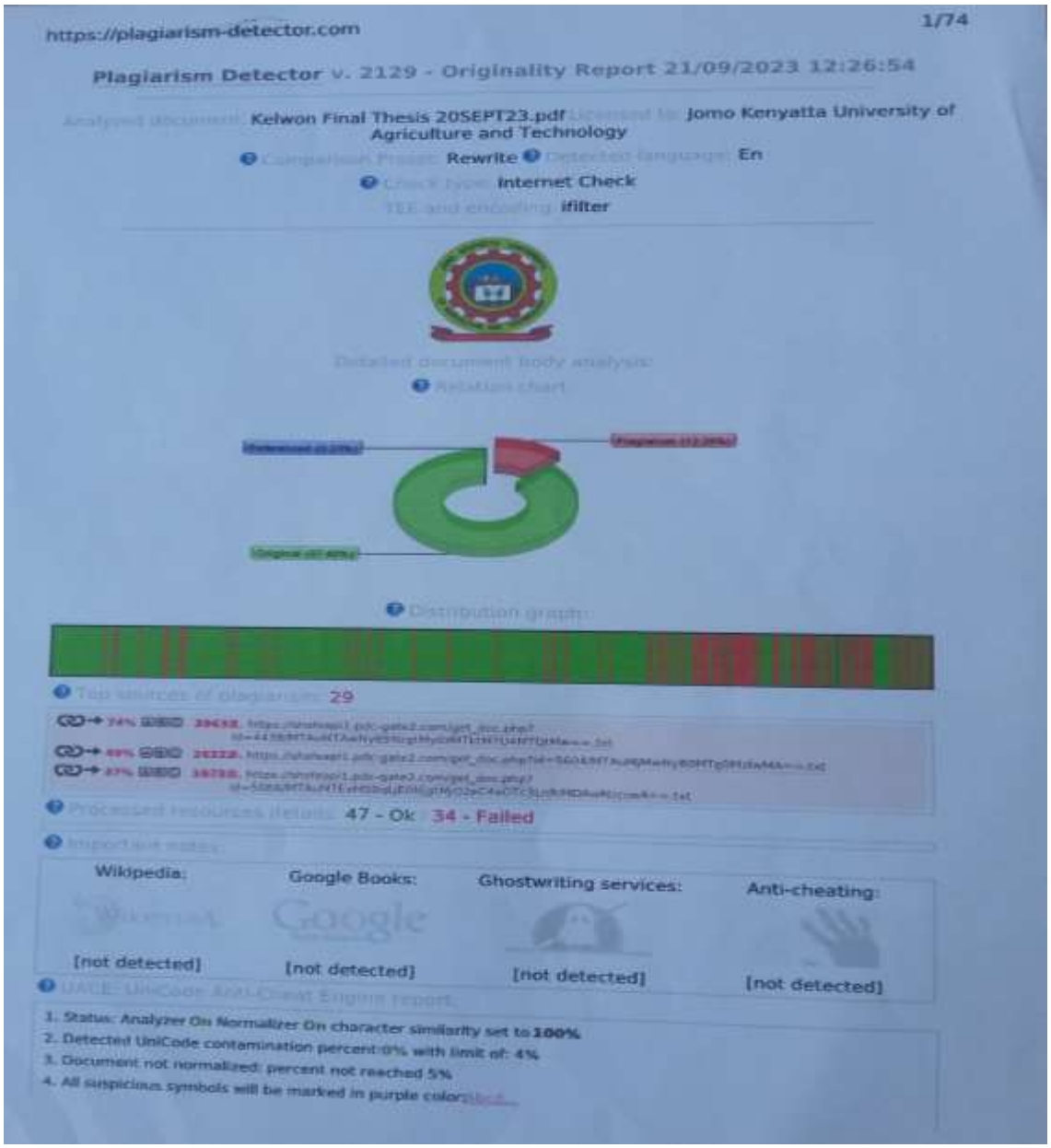
The Deputy Inspector General Kenya Police Service has approved the request of the above mentioned to carry out research according to his request in his letter dated 25th March 2018.

On completion of his research, he is to share his findings by sharing a copy with police headquarters.

Accord him necessary assistance. Vigilance Letter A/EST/6/1/2/VOL.2/(14) dated 8th April 2019 refers.

(PAUL M. KARANJA)
FOR: REGIONAL POLICE COMMANDER
NAIROBI.

Appendix XIII: Plagiarism Detector Originality Report of Thesis (87.48% Original), dated 20th September 2023



Note: Thesis' Originality is 87.48%; Plagiarism 12.29% & Referencing 0.23%