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## CRIMINAL PROFILING AND THE CHALLENGES OF CRIMINAL INVESTIGATION IN NIGERIA POLICE FORCE KOGI STATE COMMAND

By

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### ABSTRACT

The study examined criminal profiling and the challenges of criminal investigation in the Nigeria Police Force focusing on Kogi State Command. The specific objectives of the study included examining the mechanisms put in place to aid criminal profiling in the Nigerian criminal justice system, especially in Kogi State Police Command; an evaluation of the effectiveness of the mechanisms; identification of the challenges facing criminal profiling in the Nigerian criminal justice system, especially in Kogi State Police Command; and suggestions on how criminal profiling can be effective in the Nigerian criminal justice system. The Personality Theory of Criminal Behaviour was adopted as a choice of framework to buttress the study. A purposive sampling technique was adopted in which the study participants were purposively and systematically selected from the sample of 382 out of the total population of 9000 personnel of the Nigeria Police Force. To ensure that the research instruments were valid, a pre-test and proper scrutiny were conducted on every question in the questionnaire and the personal interview guides by five experts. The findings of the study revealed that the establishment of a police records management system, a forensic laboratory system where evidence from DNA sources is scientifically examined, and a central database for all Nigerians were the mechanisms put in place to aid criminal profiling in Nigeria. It was also discovered that criminal investigative analysis, behavioural evidence approach, and environmental psychology were approaches to profiling criminals. The study also established that the mechanisms and approaches used for criminal profiling in Nigeria were very relevant to the criminal justice system but appeared to be ineffective, resulting from inherent challenges such as bribery and corruption, computer illiteracy, lack of professionalism, inadequate funding and remuneration of police personnel and uncooperative attitudes of the members of the public, among others. It was recommended that professional psychologists should be recruited and form a separate department in the Nigerian Police Force; the police should be well funded and better remunerated to boost their morale and commitment to profiling, among others.

### KEYWORDS:

Crime, Criminal Profiling, Criminal Investigations, Nigeria Police Force, Kogi State.



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## Introduction

Criminal profiling involves determining an offender's personality qualities, behavioural patterns, locations, and demographic or biological features based on the elements of the crime (Edero, 2020). The concept of criminal profiling, according to the Federal Bureau of Investigations (FBI) of the United States, is a method for locating the perpetrator of a violent crime by determining the offender's personality and behavioural traits based on an examination of the crime that was committed (Federal Bureau of Investigation, 2008). A particular offender may be connected to several crimes, and the profile may be used to forecast the identified offender's future behaviour. However, since the late 1990s, research findings have been published to support its application to arson and later terrorism in the year 2000 and burglary in 2017. Prior to this, the majority of criminal profiling researchers, including Kocsis and Richard (2013), Alison (2011), and Ainsworth (2000), believed that criminal profiling was only relevant to sex-related crimes, such as serial rape or sexual homicide (Beauregard & Field, 2018 cited in Binti, 2022). Nigeria is one of the countries where criminal profiling is a relatively new enforcement method because it only began in the last two decades and is still a very contentious technique (Muhammad, 2022). Although the vast majority of people have no idea what it is or how it is done, it has nonetheless ingrained itself into the collective consciousness of people. This ignorance is equally as widespread among professionals as it is with the general population.

Despite the fact that criminal profiling is frequently used in investigations into serial crime and criminal behaviour, scholars almost universally agree that it lacks a scientific foundation and relies on subpar methodology. As a result, the reliability and usefulness of criminal profiling are seriously questioned, to the point where evidence cannot be utilised in court and grave injustices are brought about. Profilers are often portrayed as social outcasts who are very upset by how well they understand the minds of the unknown criminals they are looking for (Turvey, 2001). Criminal profiling is a topic that is not foreign to society. Numerous understudies are already hard at work right now as a result of criminal psychology's constant media appearances. It is now common to hear about murderers and criminals who murder, rape, or assault victims because they have certain characteristics in common with the victims or because of certain twisted motives or goals. This information can be found in the news, online, and even in a number of documentaries (Edero, 2020).

Based on their diverse backgrounds, different scholars have viewed criminal profiling in different ways. As a result, it has been given many different names, including criminal personality profiling, criminological profiling, behavioural profiling, criminal investigative analysis, offender profiling, psychological profiling, crime scene analysis, socio-psychological profiling, and linkage analysis (Labuschagne, 2006). Despite having various titles, these strategies all have the same objective, which is to assist detectives in using data from crime scenes and victim and witness narratives to create an offender description. Holmes (2000) in his own position opines that the main goal of profiling is to help find out criminals by extrapolating their personal characteristics from information about crimes.

It is not unexpected that the absence of forensic science and technological expertise as a tool for criminal profiling has not been addressed in the literature on Nigerian police concerns. A survey of the literature revealed that few studies had either a partial or complete focus on criminal profiling (forensic investigation) inside the Nigerian Police, despite the necessity for research on forensic technology. To the best of the researcher's knowledge, the majority of studies have focused on the need for police reforms rather than the necessity for criminal profiling and the obstacles to its efficacy. As a result, this study seeks to fill this gap in the literature and add to the body of knowledge. The establishment of a forensic laboratory and digital resource centre in Abuja by the

Nigerian Police Force in 2016; the facility, which includes technologies for identifying crime suspects through features like iris and facial recognition, potential identification marks, multiple and extended finger prints, among others, are intended to aid the activities of its criminal intelligence and investigation department. The Nigerian criminal justice system, in particular the Nigerian Police Force, is aware of the benefits and challenges of criminal profiling as a technique in criminal investigations. However, due to the inherent difficulties facing Kogi State police commands, criminal profiling in Nigeria, and notably in Kogi State, has not yet gained the degree of acceptance, usability, or institutionalisation that it has in other jurisdictions. Because of this, the focus of this study was on the Kogi State Police Command in Nigeria's criminal justice system to look at criminal profiling and the problems it faces.

### **Statement of Problem**

The Nigerian Police Force (NPF) is charged with the responsibility of maintaining law and order and internal security, especially as they affect protection of lives and property of the entire populace (Nte et al., 2019). But unfortunately, the effort of the police in criminal investigations and protecting lives and property has been quite inadequate, reasons not farfetched from scanty numbers of trained personnel to manage criminal profiling tools such as the bio-data databases of Nigerians, Automated Fingerprint Identification System (AFIS), Deoxyribonucleic Acid (DNA) databases or equipment, and inadequate modern technological infrastructure to investigating violent crimes like rape, assault, battery, terrorism, arson, domestic violence, gang violence, and kidnapping has invariably rendered criminal profiling ineffective in Nigerian Police Force (NPF) (Muhammad, 2022). The consequences of these are that many violent crimes are on the rise daily in our society with the perpetrators undetected and so the protection of people's lives and property as well as Nigeria's social stability are now in great doubt due to the country's recent spike in violent crimes. The most serious violent crimes, which have been on the rise lately, include cases of traditional crimes like armed robberies, arsons, murders, kidnappings, rape, hired assassinations, thuggery, and ritual killings, among others (Edero, 2020). These challenges have led to prosecution of innocent Nigerians while many criminals have escaped punishment because there was no forensic connection to the crimes to convict or exonerate them.

However, as Norswell (2014) cited in Nte et al. (2019) asserted, a developed and reliable database for criminal profiling will help in linking several crime scenes together, exonerate the innocent (prisons in Nigeria will be decongested for once because many in there might have been wrongly detained), identify potential serial offenders, unravelling clues from old cases, comprehensively closing the unsolved cases and identifying the unknown perpetrators from numerous cases of only victims and not suspects, among other relevance of criminal profiling in criminal investigation. The Nigerian Police have faced inherent problems for decades, which have repeatedly thwarted reform efforts. One of the biggest issues is poor forensic analysis, which is frequently brought on by a lack of the necessary tools. To avert the grave consequences of the above mentioned challenges, it needs to be fixed in order for the police to meet international standards like the Federal Bureau of Investigation (FBI) of the United States of America and other Western Nation sister agencies which have extensively used criminal profiling in their efforts to combat crime. However, the traditional eyewitness account and confession methods of criminal investigation used by Nigerian law enforcement agencies have been shown to be antiquated and out-of-date. In order to stop these sophisticated crimes, sophisticated tools like forensic science are required. This study makes the assertion that the most significant and pressing issue the Nigerian police are currently facing is their inability to conduct proper forensic investigations of criminal profiles whenever crimes occur. This is

because, in many cases, a lack of forensic investigation expertise has resulted in the wrong people being investigated based on false informants, bad snitches, shoddy evidence gathering, and false confessions or false admissions.

A critical review of previous research efforts on criminal investigations in Nigeria shows that much of the efforts of such researchers had focused on the use of non-scientific tools of criminal investigations such as eye witness testimony and statements of confessions etc. without any attention paid to the scientific approach of criminal profiling and the challenges hindering effective utilisation of criminal investigation especially in Kogi State Police Command. The foregoing, no doubt, leaves a yawning gap in research that needs to be closed. Hence, the need for this current study to bridge the gap in the body of knowledge. Olashile (2009) has also argued that the police records system not based on strong forensic evidence is largely inadequate as many criminals easily escape detection because names, faces, and other physical body attributes, phone numbers and at times addresses change every day. This situation has created a challenge in criminal investigation especially in Kogi State Police Command. In the light of the foregoing therefore, this study seeks to examine criminal profiling and the challenges of criminal investigation in Nigeria Police Force, Kogi State Command.

### **Research Questions**

This study sought to provide answers to the following research questions:

- i. What are the approaches to effective criminal profiling in Kogi State Command?
- ii. How effective are the approaches to criminal profiling in Kogi State Police Command?
- iii. What are the challenges to effective criminal profiling in Kogi State Police Command?

### **Aim and Objectives of the Study**

The aim of this study was to examine criminal profiling and its challenges in the Nigerian criminal justice system. However, the specific objectives include to:

- i. Identify the approaches to effective criminal profiling in Kogi State Police Command;
- ii. Examine the effectiveness of the approaches to criminal profiling in Kogi State Police Command; and to
- iii. Identify the challenges to effective criminal profiling in Kogi State Police Command.

### **Hypotheses of the Study**

In the course of this study, the following research hypotheses were formulated and tested:

#### **Hypothesis One**

H<sub>0</sub>: There is no significant relationship between improper records kept by NPF and effective criminal profiling in Kogi State Police Command.

H<sub>1</sub>: There is a significant relationship between improper records kept by NPF and effective criminal profiling in Kogi State Police Command.

#### **Hypothesis Two**

H<sub>0</sub>: The approaches adopted by Nigeria Police Force for criminal investigation have been effective in combating crime in Kogi State Command.

H<sub>1</sub>: The approaches adopted by Nigeria Police Force for criminal investigation have not been effective in combating crime in Kogi State Command.

#### **Hypothesis Three**

H<sub>0</sub>: Improper/poor identification systems do not negatively affect the effectiveness of Criminal Profiling in Kogi State Police Command.

H<sub>1</sub>: Improper/poor identification system do negatively affect the effectiveness of Criminal Profiling in Kogi State Police Command.

### **Scope of the Study**

This study attempted to examine criminal profiling and the challenges of criminal investigation in Nigerian Police Force, using Kogi State Police Command as a point of reference. The study covered the mechanisms put in place to aid criminal profiling in the Nigerian criminal justice system, the challenges facing the Nigerian criminal justice system and the effectiveness of criminal profiling exercise in the dispensation of justice through investigating and apprehending the right perpetrators of a particular criminal behaviour from suspects.

### **Significance of the Study**

The significance of this study lies in the following facts:

Firstly, profiling does not provide the specific identity, but rather, it indicates the kind of person most likely to have committed a crime by focusing on certain behavioural and personality characteristics in the crime scene. Therefore, this study brought to light the approaches or mechanisms put in place for effective criminal profiling exercise in Nigeria and Kogi State Police Command in particular.

Secondly, it is no longer news that the Nigerian criminal justice system faces some major setbacks, especially the Nigerian Police Force, in their investigation processes and inability to apprehend the right perpetrators of criminal acts and bring such offenders to justice. Hence, this study unraveled the major challenges hindering effective criminal profiling in the Nigerian criminal justice system and brought suggestions through recommendations on how profiling can be effective among personnel of the Nigeria Police Force.

Thirdly, the findings of this study, if properly examined and implemented by the Nigerian Police, can help to improve their performance in crime detection and apprehension. Finally, the study is a source of fundamental material for future researchers that will conduct research in this area, and thereby contributing to the body of knowledge.

### **Literature Review**

Literature were reviewed in accordance with the aim and objectives of this study and in line with the following sub-headings:

#### **Conceptual Reviews:**

##### **The Concept of Criminal Profiling**

Depending on their origins, different researchers have characterised criminal profiling in a variety of ways. Unfortunately, the term "criminal profiling" has occasionally come to mean different things. Part of the misunderstanding stems from the various terms that are frequently used interchangeably, such as "offender profiling," "psychological profiling," "criminal investigative analysis," "crime scene analysis," "behavioural profiling," "criminal personality profiling," "socio-psychological profiling," and "criminological profiling." However, in this study, the phrase "criminal profiling" is utilised. It is a forensic strategy that aims to give investigative authorities precise information that will assist them to concentrate their attention on people who exhibit personality features that are comparable to those of other offenders who have committed similar crimes (McCray & Ramsland, 2003). Criminal profiling also involves determining an offender's character traits, behavioural patterns, and demographics based on the details of the crime (Muller, 2000). It is also an attempt to give detectives more information about a serial killer who has not been caught yet (Harris, 1989).

For the sake of this research paper, we will define criminal profiling as a procedure that evaluates and interprets the behaviours and/or activities used in a crime to make predictions about the traits of the most likely perpetrators of the crime. A criminal profile is often called the composite expected features. It helps investigators, usually police officers, figure out who a criminal or criminals are and then arrest them.

### **Criminal Investigation**

Criminal investigation is an applied science that involves the study of facts, used to identify, locate and prove the guilt of an accused criminal. Criminal investigation is concerned with activities that violate the law of the state legal system that regards such violation as serious enough to necessitate the need for investigations. A complete criminal investigation can include searching, interviews, interrogations, evidence collection and preservation and various methods of investigation. Modern-day criminal investigations commonly employ many modern scientific techniques known collectively as forensic science (Sylvester & Agbeyi, 2019). Criminal investigation, according to these authors, refers to the process of collecting information (or evidence) about a crime in order to: Determine if a crime has been committed, identify the perpetrator, apprehend the perpetrator, and provide evidence to support a conviction in court.

### **Brief Overview of the Nigerian Police Force Kogi State Police Command**

The Kogi State Police Command was established immediately after the creation of Kogi State from parts of Kwara State and Benue State in 1991, with its capital situated in Lokoja, the state capital. It is one of the 37 police commands in Nigeria, including the Federal Capital Territory (FCT). It is also one of the 2 commands that made up the Zone 8 Command, which has its capital at Lokoja in Kogi State (i.e., Kogi and Kwara states). For operational purposes, the command is divided into ten (10) area commands and forty-four (44) divisions as shown in Table 1 below:

**Table 1: Showing Police Area Commands and Divisions in Kogi State Police Command**

<b>Lokoja Area Command</b>	<ol style="list-style-type: none"> <li>1. A' Division</li> <li>2. B' Division</li> <li>3. C' Division</li> <li>4. D' Division</li> <li>5. Obajana Division</li> </ol>
<b>Okene Area Command</b>	<ol style="list-style-type: none"> <li>1. Okene Division</li> <li>2. Akpafa Division</li> <li>3. Ogori/Magongo</li> <li>4. Adavi Division</li> </ol>
<b>Okehi Area Command</b>	<ol style="list-style-type: none"> <li>1. Okehi Division</li> <li>2. Osara Division</li> <li>3. Itakpe Division</li> </ol>
<b>Koto/Karfe Area Command</b>	<ol style="list-style-type: none"> <li>1. Koto/Karfe Division</li> <li>2. Chikara Division</li> <li>3. Gegu-Beki Division</li> </ol>
<b>Idah Area Command</b>	<ol style="list-style-type: none"> <li>1. Idah Division</li> <li>2. Ajaka Division</li> <li>3. Odolu Division</li> <li>4. Ofu Division</li> <li>5. Ibaji Division</li> <li>6. Akpanya Division</li> </ol>
<b>Anyigba Area Command</b>	<ol style="list-style-type: none"> <li>1. Abocho Division</li> </ol>

	<ol style="list-style-type: none"> <li>2. Dekina Division</li> <li>3. Bassa Division</li> <li>4. Egume Division</li> </ol>
<b>Ajaokuta Area Command</b>	<ol style="list-style-type: none"> <li>1. Ajaokuta Division</li> <li>2. Adogo Division</li> <li>3. Itobe Division</li> </ol>
<b>Ankpa Area Command</b>	<ol style="list-style-type: none"> <li>1. Ankpa Division</li> <li>2. Enjema Division</li> <li>3. Omala Division</li> <li>4. Kogi Okaba Division</li> <li>5. Kogi Olamaboro Division</li> </ol>
<b>Kogi Isanlu Area Command</b>	<ol style="list-style-type: none"> <li>1. Kogi Isanlu Divison</li> <li>2. Kogi Odo-Ere Divison</li> <li>3. Kogi Egbe Division</li> <li>4. Kogi Ife-Olukotu</li> </ol>
<b>Kogi Kabba Area Command</b>	<ol style="list-style-type: none"> <li>1. Kogi Kabba A Division</li> <li>2. Kogi Kabba 'B' Division</li> <li>3. Kogi Iyara Division</li> <li>4. Kogi Mopa Division</li> <li>5. Kogi Ayetoro Division</li> </ol>

**Source:** Desk of Police Public Relations Officer (PPRO) Kogi State Command

Similarly, 7 departments, each headed by an Assistant Commissioner of Police, were also formulated according to the information gathered from the office of the Police Commands Public Relations Officer. They include:

Administration (A dept.), Operation (B dept.), Works and Play (C dept.), Criminal Investigation and Intelligence (D dept.), Training (E dept.), Research and Planning (F dept.), and the newly formed Quick Response Units (QRUs) have taken the place of the former Special Anti-Robbery Squad (SARS). The command is headed by a Commissioner of Police and assisted by a Deputy Commissioner of Police (Nigeria Police Annual Report, 2021). The administrative structure with each department are charged with peculiar duties which are inter-woven but distinguishable.

### **Mechanisms put in place by the Nigeria Police Force (NPF) to help Criminal Profiling.**

The Nigerian government has established the following mechanisms to help in the process of conducting a potential criminal profiling effort to find those responsible for committing specific crimes and engaging in criminal behaviour:

#### **Forensic laboratory in Nigeria:**

The only forensic laboratories used by the Nigerian government are the new one, which the Lagos State Government recently inaugurated, and the two older ones, one in Abuja and one in Oshodi, Lagos. The Forensic Section is a professional/specialist arm of the Nigerian Police that provides support to investigators both inside and outside the Force, according to the Department of ICT, Nigeria Police Force (2020).

At the Force CIID Annex in Lagos, the Section's Forensic Laboratory is staffed by a Commissioner of Police for Forensics and eighteen other officers. Twenty-Nine (29) additional officers and a Commissioner of Police Forensic serve in the Abuja Head Office. The following units make up the Section, with most of them performing their duties in Lagos and a few in Abuja:

#### **Automated Fingerprint Identification System (AFIS) Unit:**

In Lagos, the CCR's manual records are converted to digital format by the AFIS unit for suspect enrolment and profiling. For the purpose of capturing suspects, the FCIID in Abuja has installed a biometric system. In accordance with the Inspector General Police's approval, six (6) Biometric systems were also deployed to the six geopolitical zones of Maiduguri, Kano, FCT, Awka, Lagos, and Port Harcourt. Additionally, the unit transports the fingerprints of nominees, appointees, and job- and visa-seekers to Lagos' Central Criminal Registry (CCR) so that they can be cleared and issued Character Certificates.

The section in charge of forensic examination and analysis of contested documents, forgery, handwriting, and signatures is known as the "Document Unit." Ten (10) employees are being trained by one of the retired specialists.

**The Ballistic Unit:**

This unit examines, analyzes, and compiles reports on the investigational firearms and ammunition.

**The Crime Scene Management Unit:**

This unit assists IPOs in processing a crime scene, gathering, preserving, and packaging exhibits for investigation, analysis, and reporting. This unit responds to requests from Sectional Heads, State CIIDs, Divisional Headquarters, and other security agencies. Including expressing an expert opinion on the manner in which a crime is committed.

The analysis and detection of chemical components in poison, contaminated goods, and gun powder are the topics covered in the chemistry/toxicology unit.

**The Serology/DNA unit:**

This unit analyzes suspected blood stains to determine whether they are real blood or human blood. Since 2010, it has educated and qualified 3 DNA Examiners.

All electronic devices with storage capabilities can be used for digital analysis with our Cellebrite UFED Machine. The machine has the ability to recover deleted contents from such devices, which can be useful in ongoing investigations in which the device is an exhibit. It has one officer who was certified by UNODC after receiving training in Kenya, two Cellebrite UFED machines that were donated to the NPF, one of which is located in the AFIS unit on the second floor of FHQ Abuja, and the other of which was deployed to Maiduguri by the certified officer, who also trained three additional officers to operate the machine, all of whom are now operational. When necessary, Certified Experts in each of these areas are readily available to provide expert testimony in court.

Criminal profiling appears to be ineffective in the Nigerian criminal justice system since these resources are not being fully utilized perhaps, due to lack of technological know-how among other inherent challenges.

**Software for the Police Records Management System (RMS):**

Police records management systems (RMS) allow law enforcement agencies to store, retrieve, maintain, archive, and examine data, records, or files related to law enforcement operations, according to Best Police Management System (2020). These tools automate essential tasks that improve daily operations.

Police RMS solutions oversee the creation of records from the time they are first generated to the point of completion. These solutions include standard documents like investigation reports, 911/CAD reports, booking and arrest reports, criminal identification, detention records, and citations and tickets. For law enforcement employee operations, these solutions might also offer capability for managing

personnel files and other administrative paperwork. These instruments are used by law enforcement personnel to record data that serves as proof of alleged or established criminal activity.

Strong police RMS tools may include fundamental elements for managing evidence, or they may integrate directly with specialized systems that do so. The effectiveness of investigating crimes is increased by the fact that many of these solutions support agency-to-agency data sharing to communicate multijurisdictional information on people, organizations, locations, and vehicle items. Police officers may now follow activities while on the move thanks to mobile record generation and storage offered by modern police RMS solutions. Additionally, it is typical for these tools to have access to car plate recognition, master person indices, and public national registries for sex offenders. They also typically feature a public portal where users may obtain crime-related data that is populated from databases.

The following requirements must be met for a product to be eligible for inclusion in the Police Records Management System category: It must permit law enforcement organizations to record important data and records related to incident reporting. Support storing a variety of records, such as citations, warrants, arrest reports, incident reports, and field interviews, among others.

### **The Nigerian Population's Central Database:**

A network's centralized database often stores data or information in a specific place. It enables the gathering and storage of data from current databases in a single database for sharing, analysis, and updating within an organization (Abubakar & Bashir, 2017). In order for criminal profiling to be successful in Nigeria, the amount of data that businesses and government institutions typically collect and maintain must be managed in a more effective and efficient manner. In Nigeria, organizations and government institutions now distribute data in a redundant and inconsistent manner on numerous levels. Numerous organizations, including the Federal Road Safety Corps (FRSC), the Nigerian Communication Commission (NCC), the National Identity Management Commission (NIMC), and banks, among others, gather essentially the same information from people (Abubakar & Bashir, 2017).

For instance, the NCC ordered all cell companies to gather subscriber information, including biometric information. Similar to this, the Central Bank of Nigeria (CBN) ordered all banks to comply with the Bank Verification Number (BVN) exercise so that client bank information, including their biometric, will be linked together and CBN may regulate customer bank accounts using unique number identification (i.e. BVN). In addition to providing licenses, FRSC also recorded driver information and biometrics during the exercise and stored them in their database. The Nigerian Immigration Service (NIS) also recorded the biometric information and data of citizens requesting an international passport. National Identity Numbers (NINs) and Cards are being issued to residents by NIMC as of late. Biometric information about the citizens is collected and kept in their database.

### **Effectiveness of Criminal Profiling in Nigerian Criminal Justice System Especially Nigeria Police Force Kogi State Command**

The usefulness and even the legitimacy of criminal profiling have been contested. Some detractors only contest the accuracy of criminal profiles. Others wonder if we ought to concentrate on the individuals (violent and sexual offenders) rather than the acts (violent and sexual offences). According to this theory, focusing on individuals fosters the problematic notion of "dangerous individuals." Research shows that Nigeria's top law enforcement and security agency, the Nigeria Police Force, doesn't have the most up-to-date technology in its forensic laboratory (Evelyn, 2021).

Criminal investigation is a significant issue for Nigerian policing as claimed by Evelyn (2021). The advancement of forensic technology has made the biggest contributions to criminal investigation. The Nigerian case is a failure, despite the fact that forensic investigation has successfully solved millions of crimes in developed nations like the U.S. and the UK. It is well known that the Nigerian police's centralized way of doing things gives the federal government a lot of power and may cause it to get involved in local affairs, which could mean there isn't enough money for forensic technology equipment for investigations.

### **Challenges to the Effectiveness of Criminal Profiling in the Criminal Justice System - Nigeria Police Force**

Profiling violent crimes presents a variety of difficulties for law enforcement agencies, particularly the Nigeria Police Force. These difficulties range from technical to structural, and occasionally they relate to the ability of the individual enforcers to process crucial information. Therefore, it is essential to comprehend these obstacles in order to develop workable solutions when such difficulties arise. The following are what they are:

#### **Insufficient funding**

The main barriers that have historically prevented spending on preventing crime from being channeled into building up criminal justice systems are a lack of money and inadequate funding (Adewusi, 1990). According to the United Nations Department of Public Information, money is still urgently needed for future research despite investment in community and situation prevention rising over the previous two decades and subjects like child development beginning to draw greater focus (UNDPI, 2000). To adapt crime control and preventive strategies to increasingly modern crimes, such as organized and multinational crimes, funding will be required (Adewusi, 1990). As trade and commerce become more global, business and leisure travel expand, and traditional borders open up, the current levels of these offenses could skyrocket (UNDPI, 2000).

Odekunle (2004) claims that crime investigation and detection require a significant investment of resources. Money is needed to hire, train, equip, and mobilize a suitable number of criminal investigators. According to Elgege (2006), when a crime is reported to the police in Nigeria, the custom is for the complaint desk officer to ask for money to buy stationery so they can file the complaint. Once the necessity to visit the crime scene arises, the complainant will be required to provide transportation since the criminal investigations department typically does not have a vehicle. The complainant or the accused is required to pay for a post-mortem examination if the offense involves a murder, because funding is not available for such procedures. When an investigation is over, the complainant or the defendant is also required to pay for the duplicate of the case file for the investigation. The aforementioned makes it abundantly evident that criminal investigations are underfunded in Nigeria. According to Otuba & Coker, this underfunding is a result of both the general underfunding of the Nigerian Police as a whole and internal corruption (2006:67).

#### **The Nigerian Police's type of Training and Qualifications**

The Nigeria Police's criminal investigations are conducted by officers of lower ranks than sergeants. The majority of these constable investigators have just completed the basic three-month entry-level training at the Police College, where the majority of their instruction is focused on physical drills and pays little attention to the art of policing. While still a novice, the officer is assigned to conduct complex investigations since she lacks the expertise and training necessary for real criminal investigation (Alemika, 1999). In his first press conference after taking office on January 15, 2005,

the former Inspector General of Police, Mr. Sunday Ehindero, who is quoted in Otubu and Coker (2006:38), confirmed this position. He said that:

The time when novices would be assigned to look into criminal offenses is over. Instead of sending a tailor to look into anything, we need to take a census of all individuals with professional competence, such as psychiatrists. No one will be automatically posted to the CID (Criminal Investigations Department) unless they have something to offer, and we will make use of them. Sadly, the endorsements on the investigation reports show that this problem still exists (Otubu & Coker, 2006:38).

According to Alemika (1997), Osaba (1994), and Balogun (2003), these deficiencies are crucial in terms of manpower, both in terms of quantity and quality. That is, the effectiveness of the force is impacted by the quality of the police force, some of whom have poor communication skills. Additionally, they assert that the performance of the police force is impacted by poor criminal and operational information management practices, including erroneous recording and compiling of information, insufficient analysis, and infrequent dissemination of statistics.

### **Lack of Integrity**

Elgege (2006) asserts that one of the core values of public officials is integrity. It directs how one behaves while fulfilling official obligations. For instance, the Nigerian Police Force lacks integrity. The officers frequently display their lack of professionalism and extreme unreliability by taking part in criminal activity or collaborating with offenders. They frequently defend the wealthy in their daily work. Their position is frequently utilized to intimidate, extort, and bribe their fellow residents. This was also expressed by Dauda (2008): "The police, in my opinion, are a shame to Nigerians; they conduct awful things... Consider the scenario where cops kill an innocent individual and then claim the next day that he was caught stealing.

### **Language Barriers**

Language barriers present another additional difficulty for Nigeria's criminal justice system, claims Kunle (2005). People in a pluralistic, semi-illiterate culture rely on their "mother tongue" for social interaction on a daily basis. A "foreigner" or "outsider" (a native speaker of the given language) finds it challenging to interact effectively with the natives in such a community. This is the case in Nigeria, where a Hausa-speaking police officer in the country's multilingual police force would find it hard to do his job of preventing social unrest in a Yoruba or Igbo-speaking area (Kunle, 2005). Ohonbamu (1972) says that (mis)communication was still a problem even after the colonial police realized they had made a mistake and put more emphasis on practical language skills than academic ones in order to improve the roles of police in civil society.

### **Lack of Support from the Public**

The Nigerian police force used the catchphrase "the police are your friends" in one of its public relations jingles. Another amusing one advises calling in a "thug" the next time you are in trouble if the police are not your pals. A bold illustration of a thug with clean-cut hair wearing dark sunglasses, a heavy club or iron bar, and smoking what appears to be pot or marijuana is placed on top of this cynical counsel (The Guardian, June 14th, 2000. Lagos). According to Adewusi (1990), the majority of the populace views police officers with contempt, mistrust, and suspicion. They view them as enemies on the side of criminals rather than as friends and allies in the fight against crime. Because of this, they are afraid to help or work with the police in any way.

### **Corruption**

The Nigerian legal system has a number of major issues that work against socioeconomic growth, one of which is corruption (Garoupa, 2002). As strong and well-placed Nigerians vie to outdo one another in the expropriation of the so-called "National Cake," corruption is pervasive and has practically become institutionalized (Garoupa, 2002). According to Bonger (1990), the police are not immune from corruption, because they are an integral component of Nigerian society. Ahire (1991) asserts that extortion of meagre sums of money, or what one may refer to as "peanut money," from operators of commercial vehicles and traffic infractions is a prevalent kind of police corruption. This is not really a big deal to us. Our main worry is that police corruption, no matter how much of it there is, encourages and facilitates rather than deters criminal activity in our nation (Ahire, 1991).

The Nigeria Police Force has a high incidence of corruption and extortion. The reputation of the police has been severely tarnished by this behaviour (Neild, 2004). Asserting that police corruption is a severe problem because they are expected to be morally honest as law enforcement officers, Alemika (1999:10) agrees with Neild. Society is in danger if the police, who are tasked with stopping and detecting crime and corruption and prosecuting offenders, are corrupt themselves. The police also possess authority that has a significant impact on residents' lives, property, and safety. Citizens feel unsafe where such power is tainted by corrupt tendencies. Extortion, a type of robbery, is another manifestation of this corruption (Neild, 2004). According to Uruena (2003), police corruption explains why such activities endanger the public and why the police are therefore unable to live up to expectations. Alemika (1999) asserts that police brutality is frequently used as a tactic for pressuring people to give in to demands for bribes and that it occasionally serves as a form of punishment for refusing to comply with the police's demands for satisfaction.

### **Lack of Adequate Equipment**

In order to effectively combat crime, Philip (1999) contends that walkie-talkies, radios, and telephones are essential tools. Radios and walkie-talkies are typically broken or even unusable where they are present. According to Philip (1999), the Nigerian police force is in need of more vehicles, especially quick-moving, reliable patrol cars. As a result, they rarely pursue criminals in hot pursuit. Roebuck (2000) asserts that it is a well-known fact that dangerous criminals, such as armed robbers, have significantly better weapons than the police. While the majority of armed robbers typically carry high-tech automatic guns, there aren't many armed police officers. Their most popular weapons are the short rifle and the Mark IV rifle, both of which are difficult to carry and wield. Most police officers carry truncheons and batons, which don't work against criminals or other troublemakers (Membere, 1999).

According to Membere (1999), the police need to be equipped with advanced weapons so they can hold their own against criminals like armed robbers who frequently use advanced weapons. But the cops should only ever employ these weapons as a last option. A major reason why cops have failed is the inadequate state of their arsenal (Membere, 1999). According to Dauda (2008), Nigerian police are useless when confronted with armed thieves because these youngsters have sophisticated machines that the authorities cannot dare to withstand.

### **Empirical Review**

Muhammad (2022) examined the factors that could challenge databases and affect the realization of the benefits of forensic intelligence in Nigeria. The study was carried out among the Criminal Investigations and Intelligence Departments (CIIDs) in Zone 1 of the Nigeria Police. The respondents were, the Investigating Police Officers (IPOs) serving in the zones CIIDs. Zone 1 is one of the twelve zonal police commands in Nigeria, comprising of the zonal command headquarters and three state

commands, that is, Kano, Jigawa, and Katsina states. Out of the total population of 3,503, a sample size of 347 was determined using Krejcie and Morgans table of sample size estimation. Using survey method, and with police investigators as respondents, seven challenges were determined, and hypotheses were tested to find out if the challenges have a significant association among themselves. Of the variables (that is, the seven challenges), three (corruption, lack of interagency cooperation, and undue interference in investigations) indicate statistically significant association with unreliable databases. The study recommended that authorities should address the challenges to ensure reliable databases and effective forensic intelligence for the police to utilize.

Though the author seems to have addressed some of the issues of concern in the current study, but however, the method of data collection adopted in the study limited the comprehensive outcomes of the study. Hence, Focus Group Discussion and /or in-depth interview will have elicited more details of the challenges of criminal profiling especially in Kogi State Nigeria. The current study covered the gap in the body of literature.

Nwokolo and Ivongbe (2022) examined forensic science evidence admissibility as an instrument for handling criminal prosecution in the process of justice. It was conducted by empirically reviewing related literature in the field of Forensic Science using a qualitative research method and survey research design. The paper used interview sessions to generate primary data and compared the result with the secondary data to justify the relationship of Forensic Science evidence admissibility. The researchers comparatively analysed the importance of Forensic Science evidence in administering justice during criminal proceedings using applicable case studies. The research findings revealed that proper Forensic Science evidence are used to grant justice as it is a scientific method of justifying truth in a criminal investigation and prosecution both in the court of law and law enforcement agency office. The study concluded and recommended amongst others that Forensic Science should be included as an academic discipline in higher institutions in Nigeria, particularly in Nigeria Police Colleges and Law Schools where proper techniques and their application should be taught in grooming more Forensic Experts. The paper also recommended and stressed the need to establish more forensic laboratories in Nigeria with proper funding as well as the enactment of a law for the admissibility of forensic evidence in the court of law.

Meanwhile, the study ignored the challenges that may impede the effectiveness of forensic science in criminal investigation hence, the current study unveiled such challenges to bridge the gap in this prior existing research.

Ibrahim & Andrew (2021) examined prevalence of psychopathy among criminal and non-criminal population in Kaduna State Nigeria. Survey method was used to study the participants comprising of both males and females in Kaduna North Local Government area of Kaduna state using Krejcie and Morgan formula to determine the sample size of 384. An adopted standardized instrument of Hare Psychopathic Checklist Revised (PCL-R) 2nd edition was used to collect the data. Four research hypotheses were tested. And cognitive perspective theory was adopted in the study. The results revealed that the reliability statistics for the scale based on the total number of 20 items was .823 and considered to be highly significant. Criminal population respondent have highly prevalence rate of committing crime more than the non-committing crime more than the non-Criminal population in Kaduna state. Which indicate a mean score of 3.36 with a standard deviation of 497 of 192 Criminal population respondent have highly prevalence rate of committing crime in Kaduna state. While mean score of 2.91 with standard deviation of .422 of 192 non- Criminal population respondent have low prevalence rate of committing crime in Kaduna state. The study also found that empathy is an important factor to consider when investigating the construct of psychopathy. Hence, there is need to move away from focusing on behavioural correlates (antisocial and criminal behaviours), and to focus

more on affective components and find ways to assess these affective constructs in a more valid and reliable manner.

The study unavoidably shied away from studying the real practice of criminal profiling which would have helped more in determining the prevalence of psychopathy among criminals and non-criminals in the study area. Hence, the current study centred on criminal profiling.

Stephen et al., (2021) in their own study investigated on the level of awareness on the relevance of forensics in criminal investigation in Nigeria. The design used in the study was survey research design and the sample size of this study was a total of one hundred personnel of law enforcement and the judiciary. The study adopted descriptive statistics which involves the use of frequency and percentage. The result of the present study revealed that the participants were distributed socio-demographically as follows; there was an observable higher number of male participants (68%) relative to the female participants (32%), As per age distribution, a larger population of the participants were found to be > 40 years of age with 55%, and it was observed that age between 35-39 years ranked the least with 15%. On educational level, the result of the present study revealed that majority of the participants possesses a bachelor's degree as the highest level of educational qualification with 75% from a pool of 100% of participants. The study further examined responses on the relevance of forensics in criminal investigation, and the result revealed an inadequate level of awareness on the relevance of forensics in criminal investigation. The study concluded that there is an inadequate level of awareness on the relevance of forensics in criminal investigation, and therefore recommended that the Nigerian Police Force and the Judiciary should collaborate with Universities running programs on forensics for trainings.

The authors of the study failed to admit that it's one thing to be aware of something and another thing to be aware and not be effective, so the factors affecting the effectiveness of forensics is abruptly lacking in the study but this current study unraveled those challenges.

Udogadi and Akpata (2020) investigated the awareness level of the role of forensic DNA database in criminal investigation in Nigeria with Benin City as a case study. Using survey research design for the study, a total of 458 questionnaires were distributed around Benin City between the periods of 12th January 2020 to 21st March 2020, with a particular focus on security agents and students. While SPSS version 22 was used to analyse the data collected, responses were compared using Chi-square and presented as counts and percentages. The study revealed that there was a low level of awareness on the role of a forensic DNA database in a criminal investigation in Nigeria. Comparable to other countries in Africa, and since the introduction of the Criminal Law (Forensic Procedures) Amendment Act (2013), the use of DNA profiling technology became the gold standard for a criminal investigation and as such, the Forensic DNA Database was developed. The study recommended that the Nigerian government should collaborate with National University Commission to ensure that Nigeria Universities start running programs in forensic science, as this will greatly increase the awareness, and provide the requisite knowledge for expertise in the field of forensic science.

Meanwhile, the authors failed to address the apparent challenges obscuring the importance of forensic DNA database in criminal profiling and again the study was limited to using questionnaire as the only instrument of data collection. Whereas, interview would have helped in eliciting detail views on the subject matter. All these gaps were bridged by this current study.

### **Theoretical Framework: Biological Theory of Crime**

The Italian criminologist Cesare Lombroso's research from the nineteenth century is where the biological explanation of crime first emerged. Cesare Lombroso is known for his "born criminal" theory, which was the most common way to think about criminal behaviour in the late 19th century and early 20th century. Lombroso essentially held that criminality was hereditary and that physical flaws could be used to identify criminals and establish their atavistic or primitive nature. For instance, the expressive face, manual dexterity, and small, roving eyes of a burglar could be used to identify him. Rapists had "jug ears," while habitual murderers had cold, glassy glances, bloodshot eyes, and large hawk-like nostrils. Lombroso, however, did not limit his opinions to male criminals; he co-wrote his first book to investigate the causes of female crime and came to the following conclusions about them: female criminals were far more ruthless than male criminals; they tended to be lustful and immodest; they were shorter and more wrinkled; they had darker hair and smaller skulls than "normal" women. However, Lombroso noted that there was less baldness among them. Women who committed crimes out of passion were more evil than men and had large lower jaws (Canter et al., 2006).

Based on the ideas of biological determinism, Lombroso's work on the identification and categorization of criminal "types" suggested that some people were born with characteristics that made them more likely to commit crimes. Lombroso not only felt that people were biologically predisposed to either criminal or law-abiding behaviour; he also thought that the type of crime that each individual criminal was biologically predisposed to committing could be identified by how they looked (Canter et al., 2006). Based on Darwin's theory of evolution, Lombroso claimed that there were three basic categories of criminals: criminals who were born criminals, criminals who were insane, and criminaloids. He asserted that criminality is inherited and can be distinguished by bodily flaws, and that there is a born criminal. He sees specific physiognomic defects in criminals. He viewed criminals as brutal and primitive. These born criminals were inferior evolutionary reversions in terms of their physical traits; they were degenerated, primordial criminals. According to Lombroso, born criminals are atavistic replicas of not only savage men but also the most vicious predators and rodents. This was stated in his magnum opus, *Criminal Man*. Since these creatures are not of our species but rather the species of blood-hungry beasts, this finding should not increase our sympathy for people who commit crimes from birth (as some argue). Instead, it should protect us against sympathy (Lombroso, 1986). In his thesis on criminal anthropology, he compared the skulls of executed and living criminals to those of apes and ancient humans and came to the conclusion that criminals were atavism victims. According to him, "born criminals" have 18 physical traits, provided that at least five of them are present. According to Lombroso (1986), these bodily traits/deformities consist of the following: the face's asymmetry abnormalities, deformities of the eye, excessively large cheekbones, and jawbones. Very large ears, occasionally very small ears, or ears that protrude from the head, like chimpanzees' do. Thieves may have a twisted, inverted, or flattened nose, while murderers may have an aquiline or beak-like nose or one with a tip that rises like a peak from enlarged nostrils. Lips that are thick, bulging, and protrude into the pelvic organs are an inversion of sex traits. Extra-long arms and extra fingers are just two examples.

According to Lombroso, criminals who were mad were those who had mental diseases as well as some physical defects (Lombroso, 1876). The criminaloids were a sizable broad class of criminals without any distinguishing traits. They did not have any observable mental disorders, but their emotional and mental makeup made them more likely to engage in criminal behaviour in specific situations, such as when there were opportunities to do so (Turvey, 2011). This classification has been contrasted with the later clinical diagnosis of psychopathic personality disorder. Lombroso argued that criminaloids are typically left-handed, which he claimed was typical of con artists. He also said that

they often lose their hair and turn grey early, don't feel pain, and drink a lot (Ebisike, 2007). The idea is extremely relevant to the art and science of criminal profiling, despite criticism that it is incorrect and that there is no such thing as a physically defined criminal type (Ebisike, 2007). Since Lombroso adhered to the biological idea, he thought that criminals had distinguishable characteristics. If those traits can be identified, professionals in the criminal justice and law enforcement systems, particularly those from the Nigeria Police Force, may be able to use them to identify potential criminals and those responsible for specific crimes in Kogi State Police Command. Furthermore, if those quirks could be discovered, they could be able to anticipate or even stop illegal behaviour. Hence, it can help the Kogi State Police Command in criminal profiling.

### Research Design

This study adopted a survey research design because it focuses on the vital facts of people and their beliefs, opinions, attitudes, motivations, and behaviour towards a phenomenon. This is aimed at investigating and explaining criminal profiling and the challenges of criminal investigation using personnel of the Nigerian Police Force in the Kogi State Command.

### Study Population

The population of this research work were the personnel of the Nigerian Police Force, Kogi State Command who were in the D' Department-Criminal Investigation and Intelligence unit (CIID) and G' Department-ICT unit because they are the departments charged with the responsibility of criminal profiling and other related issues. Meanwhile, as at December 31st 2021, the State Command has over 9000 (Both Divisional Crime Officers, Inspector Crime Officers and Investigative Crime Officers including men of various ranks in the ICT (Desk of Police Public Relations Office Kogi State Command).

### Sample Size

A sample is the portion of the population selected for a study. Due to financial and time constraints, the Taro Yameni statistical approach was used to calculate the sample size from the total population of the study, as shown in the formula below:

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

n = Sample size

N = Finite population

e = Level of significant or limit of tolerable error

n = 9000

$$n = \frac{1 + (9000)(0.05)^2}{9000}$$

$$n = \frac{1 + (9000)(0.0025)}{9000}$$

1 + 22.5      Therefore, n = 382

From the above calculation, a total of three hundred and eighty two (382) personnel of Nigeria Police Force (NPF) who are in the D' Department - Criminal Investigation/Intelligence unit and ICT units were randomly selected across the selected Area Commands to represent Kogi State Command.

### Sampling Techniques

In order to minimize errors associated with sampling, the researcher adopted the non-probability sampling technique, specifically quota sampling which rely on the non-random selection of a predetermined number or proportion of units. Since the Police Command is administratively divided into ten (10) Area Commands and fourth four (44) Divisions, quota sampling technique was employed to select Eighteen (18) personnel of Criminal Investigation/Intelligence and ICT units from each Divisions in the 4 selected Area Commands with the highest Divisions in Kogi State Police Command based on the population of the personnel in the selected divisions as demonstrated in the table 2 below:

**Table 2: Showing the Police Area Commands and Divisions Sampled with the Number of Police Personnel Selected**

Police Area Commands	Police Divisions	No. of Police Personnel Sampled
Lokoja Area Command	1. A' Division	20
	2. B' Division	20
	3. C' Division	20
	4. D' Division	20
	5. Obajana Division	20
Kogi Kabba Area Command	1. Kogi Kabba A Division	19
	2. Kogi Kabba 'B' Division	19
	3. Kogi Iyara Division	19
	4. Kogi Mopa Division	19
	5. Kogi Ayetoro Division	19
Ankpa Area Command	Ankpa Division	17
	2. Enjema Division	17
	3. Omala Division	17
	4. Kogi Okaba Division	17
	5. Kogi Olamaboro Division	17
Idah Area Command	1. Idah Division	17
	2. Ajaka Division	16
	3. Odolu Division	16
	4. Ofu Division	16
	5. Ibaji Division	16
	6. Akpanya Division	17
<b>Total</b>	<b>4</b>	<b>21</b>
		<b>378</b>

However, In-depth Interviews (IDI) were conducted with the Police Area Commander in each of the 4 selected Area Commands in order to have in-depth information on the substantive issues of the research to give a total of 382 (4 + 378) respondents, respectively.

### Data Collection Instruments

The study used two (2) instruments of data collection, viz., a questionnaire and interviews. However, while the questionnaire is the major instrument, the in-depth interview will complement it. The questionnaire was divided into two parts. The first part was designed to obtain background

information or demographic characteristics of the respondents, while the second part focused on the substantive issues of the study. The questionnaire consisted of both open-ended and closed-ended questions and items in line with the research questions and objectives.

The in-depth interview elicited information from the Area Commanders in selected areas of the study who are responsible for the running of the day-to-day administration of the selected Area Commands and were adjudged to have relevant knowledge about criminal profiling. This was meant to provide in-depth knowledge on the challenges of criminal profiling in the investigation of criminal behaviour. The interviews were conducted by the researcher, and two research assistants acted as note-takers.

### **Validity of the Research Instruments**

The validity of the research instrument was determined by 3 experts (Criminologists) in the Department of Sociology, Kogi State University, Anyigba, Nigeria through paper scrutiny by making necessary corrections and added more questions to the instruments to make it more elaborate as ambiguous questions were rephrased and excised where necessary. Corrections on their observations on the nature and numbers of questions used and how it should be structured were effected, and after which it was administered to the respondents.

### **Reliability of the Instrument**

To test for reliability of the research instrument, a test re-test method was adopted in which 30 copies of the questionnaire were distributed to each of the 10 Police Area Commands (3 copies each) in Kogi State Command. After some days, the instrument were retrieved and re-administered for the second time. The questionnaire distributed were completed and returned. The result showed that there is consistency in the items of the survey.

### **Method of Data Analysis**

The data collected were analyzed using tabular form as a tool for presentation and the percentages discerned using frequency count of each response to the questions, to give a clearer understanding, enhances and clarifies the data collected from the field. The responses to the questionnaire were coded appropriately in order to help in the comparison, interpretation and general discussion of findings, while the hypotheses formulated for the study were tested using Chi-square because of the categorical nature of the variables in the study.

### **Results**

A total of 382 copies of questionnaire were distributed to the respondents by the researcher and the field assistants out of which a total of 343 copies were properly filled and thus used for the analysis, while 39 copies of the questionnaire were not retrieved and thus not part of the analysis.

#### **Socio-demographic Profile of the Respondents**

This section presents information about the respondents as shown in Table 3 below:

**Table 3: Distributions of Socio-Demographic Characteristics of the Respondents**

Variables	Category	Frequency (N=343)	Percentage (%)
Sex	Male	302	88
	Female	41	12

Age	21-25	05	1
	26-30	36	11
	31-35	111	32
	36-40	144	42
	41-50	45	13
	51-60	02	1
Marital status	Single	136	4
	Married	181	53
	Divorced	07	2
	Widowed	11	3
	Separated	08	2
Educational level	Primary Certificate	24	7
	Secondary/Technical	234	68
	Tertiary Certificate	85	25
	Others	-	-
Working experience	0-5	23	7
	6-10	151	44
	11-15	32	9
	16-20	35	10
	21-25	81	24
	26-30	17	5
	31-35	4	1
Rank	<b>Constable</b>	<b>101</b>	29
	<b>Corporal</b>	<b>121</b>	35
	<b>Sergeant</b>	<b>109</b>	32
	<b>Inspector</b>	<b>03</b>	1
	<b>Ass. Sup. of Police</b>	<b>03</b>	1
	<b>Dep. Sup. of Police</b>	<b>02</b>	1
	<b>Sup of Police</b>	<b>03</b>	1
	<b>Chief Sup. of Police</b>	<b>01</b>	0.3
	<b>Others</b>	<b>-</b>	-

**Source: Field Survey, 2023**

The sex distribution of the respondents in Table 3 shows that 302 (88%) of the respondents, were male, while 41 (12%) of the respondents, were female. The high figure of male respondents is an indication that more males than females were recruited into the Nigeria Police. This could, however, be attributed to the strong physical attributes of men, as the work of crime prevention, detection (criminal profiling) requires a lot of physical agility, smartness and fitness. Women police detectives or profilers are observed to be doing the work of recording of statements, especially from female witnesses, female accused persons, and children, as well as assisting school children in crossing the road, crowd control where women and children are present in large numbers, and clerical duties etc.

The age distribution of the respondents in Table 3 shows that 5 (1%) of the respondents account for ages between 21-25, 36 (11%) of the respondents account for ages between 26-30, 111 (32%) of the respondents account for ages between 31-35, 144 (42%) of the respondents account for ages between 36-40, 45 (13%) of the respondents account for ages between 41-50, and 2 (1%) of the respondents fall within age 51-60 years. The high proportion of those whose ages ranged between 36 and 40 years indicates that most of the respondents were at their active working age.

On the marital status of respondents in Table 3, 136 (40%) of the respondents, were single; 181 (53%) of the respondents, were married. This was expected because most of the respondents were adults, matured enough for marriage, hence the high proportion of married people among the respondents. 11

(3%) were divorced; 11 (3%) had lost their partners to death (widowed); and the remaining 8 (2%) were separated from their partners.

Table 3 shows that the majority 234 (68%) of the respondents had secondary or technical certificates, 85 (25%) of the respondents, had tertiary education, and 22 (6%) of the respondents had primary certificates. This implies that the study population was literate. The high level of educational attainment of the respondents could be attributed to the high premium placed on education as requisite for competency by the police organization and management.

Respondents years of working experience in table 3 above indicates that a little more than half i.e 151 (44%) of the respondents had between 6-10 years of working experience; 23 (7%) had 0-5 years of working experience; 32 (9%) of the respondents had 11-15 years of working experience; 35 (10%) of the respondents had 16-20 years of working experience; 81 (24%) of the respondents had 21-25 years of working experience; 17 (5%) of the respondents had 26-30 years of working experience; while 4 (1%) of the respondents had 31-35 years of their working experience. The high proportion of those whose years of working experience falls between 6 and 10 years may be as a result of the massive recruitment of ten thousand (10, 000) qualified Nigerians into the police force by the President Muhammodu Buhari's administration between the years 2019-2020. During that period, many young men and women were recruited to complement the existing numbers of police personnel in the fight against the incessant insurgency bedeviling the country and to replace those who had retired or died from the police service commission.

The rank of the respondents in table 3 indicates that the majority 331 (96%) of the respondents were members of rank and file (constable, corporal, and sergeant). 1% were inspectors, while 12 (4%) of the respondents were senior officers (inspector, assistant superintendent, deputy superintendent, and police superintendent). The high proportion of rank and file is an indication that they are the main group in the crime prevention and control activities. The major duty of the senior police officer is to give directives to the rank and file on what to do, how and when to do it, especially those with the designation of Divisional Crime Officers (DCO 1), Inspector Crime Officers (ICO1) and Investigative Crime Officers (ICO1) who are mainly in Criminal Investigation/Intelligence and ICT units.

### **Mechanisms to Criminal Profiling in Kogi State Police Command**

This section presents the responses on objective 1 of the study which sought to identify the approaches or mechanisms adopted by NPF Kogi State Command to aid criminal profiling as shown in Table 4 below:

**Table 4: Frequency Distribution of the Mechanisms Put in Place to Aid Criminal Profiling Exercise in Kogi State Police Command**

You know what criminal profiling is all about	Frequency (f) N=343	Percentage (%)
Yes	192	56
No	101	29
May be	50	15
You keep records of offenders in your station	<b>Frequency (f)</b>	<b>Percentage (%)</b>
Yes	340	91
No	01	03
May be	02	06
Forensic laboratory set up by Nigeria police aid criminal profiling	<b>Frequency (f)</b>	<b>Percentage (%)</b>
Yes	189	55

No	107	31
May be	47	14
The central database system for all Nigerians e.g NIN, BVN, SIM card registration etc can aid criminal profiling	<b>Frequency (f)</b>	<b>Percentage (%)</b>
Yes	301	88
No	11	3
May be	31	9
The above mechanisms are relevant to criminal profiling in Kogi State police command	<b>Frequency (f)</b>	<b>Percentage (%)</b>
Yes	303	88
No	14	4
May be	26	8
Rate the relevance of criminal profiling to criminal justice system in Kogi State police command	<b>Frequency (f)</b>	<b>Percentage (%)</b>
Relevant	98	29
Very relevant	114	33
Irrelevant	71	21
Very irrelevant	60	17
Effectiveness of Criminal Profiling to Criminal Justice System in Kogi State Police Command	<b>Frequency (f)</b>	<b>Percentage (%)</b>
Effective	131	38
Very effective	98	29
Ineffective	65	19
Very ineffective	<b>49</b>	14

**Source: Field Survey, 2023**

On whether the respondents know what criminal profiling is all about or not, Table 4 above shows that 192 (56%) of the respondents, indicated that they know what criminal profiling is all about, while 101 (29%) of the respondents, indicated in contradiction as they claimed ignorance of the knowledge of criminal profiling, whereas the remaining 50 (15%) of the respondents, indicated that they were not sure whether what they think they know is called criminal profiling or not. The higher proportions of the respondents who indicated in affirmation to the question is an indication that the majority of the members of the Nigeria Police Force in Kogi State Command had knowledge of the concept of criminal profiling.

On whether the police force keeps records or profiles of offenders or not, table 4 also reveals that 340 (99%) of the respondents, indicated that they do keep records of criminals in their stations, while only 1(0.3%) contradicted the claim, whereas the remaining 2 (0.6%) of the respondents, sat on the fence on the question. The high percentage of the respondents who indicated in affirmation indicates that personnel of the Nigeria Police Force, Kogi State Command, keep records of criminals under their custody. This was expected because the work of the police service involves filing of cases for future eventualities and consultations. These records could be in written form such as statements of confessions made by criminals and suspects, pictures of crime scenes, evidence of criminal behaviour, photographs of criminals and suspects, etc., which are all necessary for effective criminal profiling.

On the importance of forensic laboratories in criminal profiling, table 4 equally reveals that 189 (55%) of the respondents, were of the opinion that the use of forensic laboratories is important for effective criminal profiling, while 107 (31%) of the respondents, had contrary opinions, while the remaining 47 (14%) were sitting on the fence in their responses. The implication of these findings is that the majority of the respondents admitted the importance of the forensic laboratory system in effective criminal profiling in Kogi State Police Command.

Table 4 above further shows that 301 (88%) of the respondents, indicated in agreement that the introduction of the central database system for all Nigerians is a necessary platform for effective criminal profiling, while only 11 (3%) of the respondents indicated in contradiction to the question, whereas the remaining 31 (9%) of the respondents, were not sure of the importance of the system. The higher proportion of the respondents who indicated affirmation is an indication of the fact that the importance of the central database system for all Nigerians cannot be overemphasized in effective criminal profiling. This was expected because the aim of detectives in criminal profiling is to track the exact suspected criminals using the availability data of the suspects. Hence, the needed information for the arrest of suspects could be found using either the bank's verification number or the SIM-card number registration details of the suspects.

On the relevance of the above mechanisms to the criminal justice system in Kogi State Police Command, table 4 equally reveals that 303 (88%) of the respondents, indicated in affirmation the relevance of the above mechanisms to the criminal justice system, while 14 (4%) of the respondents, were of contrary opinions, whereas the remaining 26 (8%) of the respondents, claimed that they were not sure of the relevance of the mechanisms above to the criminal justice system. Based on the majority of affirmative responses, it is clear that the criminal justice system cannot be effective without the adoption of the aforementioned mechanisms by the Kogi State Police Command.

As the respondents were asked to rate the relevance of criminal profiling to criminal justice in Kogi State Police Command, Table 4 shows that 114 (33%) accounts for the majority of the respondents who indicated very relevant the relevance and essence of criminal profiling to the criminal justice system in Kogi State Police Command. However, 98 (29%) of the respondents, indicated that it is relevant, while 71(21%) of the respondents, claimed that it is irrelevant, whereas the remaining 60 (17%) of the respondents, state that criminal profiling is very irrelevant to the criminal justice system, especially in Kogi State Police Command.

As the respondents were asked to rate the effectiveness of criminal profiling in Kogi State Police Command, Table 4 also reveals that the proportion of the respondents, i.e. 131 (38%) who accounted for its effectiveness was higher, and that signifies that criminal profiling is effective in the criminal justice system in Kogi State Police Command. Only 98 (29%) thought criminal profiling was very effective in the Kogi State Police Command. However, 65 (19%) of the respondents, indicated that criminal profiling is ineffective in Kogi State Police Command, while the remaining 49 (14%) of the respondents, indicated that criminal profiling is very ineffective in Kogi State Police Command. These responses on ineffectiveness and very ineffective could be attributed to the inherent challenges facing the criminal justice system in Kogi State Police Command, as seen on Table 5 below:

**Challenges Facing Criminal Profiling in Kogi State Police Command**

**Table 5: Frequency Distribution on the Challenges Facing Effectiveness of Criminal Profiling in Kogi State Police Command**

Nigeria Police in Kogi State Command is facing challenges in profiling criminal successfully	Frequency N= 343	Percentage (%)
Yes	295	86
No	16	5
May be	32	9
Poor identification system is a challenge to criminal profiling among Police Force in Nigeria	Frequency (f)	Percentage (%)
Yes	290	85
No	22	6

May be	31	9
Improper records keeping by Nigeria Police Force is a challenge to profiling criminals	<b>Frequency (f)</b>	Percentage (%)
Yes	193	56
No	115	34
Somehow	35	10
Corruption is a challenge to profiling and apprehension of suspects	<b>Frequency (f)</b>	Percentage (%)
Yes	299	87
No	7	2
Somehow	37	11
Shortage of Police officers is a factor militating against criminal profiling in Kogi State	<b>Frequency (f)</b>	Percentage (%)
Yes	<b>272</b>	79
No	<b>51</b>	15
Somehow	<b>20</b>	6
Inadequate training is a factor militating against criminal profiling in kogi state	<b>Frequency (f)</b>	Percentage (%)
Yes	<b>208</b>	61
No	<b>36</b>	10
Somehow	<b>99</b>	29
Inadequate funding is a factor affecting criminal profiling in kogi state police command	<b>Frequency (f)</b>	Percentage (%)
Yes	<b>265</b>	77
No	<b>52</b>	15
Somehow	26	8

**Source: Field Survey, 2023**

On whether there is any challenge(s) facing Kogi State Police Command in carrying out an effective criminal profiling exercise, Table 5 shows that the majority, which was 295 (86%) of the respondents, indicated that there are challenges hindering effective criminal profiling in Kogi State Police Command, while 16 (6%) of the respondents expressed contrary opinions, while 32 (9%) claimed that they were not sure of any challenge. The implication of these findings is that the majority indicated affirmation, and that means that Kogi State Police Command is not free from inherent challenges hindering effective criminal profiling.

On whether poor identification system or lack of technical know-how is a challenge hindering effective criminal profiling in Nigeria, Table 5 equally reveals that 290 (85%) of the respondents, agreed in affirmation, while 22 (6%) of the respondents disagreed (no), and 31 (9%) of the respondents expressed doubt (maybe) as they were not sure whether poor identification system or lack of technical know-how is a challenge. Going by the majority of the respondents indicated yes, is an indication that a poor identification system or lack of technical know-how or technical know-how hinders effective profiling of criminals. This could be true because, being an art and science, successful criminal profilers must possess excellent analytical and critical thinking abilities, good communication skills, and the ability to effectively analyze scientific and statistical data. Hence, only professionals can handle it effectively.

On whether improper keeping of records by Nigeria Police Force is a challenge to effective criminal profiling, table 5 also reveals that 193 (56%) of the respondents, indicated yes to the question, while 115 (34%) of the respondents, indicated no, whereas the remaining 35 (10%) of the respondents, indicated somehow to the question. The high percentage of the respondents indicated yes, and that signifies that improper keeping of records by Nigeria Police Force hinders effective profiling of

criminals. This could be true because data collection and storage in criminal justice helps profilers of criminals and suspects in several ways. DNA, audio and video evidence from crime scenes, and fingerprints, for example, can all be stored in computer software databases and used to profile and identify suspects and criminals more quickly.

As the respondents were asked whether corruption is an obstacle to effective criminal profiling, Table 5 above indicates that majority I.e 299 (87%) of the respondents agreed that corruption constitutes an obstacle to effective criminal profiling, and while 7 (2%) of the respondents disagreed that corruption is not an obstacle to effective criminal profiling, 37 (11%) of the respondents sat on the fence in the responses to the question. The high proportion of the respondents who indicated yes, corruption is a serious factor affecting effective criminal profiling to determine the right criminal from suspects. The implication of this is that police corruption, regardless of the amount involved, promotes and facilitates, rather than checks, criminal activities in the country and particularly in Kogi State.

On whether the challenge facing criminal profiling in Kogi State Police Command is the shortage of officers of the NPF, especially in the CIID and ICT departments, Table 5 reveals that the majority i.e 272 (79%) of the respondents pointed out that inadequate manpower or shortage of police officers is an obstacle to effective criminal profiling, while 51 (15%) of the respondents indicated that shortage of police officers or inadequate manpower is not an obstacle to effective criminal profiling in Nigeria.

The remaining 20 (6%) of the respondents, indicated that they were not clear whether the shortage of police officers is a factor militating against effective criminal profiling. These findings imply that a significant proportion of the responses affirmed that a shortage of police officers in the designated units of the force in Kogi State Command constitutes an obstacle to effective criminal profiling in Kogi State and that is not in doubt.

As the respondents were asked whether inadequate training constitutes a challenge facing criminal profiling, table 5 further shows that 208 (61%) of the respondents, agreed, while 36 (10%) disagreed, and the remaining 99 (29%) of the respondents, were not sure of their responses. Going by the high percentage of the respondents who agreed that inadequate training is a factor militating against effective criminal profiling, it signifies that if the police have no proper training on the art and science of profiling suspects, especially in the application of ICT, then it will affect the criminal justice system as the outcome of profiling will be misleading to the arrest of wrong criminals and suspects.

Table 5 above shows that the majority, which accounted for 265 (77%) of the respondents, indicated yes that inadequate funding is a factor affecting effective criminal profiling in Kogi State Police Command, while 52 (8%) of the respondents, indicated in contradiction. The remaining 26 (8%) of the respondents, were not sure whether inadequate funding can affect the effectiveness of criminal profiling or not. The implication of these findings is that inadequate funding of the Nigeria Police Force can de-motivate officers from being dedicated to effective criminal profiling exercises in Kogi State Police Command and in Nigeria as a whole. This is true because poor funding leading to dilapidated equipment for profiling can make police officers not develop the enthusiasm necessary for effective criminal profiling.

### **What other challenges do you think are affecting criminal profiling in Kogi State Police Command?**

Other challenges that could affect the effectiveness of criminal profiling in Kogi State Police Command as specified by the respondents include: lack of public cooperation; lack of or inadequate motivation of officers of the Nigeria Police Force in terms of incentives/impress; unwillingness of the

community members to provide sensitive information necessary to apprehend suspects; level of collaboration of the sister security agencies; computer illiteracy etc.

**Suggestions and Comments on how the above challenges can be overcome for Effective Criminal Profiling in Kogi State Police Command.**

How do you think these challenges can be overcome for effective criminal profiling, in your opinion? Respondents made the following recommendations for effective criminal profiling in the Kogi State Police Command:

They should be computer equipment (both software and hardware) to help in recording and storing offenders information, which is necessary for effective profiling of criminals. Also, the officers in charge should be trained and retrained on how to use modern computer gadgets.

For criminal profiling exercises to work, the public and other security agencies must work together to gather information and report on people who might be criminals.

**Qualitative Analysis of the Interview Results**

This part of the data analysis deals with the interview schedules with 4 Police Area Commanders randomly selected for the study and interviewed to elicit information about criminal profiling and the challenges hindering effective criminal profiling and how the challenges can be overcome for an effective criminal profiling exercise in Kogi State Police Command.

**Qualitative Table: Demographic Characteristics of the Interview Participants**

Variables	Category	Frequency
Sex	Male	***3
	Female	**2
Age	20-30	**2
	30+	***3
Educational level	Secondary/Technical	*1
	Tertiary Certificate	**2
	Others	***3
Years in Service	0-5	*1
	6-10	*1
	11-20	**2
	21-30	***3
	30+	***3
Rank/Designation	<b>Divisional Crime Officer</b>	*1
	<b>Inspector Crime Officer</b>	**2
	<b>Investigative Crime Officer</b>	***3

**KEY:** \* = 1  
 \*\* = 2  
 \*\*\* = 3

The summary of the interview schedules were transcribed, screened, and content analysed as follows:

1. Are you familiar with the concept of criminal profiling in criminal investigation?

On the above question, 100% of the interviewees answered affirmatively.

2. What are the mechanisms of Criminal Profiling available or accessible to NPF?

In responding to question no. 2, a participant responded as follows:

"The most available way we track criminals is through record keeping of serial criminals including their photograph, phone numbers and addresses among others. You see, we have case files and log books where we make documentaries for future reference, in case we would have similar case a in the future, the documentaries would then serve as a tool for profiling in such criminal investigation" (**IDI/ 2/MALE/46/SCIID/2022**).

3. Do you find criminal profiling relevant to the criminal investigation in NPF?

Answers: 100% of the interviewees responded in the affirmative.

4. How effective is criminal profiling to the criminal justice system, especially among Nigeria's police force?

In response to the above question 3, one of the participants stated that:

Well, you see, criminal profiling can be extremely useful in solving some cases where detectives and police officers have come to a dead end in their investigation. However, most of the time the approaches are actually found not to be that useful or the detectives solve the case via other means and alternatives. But then criminal profiling is relevant because it is mainly used by the police DCOs and ICOs to narrow down suspect lists in cases like murder, assassination, rape, or property crimes where no physical evidence is left at the crime scene (**IDI/ 3/MALE/46/SCIID/2022**).

These findings can be interpreted to mean that criminal profiling is a valuable investigative tool used by the Nigeria Police Force, but its outcome has not been 100% effective as detectives do employ alternative means of identifying criminals or offenders of a particular crime or criminal behaviour.

Another interviewee gave his own explanations on the concept of criminal profiling thus:

A criminal profiler usually looks at the crime scene evidence, autopsy report, victim, and likely pre and post-crime behaviour of the offender to find out what the perpetrator did to the victim during the crime event; how the killer gained access to the victim; any intention to cover up his/her tracks at the crime scene; what attracted the killer to the victim; and what motive or fantasy propelled the killer to harm the victim in the particular manner, time, and location" (**IDI/ 1/MALE/3/DCO/2022**).

The findings from this interview can summarized thus, every effort put in place to apprehend an unknown perpetrator of a particular crime can be termed as criminal profiling and the criminal justice system finds it useful.

A participant aired his own views on the effectiveness of criminal profiling thus:

"Though, there is no scientific evidence to support the reliability and validity of criminal profiling in solving crimes. It seems that when profiling does assist the police in solving a case or in opening up new lines of inquiry, it is the exception rather than the rule. On the other hand, it cannot be denied that criminal profiling has proven helpful in some, albeit exceptional, cases. However, much more research needs to be done before criminal profiling will earn its place as a valuable forensic tool. A variation of profiling that has evoked some interest in the news media is psychological autopsy, which comprises the compilation of a psychological profile of especially well-known deceased individuals. It is also used in suicide cases, for example, to determine whether the deceased could indeed have committed suicide. But, like criminal profiling, its accuracy and usefulness are also questionable" (**IDI/3/MALE/3/ICO/2022**).

The summary of the responses from the interviewees is that 85% of them agreed and justified the relevance of criminal profiling to the criminal justice system while only 15% doubted its effectiveness, especially among Nigeria Police Force investigation of serial offences.

5. Can you please tell us how record keeping through information communication technology can help make criminal profiling more effective in the criminal justice system?

In response to the above, another interviewee stated in response to the question thus:

"Young man... you just asked me two questions in one, but let me respond to one after the other." You see, the art and science of criminal profiling needs professionals to handle it effectively. It is not all police personnel that can profile crimes. Skills, expertise, and experience are highly needed to make proper arrests of perpetrators of a particular crime. I can personally see criminal profiling as a profession because of its key attributes that lead to expertise, such as intuition, educated guesswork, formal training, etc. A high level of professionalism is needed to avoid misguided arrest of wrong suspects. While on the place of ICT, I think the police need sensitive information from citizens to use as modalities for tracking suspected criminals. That is why we need a central database system for all Nigerians. And even storing criminals' information needs ICT because paper can get torn, case files can be misplaced or mishandled, leading to loss of important information, but if everything is computerized, the donkey years to come, it still remains in the computer. So the place of ICT in criminal profiling cannot be overemphasized" (IDI 1/MALE/3/SCIID/2022).

The responses of other interviewees were not different from the one analysed above.

**What challenges do you think can hinder an effective utilization of Criminal Profiling in criminal investigation by Nigeria Police Force?**

On the above question however, responses from IDI conducted on objective 2 are as follows: 2 out of the 4 interviewees aggressively responded thus;

"My brother, you know the major problem in this country is corruption. Nigeria Police is not an exception in our investigations of crimes and criminal behaviour. It affects criminal profiling and the criminal justice system too. I think that is the hallmark of the whole thing" (IDI /MALE/3/DCO/2022).

Another interviewee said:

"As the validity of the outcome of criminal profiling is sometimes questionable and misleading, we can't rely solely on it, but then the major problems that may hamper a successful outcome of criminal profiling are corruption, lack of appropriate skills and expertise on the side of the police to properly operate the modern computer gadgets used in tracking criminals, non-cooperative attitude of the civilians, and godfatherism, among others" (IDI /MALE/45/SCIID/2022).

Other problems that were brought up by the respondents were the same as those brought up by other respondents in the questions above.

**Testing of the Hypotheses**

Here, an attempt was made to determine the content validity of the hypotheses earlier formulated. The hypotheses of this study were tested using chi-square to enable the researcher arrive at correct and valid conclusion. The formula is:

$$X^2 = \sum \frac{(O-E)^2}{E}$$

Where:  $\sum$  = Summation of the values or data.

O= Observed values.

E= Expected values.

X<sup>2</sup> = Chi-square

The formula used for the degree of freedom (Df) = (r-1) (c-1)

r = number of rows in the contingency table

c = number of columns in the contingency table

Expected frequency is calculated by using the formula: Grand total divided by 3 because the observed value has only three variables.

All the contingency tables below show the rejection and acceptance region using 5% level of significance, so the confidence interval will be 95%.

- (i) That we assume at 5% level of significance
- (ii) That the degree of freedom equal  $(6 - 1) (3 - 1) = 10$
- (iii) That the differential frequency (Df) = 0.05
- (iv) That the critical table value of chi-square is 18.31

**Decision Rule for Chi-square Testing**

If the obtained value of chi-square ( $X^2$ ) is greater than the critical table value of the chi-square ( $X^2$ ), then  $H_1$  (alternative hypothesis) is accepted, otherwise we accept  $H_0$  (null hypothesis).

**Hypothesis One**

$H_0$ : There is no significant relationship between improper records keeping by NPF and effective criminal profiling in Kogi State Command.

$H_1$ : There is a significant relationship between improper records keeping by NPF and effective criminal profiling in Kogi State Command.

Table 5 was used for the above hypothesis as follows

O	E	O-E	$(O-E)^2$	$\frac{(O-E)^2}{E}$
290	114.3	175.7	30870.49	270.08
22	114.3	-92.3	8519.29	74.53
31	114.3	-83.3	6938.89	60.70
TOTAL				405.31

From the result above, the obtained value of chi-square (405.31) is greater than the critical table value (18.31). In this case,  $H_1$  is accepted and  $H_0$  rejected. This means that there is a significant relationship between improper records keeping by NPF and effective criminal profiling in Kogi State Command.

**Hypothesis Two**

$H_0$ : The approaches adopted by Nigeria Police Force for criminal investigation have been effective in combating crime in Kogi State.

$H_1$ : The approaches adopted by Nigeria Police Force for criminal investigation have been effective in combating crime in Kogi State.

Table 5 was used for the above hypothesis as follows:

O	E	O-E	$(O-E)^2$	$\frac{(O-E)^2}{E}$
193	114.3	78.7	6193.69	54.19
115	114.3	0.7	0.49	0.0043
35	114.3	-79.3	6288.49	55.02
TOTAL				109.21

From the result above, the obtained value of chi-square (109.21) is greater than the critical table value (18.31). In this case,  $H_1$  is accepted and  $H_0$  rejected. The approaches adopted by Nigeria Police Force for criminal investigation have been effective in combating crime in Kogi State Command.

**Hypothesis Three**

$H_0$ : Improper/poor identification system do not negatively affect the effectiveness of Criminal Profiling in Kogi State Police Command.

$H_1$ : Improper/poor identification system negatively affect the effectiveness of Criminal Profiling in Kogi State Police Command.

Table 5 was used for the above hypothesis as follows:

O	E	O-E	(O-E) <sup>2</sup>	(O-E) <sup>2</sup> E
299	114.3	184.7	3414.1	298.5
7	114.3	-107.3	11513.3	100.73
37	114.3	-77.3	5975.3	52.28
TOTAL			451.51	

From the result above, the obtained value of chi-square (451.51) is greater than the critical table value (18.31). In this case, H<sub>1</sub> is accepted and H<sub>0</sub> rejected. This means that Improper/poor identification system negatively affect the effectiveness of Criminal Profiling in Kogi State Police Command.

### Discussion of Findings

The study was analysed through the use of a structured questionnaire and in-depth interview with questions tailored towards examining criminal profiling and the challenges of criminal investigation in the Nigerian criminal justice system, with a particular focus on the Kogi State Command.

The findings of the study revealed that the approaches put in place to aid the practice of criminal profiling in the Nigerian criminal justice system includes but are not limited to case record keeping, as significant majority i.e. 340 (99.1%) of the respondents revealed that they keep records of offenders in stations under their custody. This is true because, by training, the work of the police service partly involves filing of cases, keeping booking and arrest reports etc for future reference, and consultations on similar cases within the ambience of the law. These records could be in written form such as statements of confessions made by criminals and suspects, pictures of crime scenes, evidence of criminal behaviour, photographs of criminals and suspects, etc., which are all necessary for justice to be served through effective criminal profiling.

These findings collaborate with the publication of the Best Police Management System (2020), which opined that police records management systems (RMS) enable law enforcement agencies to store, retrieve, retain, archive, and view information, records, or files pertaining to law enforcement operations. These tools automate vital processes that enhance the day-to-day operations of criminal profiling.

The establishment of forensic laboratory system is another approach put in place to aid the practice of criminal profiling in the justice system as revealed by a significant majority i.e. 198(55%) of the respondents. In Nigeria, profilers such as Divisional Crime Officers (DCOs), Inspector Crime Officers (ICOs), and Investigative Crime Officers (ICOs) among the Nigeria Police Force take photographs and physical measurements of crime scenes, identify and collect forensic evidence, and maintain the proper chain of custody of that evidence. A typical example of modern forensics evidence is the use of DNA profiling. This is also true because crime scene investigators collect evidence from DNA sources such as fingerprints, footprints, tire tracks, blood samples, other body fluids, hairs, semen, saliva, bone, fibres, and fire debris that can be detected and used for forensic purposes to track the right offender of a particular crime and criminal behaviour for justice to be served.

These findings from the study are in line with the publication of the Department of ICT, Nigeria Police Force (2020), which explains that the forensic section is a professional/specialist arm of the

Nigeria Police that renders support to investigators within and outside the Force. Hence, the following units were created, including the Automated Fingerprint Identification System (AFIS) Unit and the Document Unit. The Document Unit is in charge of forensic examination and analysis of disputed documents, forgery, handwriting, and signatures. The ballistics unit handles examination, analysis, and reporting on firearms and ammunition under investigation. The Crime Scene Management Unit assists IPO's to process a crime scene and collect, preserve, and package exhibits for examination, analysis, and reporting. The Chemistry/Toxicology Unit deals with analysis and detection of chemical components in gun powder, poison, adulterated products etc. The Serology/DNA Unit handles analysis of suspected blood stains to determine whether they are animal blood or human blood. The Digital Forensic Unit deals with all electronic devices and machines have the capacity to recall deleted files from such devices, which can help an ongoing investigation where the device is an exhibit.

The central database for all Nigerians is another mechanism set up to profile criminals in the justice system, as revealed by a significant majority, i.e. 301 (88%) of the respondents. The centralized and computerized storage of Nigerians profiles in a database, which constitutes an important investigative resource in contemporary Nigerian criminal justice systems, enables the systematic comparison and automated matching of crime scene samples and individual profiles. Bank Verification Number (BVN), National Identity Number (NIN), SIM card number registration details of the suspects, and driver's license, among other things, could be used to obtain the necessary information for criminal profiling in this regard.

This finding justifies the fact that Nigeria Communication Commission (NCC) directed all mobile operators to collect data about their subscribers, including biometric data. Similarly, the Central Bank of Nigeria (CBN) directed all banks to comply with the Bank Verification Number (BVN) exercise so that customers' bank details, including their biometrics, will be linked together and that, through that, CBN can have control over bank accounts of customers using unique number identification (i.e., BVN). FRSC also provided drivers with licenses. They captured details and biometrics of drivers during the exercise and stored them in their database. The Nigerian Immigration Service (NIS) also captured data and biometrics of citizens applying for international passports. NIMC has recently registered and is providing citizens with National Identity Numbers (NIN) and Cards. The citizens' data, including biometrics, are captured and stored within their database as tools of profiling and easy tracking of crime perpetrators.

The study established that the above approaches set up to aid the practice of criminal profiling were very relevant to the criminal justice system in Nigeria as testified by a significant majority, i.e., 114(33%) of the respondents. Though the relevance of these approaches is subject to the optimal utilization of the modalities listed above. Meanwhile, a significant majority i.e 131(38%) of the respondents, reported that the approaches have been effective in criminal profiling exercise but not at its optimal level, reasons not farfetched from the inherent challenges facing the Nigerian Police Force, Kogi State Police Command.

In light of the above, the study therefore revealed challenges such as corruption which manifests in improper/poor identification system, with 299 (87%) of the respondents attesting to that, and as confirmed by the outcome of hypothesis three tested with Chi-square above. This revelation from the findings of the study is not shocking because the glaring menace of bribery and corruption has eaten deep into the fabric of all aspects of law enforcement agencies, including the criminal justice system, and the Nigerian Police Force. A situation whereby profilers receive what is popularly called "sorting money," a slang for bribery payment, to quench an investigation or be reluctant to profile properly is

corruption, and it affects the criminal justice system. This finding justified the view of scholars such as Uruena (2003), Alemika (1999), and Neild (2004), among others, who asserted that police corruption commonly involves paltry sums or what could be called "peanut money" extorted from suspects and other forms of corruption in the profession. The implication of this is that police corruption, regardless of the amount involved, promotes and facilitates, rather than checks, criminal activities in the country as the corruption of the police does not stop at the checkpoints; it affects criminal investigations and profiling.

The study further revealed other challenges such as lack of professionalism on the part of Police profilers as a factor hindering the effective outcome of criminal profiling, as attested by a significant majority, i.e. 290(85%) of the respondents and as confirmed by the outcome of hypothesis one tested with Chi-square above. It is no longer news that criminal profiling appears to be a professional exercise and the lack of technical know-how hinders the effective outcome of it. This could be true because, being an art and science, successful criminal profilers must possess excellent analytical and critical thinking abilities, good communication skills, quality training, sound professional qualifications, and the ability to effectively analyse scientific and statistical data. Hence, only professionals can handle it effectively and a lack of it is a challenge to its outcome.

These findings support the position of scholars such as Alemika (1999), who postulated that during recruitment, many police departments did not focus on the qualities that are important to policing, such as a high degree of intelligence, education, tact, sound judgment, physical courage, emotional stability, impartiality, and honesty, which are generally lacking in their time of duty as a result of inadequate education during training and recruitment.

The study further discovered that inadequate funding of the Nigerian Police Force is another factor militating against the effective outcome of criminal profiling in the Kogi State Command as revealed by a significant majority, i.e., 208, representing 61% of the respondents. It is a fact that investigators need motivation, modern equipment, and vehicles to be committed, so if their pay packet is meagre, it will indirectly affect their performance in profiling offenders.

This finding is also in tandem with the submissions of scholars such as Elgege (2006), Otuba and Coker (2006), among others, who posited that in the Nigerian criminal justice system, when a crime is reported at a police station, the practice is for the complaint desk officer to request money to purchase stationery to record the complaint and open a file. Afterwards, where the need arises to visit the scene of the crime, the complainant must provide transportation, because there is usually no vehicle attached to the criminal investigations department. If the crime involves a murder, the complainant or the accused is called upon to pay for a post-mortem examination because funds are not available for such activities. When investigations have been completed, the complainant or the accused person is also called upon to provide funds for the duplication of the investigation case file. It is clear from the foregoing that criminal investigations and profiling are underfunded in Nigeria and that constitutes an obstacle to effective criminal profiling.

The findings of this study also justified the theoretical framework applied in the study, i.e., the personality theory of crime, which is premised on psychological profiling, a method of suspect identification which seeks to identify a person's personality characteristics based on things done or left at the crime scene and then generates personality profiles in order to correctly identify offender features from crime scene details. The prior understanding of individual behaviour and personality attributes can help criminal profilers such as Divisional Crime Officers (DCOs), Inspector Crime

Officers (ICOs) and Investigative Crime Officers (ICOs) to correctly predict the likely perpetrators of a particular criminal behaviour.

### **Conclusions**

After a critical examination of the study, it can be safely concluded that criminal profiling is very relevant to the Nigerian Police Force but not effective and sufficiently reliable to be admissible in all cases. Because with profiling evidence, it is easier to prove innocence than guilt, but this does not mean that it is not reliable in some cases. And so, only the Divisional Crime Officers, Inspector Crime Officers, and Investigative Crime Officers can qualify as expert profilers, either by knowledge, skill, experience, training, or education, but criminal profiling, as we have seen, is supposed to fall under a specialized field of knowledge. Profilers, who are supposed to be criminal investigators, have mostly taken on the role of criminal prosecutors in Kogi State Police Command. This is one of the problems that makes it hard to know how reliable it is.

### **Recommendations**

Based on the findings of this study, the researcher suggested the following recommendations:

To have a reliable profiling outcome, profilers in the Nigeria Police Force should possess strong critical thinking skills using logic and reasoning, strong intuition and analytical skills, emotional detachment, and an understanding of criminal minds and psychology.

Government agencies and policies should entrench the central database for all Nigerians to enable quick tracking of criminals by profilers because sensitive information such as personal data is necessary for an effective and reliable outcome of criminal profiling.

Having discovered that lack of professionalism is a challenge to effective criminal profiling, NPF should create an offender profiling department different from the Criminal Investigation/Intelligence Department (CIID) and recruit trained psychologists who are professionals with appropriate skills and expertise in the area, because if profiling is being handled by such experts, then the outcome would be more reliable.

The police should be well remunerated to boost their morale, increase their motivation and enthusiasm to utilize with dedication the apparatus for profiling. They need better funding as well, in order to procure the necessary computer devices and gadgets, motor able vehicles, and forensic laboratory equipment to enhance their performance in profiling criminals. Similarly, police management should remind citizens of the importance of always cooperating and working with the police in order to provide adequate and timely information on the activities of suspected and even suspicious people in their neighbourhood.

### **Limitations of the Study**

The major limitation of this research work is that the study was limited to using only a questionnaire and an interview for data gathering, and even the interview involved only four respondents, which may not be enough for diverse responses. Focus Group Discussion (FGD), on the other hand, would have helped to get more detailed responses from more than four people.

The study also sampled only 4 Police Area Commands out of the 10 Area Commands in Kogi State Police Command, and the implication of this is that since a significant majority of the population in the study area was not covered, the results of the study may not be adequately generalizable.

Moreover, the quota sampling technique as adopted in this study is not the best and most appropriate for a study of this nature. Using probability sampling techniques would have made the findings of this study more reliable and generalizable.

### **Suggestions for Further Studies**

A comparative study on the problems and prospects of globalization in criminal profiling exercise should be carried out.

An exploratory study should be embarked upon on the need for Internet Communication Technology (ICT) in effective criminal profiling in Nigeria.

### **Availability of data and material**

Data generated for this research is available on reasonable request

### **Competing interests**

The authors declare that they have no competing interests.

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