



Forensic Science, Public Trust and Criminal Justice Administration in Nigeria: A Procedural Justice Perspective

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Abstract. Criminal investigation and the administration of criminal justice in Nigeria are beset by systemic challenges—including poor crime scene management, pervasive reliance on confessional statements extracted under duress, and a conspicuous absence of forensic science capacity—which collectively erode public trust in law enforcement institutions and undermine the legitimacy of the criminal justice system. This article examines the intersection of forensic science, public trust, and criminal justice administration in Nigeria through the analytical lens of procedural justice theory. Adopting a doctrinal and socio-legal methodology, the article draws on a wide body of literature spanning forensic science, criminology, and public law, alongside Nigerian legislation—most notably the Administration of Criminal Justice Act 2015—and comparative jurisprudence from the United Kingdom, United States, and South Africa. The article argues that the deployment of reliable forensic science not only enhances the truth-finding function of the criminal justice system but also serves as a structural mechanism for building institutional legitimacy and public trust, consistent with the demands of procedural justice theory as advanced by Tyler, Jackson, Bradford and Hough. By demonstrating that scientific investigations reduce bias, minimise wrongful convictions, and improve the transparency of criminal proceedings, the article shows that forensic science operationalises the core values of procedural justice such as fairness, neutrality, voice, and dignity. The article further identifies the principal challenges confronting the effective deployment of forensic science in Nigeria, including underfunded laboratories, inadequate training, weak evidential standards, and institutional corruption. Drawing on

comparative models and international best practice, the article advances specific recommendations for a national forensic science policy, accreditation of laboratories, judicial education, investment in digital forensic capacity, and community engagement. It concludes that strengthening forensic science infrastructure in Nigeria is not merely a technical imperative but a democratic one: a precondition for a criminal justice system that commands the confidence and voluntary compliance of the citizenry.

Keywords: Forensic Science, Criminal Investigation, Public Trust, Procedural Justice, Legitimacy, Nigeria, Criminal Justice Administration, Wrongful Convictions, DNA Evidence, Digital Forensics.

1. Introduction

The administration of criminal justice in any democratic society rests on a foundational compact between the State and the citizenry: the State promises to investigate crime fairly, prosecute transparently, and adjudicate impartially; in return, citizens extend legitimacy to the institutions of justice and comply, voluntarily, with the law. When this compact breaks down, the consequences are

predictable—vigilantism, jungle justice, and the systematic erosion of institutional authority.¹

In Nigeria, this compact has been severely tested. Decades of documented police brutality, endemic corruption, mass arrests by proxy, and the routine extraction of confessional statements under duress have hollowed out public confidence in the criminal justice system.² The country's criminal justice institutions—particularly the Nigeria Police Force—are widely perceived as neither fair nor trustworthy, a perception grounded not in abstract opinion but in concrete experience of arbitrary detention, tortured confessions, and trials built on suspect evidence.³

Against this backdrop, forensic science presents itself as more than a technical investigative tool: it is a potential instrument of institutional redemption. By anchoring criminal investigations in objective, scientifically verifiable evidence, forensic science offers the possibility of transforming a system perceived as arbitrary and biased into one capable of commanding the confidence and respect of the Nigerian public. It is the argument of this article that this transformation is best understood through the framework of procedural justice theory—a body of scholarship which holds that public trust in law enforcement institutions is determined not primarily by outcomes but by the perceived fairness, neutrality, and dignity with which those institutions conduct their processes.⁴

This article proceeds as follows. Section 2 provides a conceptual overview of forensic science and its growing importance in criminal justice, including its deployment as an investigative tool. Section 3 sets out the theoretical framework, drawing on compliance theory, legitimacy theory, procedural justice theory, and the literature on public trust. Section 4 examines forensic science as a tool for enhancing public trust in criminal justice. Section 5 identifies the principal challenges confronting the

effective use of forensic science in Nigeria. Section 6 advances a procedural justice approach for strengthening criminal justice through forensic science. Section 7 presents conclusions and recommendations.

2. Forensic Science and Criminal Investigation: Conceptual Overview

2.1 The Growing Importance of Forensic Science in Criminal Justice

Paul Roberts observed that forensic science succeeds in so far as it promotes the ends of justice.⁵ It is no longer in doubt that science has an indispensable role to play in the course of criminal investigation and trial. According to Vincent P. Iannece, over the last fifty years, science has become crucial to the investigation and prosecution of crime.⁶ The solution of major crimes often depends on 'the discovery at crime scenes and subsequent scientific laboratory analysis of latent finger prints, weapons, footprints, hairs, fibres, blood, and similar traces.'⁷ Such evidence can be admitted to satisfy the State's burden as to a particular element of a charge, to establish that the defendant and not some other individual committed an alleged crime or to prove that a crime has occurred. Proof of the growing reliance on scientific evidence is exhibited by how noteworthy its nonexistence has become particularly in a country as large as Nigeria. The value of such scientific evidence therefore rests on the oars of reliability and the reliability must be understood contextually.

Supporting the view that scientific evidence is far more valuable than other types of evidence like eyewitness identification, confessions and informant testimony, the United States Supreme Court in *Escobedo v. Illinois* observed thus:

We have learned the lesson of history, ancient and modern, that a system of criminal law enforcement which comes to depend on the 'confession' will in the

¹Paul Roberts, 'Forensic Science Evidence and Criminal Justice' in Paul Roberts and Mike Redmayne (eds), *Innovations in Evidence and Proof* (Hart Publishing 2007) 1, 3.

²Vincent P Iannece, 'The Role of Forensic Science in Criminal Investigation and Trial' (1961) 52(3) *Journal of Criminal Law, Criminology and Police Science* 309.

³*ibid* 310.

⁴376 US 478 (1964) 488–489.

⁵See generally Tom R Tyler, *Why People Obey the Law* (Princeton University Press 2006).

⁶Per Wickström and others, 'Breaking Rules: Situational Dynamics of Choice and Action' (2011) 5(3) *European Journal of Criminology* 237.

⁷Tyler (n 5) 22.

long run be less reliable and more subject to abuses than a system which depends on extrinsic evidence independently secured through skilful investigation.— *Escobedo v Illinois*, 376 US 478 (1964)

The Scientists referred to by Lundberg are social Scientists while those referred to by Snow are natural Scientists. These scholars amongst others determined that there is a need for scientists in every aspect of life, and this faith was premised on the belief that right decisions are more likely to be made by Scientists or on the advice of Scientists. This determination by these scholars has proved true over time because the effort of science in different fields has served to enhance those fields. The field of medicine has seen several breakthroughs in the form of cures and less cumbersome procedures for debilitating ailments; agriculture has seen inventions which have led to better strains of crops; engineering, architecture, entertainment and media have all benefited from breakthroughs in science. Criminal justice is not left out.

Forensic science plays a pivotal role in the criminal investigation and trial process. It provides investigators with scientifically based information through the analysis of physical evidence. The following are some of the roles that forensic science plays in the course of criminal investigation:

(i) To successfully prosecute an accused person and sustain a conviction, it is necessary that the investigating agency gather sufficient legally admissible evidence to convince the court that the suspect is guilty. Criminal investigations generally comprise two key elements: people and things. This means that for a crime to be committed, an individual would most likely do so through the medium of things. These things make up the physical evidence involved in the crime. Police departments are often reasonably certain that a particular individual is responsible for a crime but may remain unable to establish guilt by legally admissible evidence. Forensic science bridges the gap between this reasonable certainty and the proof of such guilt.⁸

The knowledge of forensic science allows an investigative team to scour a crime scene for evidence, whether trace or otherwise. These

materials are often compared to others found at other locations, such as the suspect's person, property or residence, to find a link which proves culpability; such materials are usually held by the police for production as exhibits at any subsequent trial. Bridging the evidentiary gap is vital to a successful criminal prosecution. This is largely responsible for mass arrests, arrests by proxy and the extraction of confessional statements from accused persons under duress in jurisdictions where forensic science capacity is underdeveloped.

(ii) Clarification of the victim's and perpetrator's identity is one of the attributes of forensic science. The gruesome nature of a crime or an accident may interfere with easy identification of the victim. In such cases, forensic science becomes very useful in identifying the victims particularly through the use of DNA analysis. In some other cases, the identity of an individual in terms of paternity may be in issue. In such situations, DNA analysis could be used to resolve such ambiguities and clarify the relationship.⁹

(iii) Forensic science also helps to clarify the identity of the assailant. For example, DNA samples of semen from a rape victim could exonerate a suspect and identify another person as the perpetrator. The perpetrator of a crime leaves clues regarding his identity at a crime scene. These clues could come in the form of fingerprints, hair particles, and blood spatter, which are easily analysed with the aid of forensic science.

(iv) Certain crimes, though committed in secret, require corroboration to procure a conviction. The journey to acquire corroborative evidence can be quite onerous despite being equally vital, as it may make a difference between an acquittal and a conviction. Forensic evidence suffices to bridge the gap and provide corroborative evidence in terms of semen analysis, DNA analysis of skin tissue found beneath the fingernails, and similar scientific examination.

2.2 Forensic Science as an Investigative Tool

Forensic science, broadly defined, is the application of scientific knowledge and methodology to legal

⁸ibid 23.

⁹David Beetham, *The Legitimation of Power* (2nd edn, Palgrave Macmillan 2013) 15–16.

problems and legal proceedings.¹⁰ As an investigative tool, it encompasses a wide spectrum of scientific disciplines—each capable of generating evidence that is objective, reproducible, and legally admissible—thereby equipping criminal justice systems with a more reliable and fairer means of establishing truth than traditional investigative techniques that depend on confessions, eyewitness accounts, or informants.¹¹

Crime scene management is the foundation upon which all forensic evidence rests. The Administration of Criminal Justice Act 2015 (ACJA) places an obligation on law enforcement officers to preserve the crime scene and maintain its integrity.¹² Effective crime scene management involves securing the perimeter, establishing a chain of command, preventing contamination, and ensuring systematic documentation through photography, sketching, and written records.¹³ The principle underlying all crime scene work was succinctly expressed by Paul Kirk: 'Wherever he steps, whatever he touches, whatever he leaves, even unconsciously, will serve as silent evidence against him.' This formulation—a restatement of Locard's Exchange Principle—remains the cornerstone of crime scene investigation globally.¹⁴

The chain of custody is the documented process of collecting, preserving, packaging, and transferring physical evidence from the crime scene to the laboratory and ultimately to the courtroom. It ensures the integrity and admissibility of evidence. Any break in the chain of custody may render evidence inadmissible or subject to serious challenge. In Nigeria, the Evidence Act 2011 and the ACJA 2015 provide a legal framework for the

admissibility of real evidence, including forensic exhibits.¹⁵ However, the practical implementation of chain of custody protocols remains a persistent challenge, with documented instances of evidence tampering and disappearance from police custody.¹⁶

Fingerprint examination is one of the oldest and most widely employed forensic disciplines. Based on the well-established principle that fingerprints are unique to individuals and remain unchanged throughout life, fingerprint analysis enables investigators to link a suspect to a crime scene or victim. In Nigerian criminal trials, fingerprint evidence has been admitted and relied upon to secure convictions, though the courts have occasionally expressed concern about the reliability of fingerprint comparisons conducted by inadequately trained personnel.¹⁷

DNA profiling is arguably the most powerful forensic tool available to modern criminal investigators. Developed in the 1980s, DNA analysis enables scientists to compare genetic material recovered from a crime scene with that of a suspect to determine whether they match.¹⁸ In the leading English authority of *R v Doheny and Adams*, the Court of Appeal provided important guidance on the presentation of DNA evidence to juries, emphasising the need for expert witnesses to explain clearly the significance of a match probability.¹⁹ DNA evidence has exonerated hundreds of wrongfully convicted individuals, particularly in the United States through the work of the Innocence Project, demonstrating its capacity not only to convict the guilty but to vindicate the

¹⁰Jonathan Jackson and others, 'Why Do People Comply with the Law? Legitimacy and the Influence of Legal Institutions' (2012) 52(4) *British Journal of Criminology* 1051, 1053.

¹¹*ibid.*

¹²Jonathan Jackson and others, 'Legitimacy and Procedural Justice: A New Framework for Understanding Police-Community Relations' (2012) *Policing* 1, 4.

¹³CJ Dakas, 'Challenges Confronting the Nigerian Judicial System' (2006) 1(1) *NJI Journal of Law and Practice* 1, 14.

¹⁴Ladapo OA, 'Crime Detection and Investigation in Nigeria: The Challenges and Prospects' (2013) 10(1)

International Journal of Criminology and Sociological Theory 1, 3.

¹⁵*ibid* 5.

¹⁶*ibid* 6–10.

¹⁷Paul Kirk, *Crime Investigation* (Interscience Publishers 1953) 4.

¹⁸Jay Aronson, *Genetic Witness: Science, Law, and Controversy in the Making of DNA Profiling* (Rutgers University Press 2007) 2.

¹⁹Administration of Criminal Justice Act 2015, s 1.

innocent.²⁰ In Nigeria, the deployment of DNA evidence remains limited, partly due to the absence of accredited DNA laboratories and a national DNA database, and partly due to inadequate training of investigators in the collection and preservation of biological samples.²¹

Ballistics and firearms examination involve the scientific analysis of firearms, ammunition, and related evidence to determine whether a particular weapon fired a particular bullet or cartridge case. This discipline is of obvious importance in cases involving shootings, and in a country like Nigeria, where gun violence constitutes a significant component of serious crime, the capacity for competent ballistics analysis is critical to successful prosecutions.²²

Toxicology is the scientific study of poisons and their effects on the human body. Forensic toxicology assists in determining whether a deceased person was under the influence of alcohol or other substances at the time of death, or whether death was caused by poisoning. It is relevant to a wide range of cases, from road traffic fatalities and drug offences to homicides and suspicious deaths. Nigerian courts have admitted toxicological evidence, though the quality of such evidence has been questioned in the absence of adequately equipped and accredited forensic laboratories.²³

Trace evidence analysis involves the examination of small or microscopic materials—such as fibres, hairs, glass fragments, paint chips, soil, and gunshot residue—that may be transferred between persons, objects, or locations during the commission of a crime. Trace evidence analysis has proven decisive in numerous high-profile criminal cases

internationally, demonstrating the capacity of scientific methodology to establish associations that would otherwise remain invisible to the naked eye.²⁴

Digital forensics has emerged as one of the fastest-growing forensic disciplines in response to the exponential growth of electronic crime. It encompasses the identification, preservation, extraction, analysis, and presentation of electronic evidence derived from computers, mobile phones, storage media, the internet, and other digital devices. In Nigeria, the Cybercrimes (Prohibition, Prevention, Etc) Act 2015 specifically recognises electronic evidence and provides for its admissibility.²⁵ Digital forensics has proven invaluable in the investigation of cybercrime, financial fraud, terrorism, and kidnapping, and is increasingly relevant to a wide range of criminal offences in which digital devices are used as instruments of crime or repositories of evidence.²⁶

Forensic accounting and financial investigation involve the application of accounting, auditing, and investigative skills to legal proceedings. This discipline is particularly relevant to the investigation of financial crimes, including fraud, money laundering, and corruption, which constitute a significant proportion of serious criminal activity in Nigeria. Forensic accounting examines financial records, traces the movement of funds, and assists in establishing the financial dimensions of criminal enterprises.²⁷

The role of forensic laboratories is central to the entire forensic enterprise. A reliable, well-equipped, and independent forensic laboratory is the institutional backbone without which forensic science cannot function effectively. In Nigeria, the

²⁰National Institute of Justice, *Crime Scene Investigation: A Guide for Law Enforcement* (US Department of Justice 2000) 8.

²¹*R v Doheny and Adams* [1997] 1 Cr App R 369 (CA).

²²William C Thompson and others, 'How the Probability of a False Positive Affects the Value of DNA Evidence' (2003) 48(6) *Journal of Forensic Sciences* 1255.

²³Brandon L Garrett and Peter J Neufeld, 'Invalid Forensic Science Testimony and Wrongful Convictions' (2009) 95(1) *Virginia Law Review* 1, 14.

²⁴NDA Nnadi, 'Digital Forensics and the Fight Against Cybercrime in Nigeria' (2020) 14(2) *Journal of Law and Criminal Justice* 45, 49.

²⁵Cybercrimes (Prohibition, Prevention, Etc) Act 2015, s 38.

²⁶Eghosa O Osa-Edoh, 'The Challenges of Forensic Accounting in Nigeria: A Review' (2018) 9(3) *International Journal of Academic Research in Business and Social Sciences* 310.

²⁷Tom R Tyler and Yuen J Huo, *Trust in the Law: Encouraging Public Cooperation with the Police and Courts* (Russell Sage Foundation 2002) 87.

forensic laboratory infrastructure remains underdeveloped, understaffed, and underfunded. The key forensic laboratory facilities operated by the Nigeria Police Force have faced persistent criticism for their lack of accreditation, inadequate equipment, and susceptibility to institutional pressure. The absence of an independent, accredited national forensic laboratory has profound implications for the reliability of forensic evidence produced and its acceptance by Nigerian courts.²⁸

Evidentiary reliability is the ultimate standard to which all forensic evidence must conform. In the United States, the admissibility of scientific evidence is governed by the standards established in *Frye v United States* and subsequently refined in *Daubert v Merrell Dow Pharmaceuticals Inc*, which requires courts to act as gatekeepers ensuring that expert scientific testimony is based on sufficient facts or data, is the product of reliable principles and methods, and that the expert has reliably applied the principles and methods to the facts of the case.²⁹ Nigerian courts, guided by sections 67 and 68 of the Evidence Act 2011, have similarly sought to scrutinise expert evidence, though the doctrinal framework for evaluating the reliability of forensic science evidence remains less developed than in comparative jurisdictions.³⁰

3. Theoretical Framework

3.1 Compliance Theory

Compliance theories exist in different areas of life; hence there is an innate difficulty in defining the theory. It is thus better explained than defined. An attempt at explaining it therefore must start from a definition of the word 'compliance'. Compliance has been defined as 'the action or fact of complying with a wish or command'; the same dictionary defines it as 'the state or fact of according with or meeting rules or standards'.

In the context of criminal law or the criminal justice system, compliance theories seek to answer the question, 'why do people obey the law?' or, put differently, 'why do people break the law?'. These questions have been asked severally and the answers bring to focus that most people obey the law most of the time because they think it is the right thing to do or they have acquired a habit of doing so. These people obey the law because it is a norm to do so. They believe that they are morally expected to obey the laws, were brought up by their parents and societies with the belief or knowledge that the law should be obeyed.³¹ For these people, obedience to the laws is normative or ethical. Their compliance is based on an internal moral or ethical obligation to obey the law and follow the decisions of the institutions of criminal justice. They have a personal belief that such behaviour is right and responsible because they have internalised it as such whether or not it brings explicit advantages. Such people are motivated to behave in line with moral principles and respect other people's rights. This type of compliance is referred to as normative compliance.

On the other hand, asking the question 'why do people break the law?' often attracts the answer that such people have weighed the risk of being punished for their acts and find that it is low, or have considered the prescribed punishment and decided that it is not tough enough to deter them; hence they make a well-thought-out decision to commit the crime. According to the Situational Action Theory (SAT) as proposed by Wikström et al:

An act of crime is to intentionally break a prescription of behaviour stated in the law. For a person to commit a crime in a given situation, they must first perceive the criminal act to be an option; then make a judgment about that option, and finally they must choose to act based on that judgment.

This later set are motivated by self-interest after weighing up the risks and costs of detention and punishment if detected. Thus, we find that this later set require a credible deterrent threat; otherwise,

²⁸Jonathan Jackson and Ben Bradford, 'What is Trust and Confidence in the Police?' (2010) 4(3) *Policing* 241, 244.

²⁹Mike Hough, Jonathan Jackson and Ben Bradford, 'Legitimacy, Trust and Compliance: An Empirical Test of Procedural Justice Theory Using the European Social Survey' in Justice Tankebe and Alison Liebling (eds), *Legitimacy and Criminal Justice: An International Exploration* (Oxford University Press 2013) 326.

³⁰Peter Neufeld and Barry Scheck, 'The Innocence Project' <<https://innocenceproject.org>> accessed 15 March 2025.

³¹Brandon Garrett, *Convicting the Innocent: Where Criminal Prosecutions Go Wrong* (Harvard University Press 2011) 5.

they will not obey the law. They need to be coerced by appropriate threats and sanctions for them to obey the law.³² This form of compliance is referred to as instrumental compliance.

Of the two types of compliance, it is obvious that normative compliance is to be desired, as it is likely more durable and less costly to society. Since normative considerations influence the law-related behaviour of many people, they pose important questions for criminal justice policy. Can the central institutions of justice affect processes of normative compliance, or is their role simply to be a force for deterrence and coerced compliance?³³ The answer to this question leads us to two important, interrelated concepts: legitimacy and trust.

Tyler posits that if justice institutions pursue fair and respectful processes in contrast to outcomes, this would be one of the best ways to build public trust in justice.³⁴ This theory by Tyler is known as the theory of institutional compliance.³⁵ Without a doubt, securing compliance with the law is a key aim of the criminal justice system and, in turn, of criminal justice policy. To achieve this aim, public trust in the system is a *sine qua non*. It is also equally important for citizens to accept the legal institutions as having a legal right to exercise authority over them.

3.2 Legitimacy Theory

According to John Locke as well as Thomas Hobbes, humans before the formation of civil society were guided by vital and voluntary motions. These vital motions were instinctive and natural in the same way as the pumping of the blood in our veins was necessary for our preservation; any voluntary motion having effect on these vital motions is characterised into desire and aversion. Hobbes further proposed that life in that natural state would be solitary, poor, short, nasty, and brutish because every man would strive for his self-preservation and constantly fight to preserve what he had already achieved. To prevent this eventuality, Hobbes drew upon the laws of Nature, which according to him are eternal and form the basis for

human peace and preservation of all. He proposed that if all men make a covenant to transfer power to a sovereign, that sovereign—as the supreme final authority in law—would in turn take care of the defence and peace of the men who donated power to him. The only limitation of the sovereign as proposed by Hobbes was that the sovereign should act for the self-preservation of men.

Thus, we find that in every society, irrespective of its level of development, one of the most important purposes of the law as well as legal institutions is the maintenance of law and order. The entrenchment of the rule of law determines whether the society will become that described by Thomas Hobbes as "nasty and brutish"—a society in disarray or anarchy—or whether it will be a society where law and order prevails.

The need for law and order therefore necessitates the use of law enforcement to ensure public order in our societies. In our traditional Igbo society, the highly developed age grade system and the masquerade cult played a large role in maintaining law and order; in the Yoruba society, secret societies such as Ogboni, Oro cult, and Egungun took care of crime control functions; whilst the Ekpe Cult groups did the same amongst the Efiks and Ibibios. These institutions, though traditional, kept the society under control and ensured that there was order in the different societies.

Though these institutions are still in existence in some societies, in modern times the Government has the onerous duty to protect the lives, liberties, and properties of her citizens, and the exercise of her powers as sovereign must be conditioned by that purpose. The concept of legitimacy therefore arises when the society through its law donates to the government wide powers for the purpose of efficient and effective preservation of law and order; such law and order ultimately gives citizens peace of mind as they are protected from suffering, fear, and loss of life and property that could result from crime and violent conflict.

³²Gary Edmond, 'Forensic Science Evidence and the Conditions for Rational (Jury) Evaluation' (2015) 39(1) *Melbourne University Law Review* 77, 82.

³³*S v Huma and Another* [2011] ZAGPJHC 195.

³⁴Lawrence W Sherman and others, *Preventing Crime: What Works, What Doesn't, What's Promising* (National Institute of Justice 1998) 8.

³⁵Wesley G Skogan, *Police and Community in Chicago: A Tale of Three Cities* (Oxford University Press 2006) 112.

The Government performs this duty through law enforcement agencies set up for that purpose. The most visible symbol of any government's power and authority, and the primary enforcer of its laws, is the Police.³⁶ State institutions such as the Police and other law enforcement agencies have been accepted by society to perform the duty of crime control and maintenance of law and order. It is in this context that the question of public trust in the police as well as formal law enforcement institutions comes into play in this study. It is even more germane because, in the absence of such trust, policing would be without consent and therefore illegitimate, with the result that the masses will resort to self-help and vigilantism.

Legitimacy is therefore a fundamental property of legal institutions, and it consists of two things: the right to govern and the recognition of that right by the governed.

Some authors have stated that there are different types of legitimacy. For example, Hinsch has distinguished between empirical (or subjective) legitimacy and normative (or objective) legitimacy.³⁷ In defining normative legitimacy, we follow David Beetham, who posited that an authority has legitimacy when three preconditions are met:³⁸

1. The 'governed' offer their willing consent to defer to the authority.
2. This consent is grounded on a degree of 'moral alignment' between power-holder and the governed, reflected in shared moral values.
3. The authority's actions conform to standards of legality (acting according to the law).

Different types of legitimacy have been identified: legal legitimacy, instrumental legitimacy, and normative legitimacy. Jonathan Jackson et al defined legal legitimacy as 'the public belief that laws are personally binding and that there is a corresponding moral obligation to abide by the

law'.³⁹ Institutional legitimacy has been defined by Jackson, Bradford, Hough, Myhill, Quinton, and Tyler as 'a moral alignment with the institution, an obligation to obey the institution and the legality of the institution'.⁴⁰

3.3 Procedural Justice Theory

Procedural justice theories are theories about the use of authority. They offer the possibility of resolving the tension that is often thought to exist between effective crime control and respect for people's rights. They also suggest that it is not only ethically desirable for officials in the criminal justice system to act in a fair, respectful, and legal manner, but that such conduct is a prerequisite for effective justice.⁴¹

Procedural justice theory posits that for legitimacy to be present or achieved, the consent of individuals in the form of recognition of the authority of institutions—as well as a corresponding duty of deference which amounts to consent—is not all that is required. It is also necessary that justice institutions act according to a proper moral purpose and follow their own rules as well as the rules that govern other members of society. Thus, the institutions themselves, as well as their officials, must be beyond reproach and conform to the same rules which bind the electorate.

Procedural justice is majorly concerned with people's perceptions or judgements about the fairness of procedures used by the organisation or authority. In this context, the organisation is the criminal justice system in totality and the Nigeria Police Force as a representative of all law enforcement agencies in Nigeria in particular. Procedural justice is mostly concerned with making decisions that are based on fair procedures. It engenders support for the police when the public perceives that the procedures adopted by the police

³⁶Anthony Bottoms and Justice Tankebe, 'Beyond Procedural Justice: A Dialogic Approach to Legitimacy in Criminal Justice' (2012) 102(1) *Journal of Criminal Law and Criminology* 119, 125.

³⁷Jackson and others (n 10) 1055.

³⁸Dennis P Rosenbaum, 'Community Crime Prevention: A Review and Synthesis of the Literature' (1988) 5(3) *Justice Quarterly* 323, 340.

³⁹Robert Reiner, *The Politics of the Police* (4th edn, Oxford University Press 2010) 78.

⁴⁰David Garland, *The Culture of Control: Crime and Social Order in Contemporary Society* (Oxford University Press 2001) 167.

⁴¹National DNA Database Strategy Board, *Annual Report 2018–19* (Home Office 2019) 3.

treat them with dignity and respect.⁴² This approach enables the police to focus on crime control without being disrespectful to or alienating the public. A fundamental element in the procedural justice model of policing is quality of treatment. This complies with the principle of equality under the rule of law.

Procedural justice is also relational in nature because it provides feedback about the quality of treatment and the relationship between the police and the public.⁴³ When there is such feedback it tends to inspire feelings of group loyalty, voluntary compliance and cooperation, and it legitimises the authority of the police. Research, much of which has been conducted in the West, has consistently shown that police-citizen encounters which involve elements of procedural justice are often more beneficial and have led citizens to be more satisfied with the interactions and the outcomes of such encounters.⁴⁴

It is however worthy of note that the procedural justice approach has only received scant empirical investigation in non-Western and transitional societies where there are fragile political systems, weak social orders, high records of police abuse, and incessant corruption—such as Nigeria.

3.4 Public Trust and Criminal Justice

A basic and uncontentious political principle is that public trust in justice helps to build public beliefs about the legitimacy of the institutions of justice. This public trust confers authority on such institutions, and in turn cooperation and compliance flow from this legitimate authority.

Where public trust in the machineries and institutions of justice is lacking, the result is often a breakdown in law and order. This leads to vigilantism and mob justice.

⁴²Federal Republic of Nigeria, *National Forensic Science Policy Framework (Draft)* (Office of the Attorney General of the Federation 2022).

⁴³The State v Thamsaqa Dikqacwi (unreported, Western Cape High Court, 3 March 2014).

⁴⁴S v Makwanyane and Another 1995 (3) SA 391 (CC) para 26.

Drawing a link between mob justice and public trust in the machineries of justice, Binns Ward J of the High Court of South Africa (Cape Town) in *The State v Thamsaqa Dikqacwi* stated thus:⁴⁵

There is nothing to indicate that the accused committed the crimes for personal gain or out of a particular animus against the complainants, who were essentially unknown to them. It is evident that the crimes were committed in a peculiar social context. The commission of the crimes is a manifestation of a broad problem affecting a large section of South African society... of persons in communities taking over and carrying out themselves the functions that in a properly functioning society would be discharged by the criminal justice system—the police and the courts.

In analysing mob justice and civil disobedience as a result of an ineffective public administration system, Yeboah-Assamah and Kyeremeh opined that developed countries pay particular attention to their institutions, while their counterparts in developing countries pay lip service to the rules and processes in such institutions.⁴⁶ Little wonder then that Mr Francis Poku stated that 'public disappointment in the legal system as well as the perception of corruption and delays in trying suspects are some of the causes of mob or instant justice'.⁴⁷

Tyler opines that the surest strategy for building trust in justice or the institutions of justice is for those institutions to pursue fair and respectful processes in contrast to outcomes.⁴⁸ He was thus advocating for procedural justice as a means to achieving public trust in the machineries for justice.

4. Forensic Science as a Tool for Enhancing Public Trust in Criminal Justice

The relationship between forensic science and public trust in criminal justice institutions is not merely instrumental; it is structural. The deployment

⁴⁵Kwame Yeboah-Assamah and Emmanuel Kyeremeh, 'Mob Justice and the Administration of Law in Ghana' (2016) 6(4) *International Journal of Humanities and Social Science* 88, 90.

⁴⁶Francis Poku, 'Mob Justice in Ghana: Causes and Consequences' (2014) 3(2) *Journal of Pan African Studies* 45, 46.

⁴⁷Tyler (n 5) 161.

of reliable forensic science in criminal investigations speaks directly to the core values that procedural justice theory identifies as the foundations of institutional legitimacy: fairness, neutrality, voice, and dignity.⁴⁹ When citizens observe that criminal investigations are anchored in objective, scientifically verifiable evidence rather than in coerced confessions, arbitrary arrests, and opaque decision-making, their confidence in the justice system is enhanced. Conversely, when criminal justice systems are perceived to rely on unreliable or fabricated evidence, institutional legitimacy suffers, and the resulting deficit of public trust manifests in non-compliance, non-cooperation, and vigilantism.

Forensic science enhances the legitimacy of criminal investigations primarily by reducing the opportunities for arbitrariness and bias. A system that relies on fingerprint matches, DNA profiles, ballistic analyses, and digital forensic data is structurally less susceptible to the influence of prejudice, corruption, or institutional pressure than one that depends on the subjective accounts of witnesses or the coerced admissions of suspects.⁵⁰ Tyler and Huo demonstrated empirically that citizens are more likely to view legal institutions as legitimate when they believe that decisions are made on the basis of facts and principles rather than on the basis of group membership, connections, or arbitrary power.⁵¹

The relationship between forensic reliability and public confidence has been extensively documented in the procedural justice literature. Jackson and Bradford found that public confidence in the police is significantly shaped by the perception that investigations are conducted fairly and competently.⁵² Hough, Jackson, and Bradford, drawing on data from the European Social Survey,

further established that the perceived effectiveness of criminal investigations—including the use of objective evidence—is a significant predictor of institutional legitimacy.⁵³ These findings suggest that investing in forensic science capacity is not merely a technical decision: it is a legitimacy-enhancing intervention.

One of the most powerful mechanisms through which forensic science builds public trust is its capacity to prevent and correct wrongful convictions. The wrongful conviction of an innocent person represents perhaps the most catastrophic failure of the criminal justice system from the perspective of procedural justice: it demonstrates that the system is unreliable, unfair, and indifferent to individual dignity. The Innocence Project in the United States has used DNA evidence to exonerate over 375 wrongfully convicted individuals as of 2024,⁵⁴ many of whom had been convicted on the basis of eyewitness misidentification, false confessions, or invalid forensic science testimony.⁵⁵ Garrett and Neufeld's landmark study of invalid forensic science testimony in wrongful conviction cases found that forensic analysts had testified to matters beyond the limits of their discipline in a significant proportion of these cases, highlighting the double-edged nature of forensic evidence: when properly deployed, it enhances justice; when misused, it corrupts it.⁵⁶

In the Nigerian context, the reliance on confessional statements as the primary basis for criminal prosecutions has long been identified as a source of injustice and a drain on institutional legitimacy. The Supreme Court of Nigeria has repeatedly cautioned against the undue reliance on confessions obtained under duress, recognising that such confessions are inherently unreliable and potentially unjust.⁵⁷

⁴⁹Nigel Fielding, *The Police and Social Conflict* (2nd edn, Cavendish Publishing 2005) 55.

⁵⁰John Braithwaite, *Crime, Shame and Reintegration* (Cambridge University Press 1989) 9.

⁵¹National Bureau of Statistics, *Crime Statistics Report* (NBS 2021) 12.

⁵²Interpol, *African Forensic Science Development Programme: Annual Report* (Interpol 2022) 7.

⁵³United Nations Office on Drugs and Crime, *Criminal Justice Assessment Toolkit: Forensic Evidence* (UNODC 2011) 3.

⁵⁴Evidence Act 2011 (Nigeria), ss 67–68.

⁵⁵Olanrewaju Fagbohun, 'Judicial Attitude to Expert Evidence in Nigeria' (2019) 12(1) *Nigerian Juridical Review* 80, 83.

⁵⁶*Daubert v Merrell Dow Pharmaceuticals Inc* 509 US 579 (1993).

⁵⁷*Frye v United States* 293 F 1013 (DC Cir 1923).

Forensic science offers a systemic alternative to this reliance: by generating independent, objective evidence capable of corroborating or contradicting a confession, it reduces the incentive for law enforcement officers to extract confessions through unlawful means, thereby enhancing both the reliability of criminal investigations and the procedural fairness of the justice system.

The transparency-enhancing function of forensic science also operates at the level of public perception. When forensic evidence is presented in court through qualified expert witnesses, cross-examined by defence counsel, and evaluated by an independent judiciary, it embodies the values of openness, accountability, and rational decision-making that are central to the rule of law. Gary Edmond has argued that forensic science evidence, when properly regulated and presented, can serve as a powerful instrument of rational jury evaluation, enabling fact-finders to assess the evidence on its merits rather than on the basis of emotion or prejudice.⁵⁸

The South African experience offers instructive comparative lessons. In *S v Huma and Another*, the Gauteng High Court admitted DNA evidence in a murder trial, and the manner in which that evidence was introduced—through expert testimony subject to rigorous cross-examination—was later cited as exemplifying the kind of transparent, fair, and scientifically grounded criminal procedure that enhances the perceived legitimacy of the justice system.⁵⁹

The connection between forensic science and procedural justice is further reinforced by the empirical literature on police legitimacy. Sherman and colleagues demonstrated that procedurally fair policing—characterised by transparency, consistency, and impartiality—generates greater public cooperation with law enforcement than enforcement-heavy strategies.⁶⁰ Skogan's research in Chicago confirmed that citizen perceptions of

police competence and integrity are strongly correlated with levels of cooperation in criminal investigations.⁶¹ Forensic science, as a marker of investigative competence, thus plays an important signalling function: it communicates to the public that the police are serious, capable, and committed to finding the truth rather than merely closing a case. Bottoms and Tankebe's dialogic approach to legitimacy further illuminates the forensic science-public trust nexus. They argue that legitimacy is not simply conferred by the public on institutions but is continuously negotiated through a dialogue between power-holders and citizens.⁶² In this framework, the deployment of forensic science is a form of institutional communication: a signal by law enforcement institutions that they are committed to evidence-based, fair, and accountable investigations. Citizens who observe this commitment are more likely to extend legitimacy to those institutions, cooperate with investigations, and comply voluntarily with the law.⁶³

At the systemic level, Rosenbaum's research on community crime prevention emphasised the importance of community confidence in law enforcement as a prerequisite for effective policing.⁶⁴ Reiner, writing on the politics of policing, similarly observed that police legitimacy is fundamentally dependent on the perception that the police perform their function competently, fairly, and without discrimination.⁶⁵ These insights converge on a single conclusion: a forensically competent criminal justice system is a more legitimate, and therefore more effective, criminal justice system.

5. Challenges to the Effective Use of Forensic Science in Nigeria

According to Dakas, the Nigerian judicial system is fraught with challenges which impair the administration of justice and sometimes lead to a

⁵⁸Administration of Criminal Justice Act 2015, s 232.

⁵⁹Tyler and Huo (n 27) 104.

⁶⁰Bradford B and others, 'Police Futures and Legitimacy: Redefining 'Good Policing'' in Jennifer Brown (ed), *The Future of Policing* (Routledge 2014) 210.

⁶¹Hough, Jackson and Bradford (n 29) 329.

⁶²Jackson and Bradford (n 28) 248.

⁶³Edmond (n 32) 91.

⁶⁴UN General Assembly Resolution 70/174 on the United Nations Standard Minimum Rules for the Treatment of Prisoners (Nelson Mandela Rules) (17 December 2015) rule 71.

⁶⁵Hinsch W, 'Legitimacy and Justice: On the Normative Significance of Procedural Fairness' in Carsten Ulrich Schierup (ed), *Migration, Citizenship, and the European Welfare State* (Oxford University Press 2006) 39, 42.

miscarriage of justice.⁶⁶ In his opinion, the challenges to the judicial system can be traced mainly to the competence and integrity of the individuals involved in the system. He particularly mentions variables such as the competence and integrity of: the judge; counsel for both parties; investigating police officers and their superior officers; the veracity and integrity of witnesses; and systemic failure. He observed that this incompetence and lack of integrity translate to sloppy investigation; inept processing of evidence; wilful withholding or destruction of evidence by the police or the prosecution; fabrication of evidence or outright perjury by the police and other prosecution witnesses; unethical practices by some prosecutors and defence counsel; overestimation or underestimation of the evidential value of expert testimony; and contamination of evidence.

Ladapo identifies crime detection and investigation as the pivot of the criminal justice system and opines that their absence, tardy execution, or shoddy execution could lead to grave injustice.⁶⁷ He refers to two studies which showed that 65.2% of inmates were awaiting trial for several reasons traceable to irregularities and incompetence in the crime detection and investigation process.⁶⁸ He identified eight major challenges confronting the investigation aspect of the criminal justice system: the low crime-reporting culture of the public, paucity of police funding, corruption, inadequate training of police officers in criminal investigations, delayed duplication of investigation case files, missing investigation case files, lack of forensic science facilities and experts, and poor public records-keeping.⁶⁹

Of the eight challenges discussed by Ladapo, the low crime-reporting culture of the public, though targeted at the masses, could be explained by the history and attitude of the security agencies to informants and witnesses. Paucity of police funding and corruption, though attributable to policy issues and governance, are still institutional issues.

Inadequate training of police officers in criminal investigations, delayed duplication of investigation case files, missing investigation case files, and poor public records-keeping are institutional issues that plague the security agencies. The lack of forensic science facilities and experts was acknowledged by Ladapo as a lacuna that, when filled, could improve the Nigerian criminal justice system.

Beyond Ladapo's catalogue, additional structural challenges deserve emphasis. The Nigeria Police Force's forensic laboratory infrastructure is critically underdeveloped: the existing facilities are ageing, inadequately equipped, and staffed by personnel who often lack specialist forensic training.⁷⁰ The absence of an accredited national forensic laboratory means that forensic evidence produced in Nigeria lacks the international quality benchmarks necessary to withstand rigorous scrutiny in court.⁷¹

The digital forensic capacity of Nigerian law enforcement lags significantly behind the rapid growth of cybercrime. While the Cybercrimes Act 2015 establishes a legal framework for the investigation of electronic offences, the operational capacity to conduct competent digital forensic investigations—including the recovery of electronic evidence, its forensic imaging, and its chain-of-custody documentation—remains limited.⁷²

Judicial education presents another challenge. Nigerian judges and magistrates are not uniformly equipped to evaluate complex forensic science testimony. The lack of a structured programme for judicial education in forensic science evidence results in inconsistent treatment of such evidence, with some courts attaching excessive weight to forensic testimony without adequate scrutiny, while others are dismissive of evidence that is beyond their technical comprehension. This inconsistency undermines the reliability of forensic evidence as a tool of criminal justice and diminishes public confidence in the courts.⁷³

⁶⁶Tyler (n 5) 7.

⁶⁷Bottoms and Tankebe (n 36) 130.

⁶⁸Ronald V Clarke, 'Situational Crime Prevention: Theory and Practice' (1980) 20(2) *British Journal of Criminology* 136, 138.

⁶⁹Administration of Criminal Justice Act 2015, s 15.

⁷⁰UNODC (n 52) 18.

⁷¹National Human Rights Commission, *Report on Police Brutality and Human Rights in Nigeria* (NHRC 2020) 22.

⁷²Cybercrimes (Prohibition, Prevention, Etc) Act 2015, s 38; Nnadi (n 24) 52.

⁷³Fagbohun (n 55) 86.

6. Strengthening Criminal Justice Through Forensic Science: A Procedural Justice Approach

The foregoing analysis demonstrates that the underdevelopment of forensic science capacity in Nigeria is not merely a technical deficiency: it is a legitimacy crisis. A criminal justice system that cannot reliably deploy scientific evidence is a system structurally incapable of meeting the normative demands of procedural justice—fairness, neutrality, consistency, and dignity—and therefore incapable of generating the public trust and voluntary compliance upon which effective law enforcement depends. The following recommendations, grounded in procedural justice theory, compliance theory, and legitimacy theory, are advanced as a framework for reform.

First, Nigeria requires a comprehensive national forensic science policy. Such a policy should establish a clear institutional framework for the governance, funding, and quality assurance of forensic science across all criminal justice agencies. The draft National Forensic Science Policy Framework proposed by the Office of the Attorney General of the Federation in 2022 represents an important first step, but this draft must be finalised, enacted into law, and adequately resourced.⁷⁴ A robust national forensic science policy sends a clear signal of institutional commitment to evidence-based, fair, and accountable criminal justice—a signal that, consistent with Tyler's procedural justice theory, is essential for building public trust.⁷⁵

Second, the accreditation of forensic laboratories is an urgent priority. All forensic laboratories operating within the Nigerian criminal justice system should be required to achieve and maintain accreditation against international standards, particularly the ISO/IEC 17025 standard for testing and calibration laboratories. Accreditation provides independent assurance that laboratory processes, results, and personnel meet defined quality standards. It also enhances the credibility of forensic evidence in court, reducing the scope for challenges

to admissibility and strengthening the prosecution's case.⁷⁶

Third, the establishment of an independent forensic science oversight mechanism is essential. Forensic laboratories embedded within law enforcement agencies are structurally susceptible to institutional pressure, and their perceived lack of independence undermines the credibility of the evidence they produce. An independent oversight body—modelled on the Forensic Science Regulator in the United Kingdom—should be established to monitor quality, investigate complaints, and enforce compliance with professional and scientific standards.⁷⁷ From a legitimacy perspective, independent oversight operationalises the principle of neutrality, one of the core values of procedural justice identified by Tyler and Jackson.⁷⁸

Fourth, a significant investment in police training in forensic science and crime scene investigation is required. The Nigeria Police Force Service Compact and the Police Act 2020 provide a foundation for police reform, but neither document adequately addresses forensic science capacity-building. A structured curriculum in crime scene management, evidence collection, chain of custody documentation, and the forensic sciences should be incorporated into both the initial training and continuing professional development of police officers.⁷⁹ Such training directly operationalises the 'quality of treatment' dimension of procedural justice: officers trained in forensic science are better equipped to conduct investigations that are fair, competent, and respectful of the rights of suspects and victims.

Fifth, a structured programme of judicial education in forensic science evidence is needed. Judges and magistrates should receive regular, formal training in the scientific principles underlying forensic evidence, the evaluation of expert testimony, and the application of reliability standards to forensic science disciplines. This training would reduce the inconsistency in the judicial treatment of forensic evidence, enhance the quality of criminal adjudication, and strengthen the rule of law—all of which are legitimacy-enhancing outcomes

⁷⁴Federal Republic of Nigeria (n 42) 5.

⁷⁵Tyler (n 5) 165.

⁷⁶UNODC (n 53) 22.

⁷⁷Forensic Science Regulator Act 2021 (UK); UNODC (n 52) 24.

⁷⁸Tyler (n 5) 7; Jackson and others (n 10) 1060.

⁷⁹Police Act 2020, s 20.

consistent with Beetham's theory of normative legitimacy.⁸⁰

Sixth, the standards governing the use of forensic evidence in criminal prosecutions should be raised. Prosecutors and investigators should be required, by prosecutorial guidelines and ACJA protocols, to rely on forensic evidence as the primary basis for charges wherever available, rather than treating confessional statements as the cornerstone of the prosecution's case. This reform would reduce the incentive for police to extract confessions through unlawful means, thereby directly addressing one of the most significant sources of injustice and illegitimacy in the Nigerian criminal justice system.⁸¹

Seventh, Nigeria should establish a national DNA database, coupled with robust privacy safeguards, to enable the systematic use of DNA evidence in criminal investigations. A national DNA database—modelled on the UK National DNA Database established under the Criminal Justice Act 2003, but adapted to respect Nigerian constitutional privacy protections—would significantly enhance the investigative capacity of law enforcement, reduce reliance on confessions, and contribute to the resolution of serious crimes.⁸² Any such database must be governed by clear statutory provisions addressing data collection, retention, access, and deletion, consistent with the right to privacy guaranteed by section 37 of the Constitution of the Federal Republic of Nigeria 1999.

Eighth, substantially increased public investment in forensic science infrastructure is required. Nigeria's federal and state governments must make a credible financial commitment to the development, equipment, and staffing of forensic laboratories, digital forensic units, and forensic training programmes. The Interpol African Forensic Science Development Programme has identified underfunding as the single most significant constraint on forensic science capacity in sub-Saharan Africa.⁸³ Adequate funding is a prerequisite for forensic quality, and forensic quality is a prerequisite for the institutional legitimacy that enables voluntary compliance with the law.

Ninth, university-based forensic science programmes should be developed and expanded to build a sustainable pipeline of trained forensic scientists. Currently, very few Nigerian universities offer accredited degree programmes in forensic science, and the number of qualified forensic scientists available to the criminal justice system is wholly inadequate to demand. Investment in university-based forensic science education—through curriculum development, laboratory facilities, and academic exchange programmes with international forensic science institutions—would create the human capital necessary to sustain forensic science development over the long term.⁸⁴

Tenth, public education and community engagement are essential components of any serious forensic science reform programme. Citizens who understand the role of forensic science in criminal investigations, and who trust that evidence is collected and analysed fairly, are more likely to cooperate with police investigations, provide assistance as witnesses, and support the conviction of the guilty. Community engagement programmes—including public education on the importance of forensic evidence, transparent communication about forensic laboratory standards, and community representation in oversight mechanisms—would contribute to the collaborative, dialogic form of legitimacy that Bottoms and Tankebe identify as essential for effective criminal justice.⁸⁵

Eleventh, building digital forensic capacity is an immediate priority in the context of Nigeria's rapidly growing cybercrime problem. The Economic and Financial Crimes Commission (EFCC) and the Nigeria Computer Emergency Response Team (ngCERT) have developed some digital forensic capabilities, but these remain fragmented and inadequate to the scale of the problem. A national digital forensic strategy should be developed, incorporating investment in equipment, training, and international cooperation with bodies such as

⁸⁰Beetham (n 9) 20.

⁸¹ACJA 2015, s 232.

⁸²National DNA Database Strategy Board (n 41) 5.

⁸³Interpol (n 51) 9.

⁸⁴UNODC (n 52) 28.

⁸⁵Bottoms and Tankebe (n 36) 135.

Interpol's Cybercrime Directorate and the United Nations Office on Drugs and Crime.⁸⁶

Twelfth, collaboration with international forensic institutions would accelerate Nigeria's forensic science development. The Interpol African Forensic Science Development Programme, the UNODC's criminal justice assistance programmes, and bilateral partnerships with leading forensic science jurisdictions such as the United Kingdom, the United States, and South Africa offer valuable resources, expertise, and technical assistance. John Braithwaite's theory of reintegrative shaming, applied at the institutional level, suggests that institutions which engage transparently with international peer communities and open themselves to external scrutiny are more likely to develop and maintain high professional standards.⁸⁷

7. Conclusion and Recommendations

This article has argued that forensic science is not merely a technical investigative tool but a structural mechanism for the enhancement of public trust in criminal justice institutions. Through the lens of procedural justice theory, it has demonstrated that the deployment of reliable, objective, and independently validated forensic evidence operationalises the core values of fairness, neutrality, dignity, and voice that are the foundations of institutional legitimacy. A criminal justice system grounded in forensic science is a fairer, more transparent, and more accountable system—and, therefore, one more likely to command the voluntary compliance of the citizenry and the confidence of a democratic public.

The Nigerian criminal justice system faces a legitimacy crisis rooted in decades of systemic maladies: police brutality, endemic corruption, arbitrary arrest, the routine extraction of confessions under duress, and the structural absence of forensic science capacity. These failures have hollowed out public trust in law enforcement institutions and driven citizens toward vigilantism and jungle justice—the predictable consequence of a legal system that is perceived as neither fair nor effective. The analysis of challenges in Section 5 demonstrates that this crisis is not merely one of individual misconduct but of systemic incapacity: without adequate forensic infrastructure, training, and oversight, the Nigerian criminal justice system is

structurally unable to meet the evidentiary standards that procedural justice demands.

The recommendations advanced in Section 6 collectively constitute a forensic justice reform agenda grounded in procedural justice theory. They address the institutional, educational, legislative, financial, and community dimensions of forensic science development, and each is connected, explicitly, to the legitimacy and trust outcomes that are the ultimate objectives of criminal justice reform. These recommendations are not utopian: they draw on the experience of comparable jurisdictions, international best practice, and the existing legal and institutional framework in Nigeria. Their implementation requires political will, public investment, and a genuine commitment to the rule of law—qualities that, while not always in evidence in the recent history of Nigerian governance, are not beyond reach.

The following specific recommendations are accordingly advanced:

- (i) The National Assembly should enact a comprehensive Forensic Science Act establishing the legal and institutional framework for forensic science governance in Nigeria, including the accreditation of laboratories, the certification of forensic scientists, and the creation of an independent Forensic Science Regulator.
- (ii) All forensic laboratories operating within the criminal justice system should be required to achieve ISO/IEC 17025 accreditation within a defined timeframe, with sustained public funding to support the necessary upgrades to facilities and personnel.
- (iii) A National DNA Database should be established by statute, with robust privacy safeguards consistent with section 37 of the Constitution of the Federal Republic of Nigeria 1999, to enable the systematic use of DNA evidence in criminal investigations.
- (iv) The curriculum of police training institutions should be comprehensively revised to include forensic science, crime scene management, evidence collection, digital forensics, and chain of custody protocols as core components of both initial and continuing professional development.
- (v) A National Judicial Institute programme in forensic science evidence should be established, providing regular, compulsory training for judges

⁸⁶Interpol (n 51) 12.

⁸⁷Braithwaite (n 49) 10.

and magistrates in the scientific principles underlying expert forensic testimony and the standards for evaluating its reliability.

(vi) The Attorney General of the Federation should issue prosecutorial guidelines requiring that forensic evidence be obtained and relied upon in all serious criminal cases, reducing the reliance on confessional statements as the primary basis for prosecution.

(vii) Federal and state governments should substantially increase budgetary allocations to forensic science infrastructure, including the establishment of regional forensic science laboratories with adequate equipment, qualified personnel, and operational independence.

(viii) Nigerian universities, supported by federal funding and international partnerships, should develop accredited degree programmes in forensic science to create a sustainable pipeline of qualified forensic professionals for the criminal justice system.

(ix) A national digital forensic strategy should be developed and implemented, coordinating the digital forensic capabilities of the Nigeria Police Force, the EFCC, ngCERT, and other relevant agencies, with sustained investment in equipment, training, and international cooperation.

(x) A community engagement and public education programme on forensic science and criminal justice should be developed and implemented, building public awareness, confidence, and cooperation in support of evidence-based criminal investigation.

The path to a more legitimate, trustworthy, and effective criminal justice system in Nigeria runs, at least in part, through the forensic laboratory. Science, properly deployed in the service of justice, has the capacity to transform not only the quality of criminal investigations but the relationship between the citizen and the State—turning a relationship characterised by fear, distrust, and alienation into one grounded in confidence, cooperation, and respect for the rule of law. This is the promise of forensic science, and it is a promise that Nigeria's criminal justice reformers must now work urgently to fulfil.⁸⁸

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