THE USE OF DNA EVIDENCE IN CRIMINAL TRIALS IN NIGERIA: WHETHER A CONCLUSIVE PROOF OF THE GUILT OF AN ACCUSSED

Augustine I. Orabueze, PhD[1]

Abstract
This article aimed to evaluate whether the use and admissibility of DNA evidence in criminal trials in Nigeria constitute conclusive proof of the guilt of an accused person. To achieve this aim, the study examined issues of relevance and admissibility that arise where DNA evidence is employed in criminal proceedings. Based on the analysis of disputes relating to the relevance and admissibility of DNA evidence, the study found that DNA evidence in criminal trials is generally corroborative rather than conclusive proof of guilt. It therefore operates in conjunction with other available evidence to establish the guilt of an accused person. The study also found that although DNA evidence is corroborative in nature, it has become a vital tool in crime detection. The presence of an accused person's DNA at a crime scene may constitute prima facie evidence linking the accused to the crime scene or victim. The study concluded that where DNA evidence is combined with other supporting evidence to establish a match in criminal trials, it can accurately identify perpetrators of crime, exonerate innocent persons, and enhance public confidence in the criminal justice system. To this end, the researcher recommends that the Nigerian government should provide the necessary legal frameworks, facilities, and funding to ensure that the legal system evolves in line with advances in forensic science. This will promote the effective utilization of DNA evidence in the Nigerian criminal justice system, which remains underutilized to date.

Keywords: *Forensic science, forensic evidence, DNA Evidence, DNA profiling, Criminal Trial Proof of Guilt, corroborative evidence.*

1.0 Introduction

Today, Deoxyribonucleic Acid (DNA) is frequently used in criminal trials to establish connection between an accused and alleged the committed crime. The analysis of DNA for human identification purposes has become an integral tool in identifying victims of atrocities; unidentified decedents; mass disaster victims; and individuals involved in police investigations.[2] The authors above also noted that through this investigative tool, unknown victims, suspects, and serial offenders have been identified. At the same time, wrongly charged and convicted individuals have been eliminated from investigations or released from custody following DNA testing.[3]

In the Nigerian courts, forensic evidence has become one of the most essential tools for establishing a fact or proving a guilty person, as well as exonerating an innocent person.[4] It houses a lot of applications ranging from DNA analysis to fingerprint matching, ballistic testing, toxicological reports, and digital forensics.[5]Undoubtedly, forensic evidence of which DNA evidence is one of its disciplines has widely been used and proved to be a valuable and transformational tool in the investigation and prosecutions of crimes in the world at large.

Flowing from the above perceived effectiveness of DNA evidence in criminal trials, scholars have linked DNA evidence as scientific proof that is assumed conclusive in the court room.[6]This research will examine the above assumption to ascertain whether DNA Evidence alone can be sufficient to establish the guilt of the accused in criminal trials. And whether DNA evidence in absence of any other corroborative evidence can establish the two elements of crime; the *actusreus* and *mens rea* against the accused.

---

[1] Lecturer, Department of Public Law, Faculty of Law, NnamdiAzikiwe University Awka, Anambra State, Nigeria. Email: izuorabueze@gmail.com or ai.orabueze@unizik.edu.ng

[2] AO Amankwaa & C McCartney, 'The Effectiveness of the Current use of Forensic DNA in Criminal Investigations in England and Wales (2021) *WIREs Forensic Science e1414*, 1-9 at p1 <https://doi.org/10.1002/wfs2.1414 >accessed on 3rd March 2026.

[3]*Ibid.*

[4]SA Wakili*et al***,** 'Legal Framework and Challenges Concerning Forensic Evidence in Nigeria' *Trunojoyo Law Review (TLR)* Volume 7 Number 1(2025), 33-64 at p38.

[5] K McFadzien *et al*., "The Evidence-Based Investigative Tool (EBIT): A Legitimacy-Conscious Statistical Triage Process for High-Volume Crimes," *Cambridge Journal of Evidence-Based Policing* 4, no. 3–4 (December 8, 2020): 218–32, https://doi.org/10.1007/s41887-020-00050-3.

[6]National Research Council (US) Committee on DNA Forensic Science, 'DNA Evidence in the Legal System' (1996) <https://www.ncbi.nlm.nih.gov/books/NBK232610/> accessed on 10th March 2026.

2.0 DNA Evidence as a Form of Forensic Evidence

Forensic Evidence is a key component of forensic science. The American Academy of Forensic Sciences described forensic science as any science used for the purposes of the law.[7] Forensic Science is widely used in the investigation of crimes, and is recognized as a valuable tool in administering justice.[8] Forensic evidence, on the other hand, involves a broad range of scientific disciplines, including DNA analysis, toxicology, ballistics, finger-printing, and digital forensics, all of which contribute valuable information for law enforcement agencies and courts, in the criminal justice system.[9]

Scholars have described the important roles forensic evidence plays in criminal justice system to include: offering insights through analysis of physical evidence and identifying crime offenders through personal markers such as fingerprints, footprints, blood drops, or hair, establishes connections between criminals and crimes through objects left at or carried from the scene, linking them to the victim, analysing crime scenes and finding out the killers or criminals, exonerating the accused when recovered samples fail to connect the accused to the crime scene and the victim, providing cogent evidence in uncovering and proving crime, among other roles.[10] In the contemporary world, the law recognises the growing transformational significance of forensic evidence in solving and prosecuting criminal cases.

Nowadays, DNA evidence has turned out to be one of the most vital and trusted forensic evidence employed in investigation and prosecution of criminal cases. Criminal cases have been exceptionally solved, and justice has been achieved since the combination of the forensic tool called DNA profiling from the early 1980s till date.[11] The new developments in DNA technology today have also enhanced the efficiency and reliability of DNA evidence in criminal trials.[12]In investigations where DNA evidence may be relevant, DNA analysis has a range of applications. These can be categorized into four broad scenarios: (a) suspect/individual corroboration or elimination—crime stain-to-known person matches; (b) cold hit—identification of unknown suspect via crime stain-to-database/archived reference matches; (c) next-generation applications, such as familial searching, genealogy database investigations, and DNA phenotyping; and (d) linked crime hit—identification of linked offenses/serial offenders via crime stain-to-crime stain matches.[13]

3.0 DNA Evidence and the Relevancy Requirement of the Nigerian Evidence Act

The Nigerian Evidence Act generally provides that the Act, 'shall apply to all judicial proceedingsin or before any court established in the Federal Republic of Nigeria.'[14] The provision of the Act above affirms the fact that the application and the use of DNA evidence in any trials in Nigeria is governed by the provisions of the Evidence Act.

The admissibility of Deoxyribonucleic Acid (DNA) evidence in Nigerian criminal trials is fundamentally anchored on the relevancy requirement set out in the Evidence Act 2011, which provides that evidence must be relevant to the facts in issue to be admissible.[15] Section 1 of the Act provides that 'evidence may be given in any suit or proceedings of the existence or non-existence of every fact in issue and of such other

---

[7] American Academy of Forensic Sciences, '*What is forensic science?'* (2025)<https://www.aafs.org/careers-forensic-science/what-forensic-science> accessed on 13th March, 2026.

[8] R Koul *et al*, 'Role of forensics in crime investigation - A review article'11(8), *International Journal of Research and Review*, 492–497.

[9] MMM Airout& SIA Azam, 'The use of Forensic Evidence in Jordanian Criminal Investigation and Trial, (2023) *Migration Letters*, <https://migrationletters.com/index.php/ml/article/download/5515/3781/15318>accessed on 10th March, 2026.

[10]Y Fatoki & D Anyasi, 'A Legal Prognosis of the Significance of Forensic Evidence in Criminal Investigation in Nigeria and South Africa' (2025) Vol. 19, No. 1 *AGORA International Journal of Juridical Sciences*, pp. 19-33 at p 20. <http://univagora.ro/jour/index.php/aijjs> accessed on 3rd March 2026. See also O Atoyebi& J Samaila, 'The Role of Forensic Science in Criminal Investigations and Admissibility of Forensic Evidence in Nigerian Court.' (2023) <https://omaplex.com.ng/the-role-of-forensic-science-in-criminal-investigations-and-admissibility-of-forensic-evidence-in-nigerian-courts/#_ftn2> accessed on 10th March, 2026.

[11]OC Maxwell & CC Prince, 'Application of DNA Forensic Evidence in Criminal Justice System' (2025) Volume X Issue III *International Journal of Research and Innovation in Applied Science (IJRIAS)*, 312-320 at p312.

[12]*Ibid*; see also JM Butler *et al*, 'STRs vs. SNPs: Thoughts on the future of Forensic DNA Testing' (2019) 43 *Forensic Science International: Genetics*, 1–8.

[13] AO Amankwaa & C McCartney, (n 2) at p 2.

[14] Evidence Act 2011 (as amended), Section 256(1).

[15]*Ibid*, Section 1. See also the Relevancy provisions of the Evidence Act in sections 4-13 of the Act.

facts as are thereafter declared to be relevant, and of no other.' Section 211 (1) of the Act also states that the Court shall admit the evidence if it thinks that the facts, if proved, '...would be relevant and not otherwise.'

The answer as to when a piece of evidence is relevant was given is many decided cases in Nigeria; for instance in *John v State*[16] the Nigerian Supreme court held that once an evidence is probative to the fact in issue, it is relevant and therefore, admissible and that evidence is relevant when it has any tendency to make a fact more or less probable than it would be without the evidence and the fact is of consequence in determining the action. In *Hamza v State*[17] the court per Okoro JSC noted that at this stage admissibility, one of the cornerstones of our Law of Evidence, is based on relevancy. A fact in issue is admissible if it is relevant to the matter before the Court. That it is correct to say that relevancy is a precursor to admissibility in our law of Evidence.

From that above dictates of the Evidence Act, is pertinent to underscore that in criminal trials, evidence can only allowed if it is relevant to the issue in dispute or issue sought to be proved. DNA evidence has been proven to be strongly relevant in linking suspects to crime scenes and victims of crime. DNA evidence has been useful in identification of perpetrators of crimes in criminal trials. DNA evidence has been considered to be the 'golden standard' in forensic science and has been regularly employed in criminal investigations.[18]Through this investigative tool, unknown victims, suspects, and serial offenders have been identified; at the same time, wrongly charged and convicted individuals have been eliminated from investigations or released from custody following DNA testing.[19] Under the Evidence Act, DNA evidence is treated as expert opinion evidence under section 68 of the Act.

4.0 Admissibility of DNA Evidence in Criminal Trials in Nigeria

Black‟s Law Dictionary defines admissibility as, the quality or state of being allowed to be entered into evidence in a hearing, trial, or other official proceedings.[20]The admissibility of forensic evidence in judicial proceedings in Nigeria is based on two standards namely; the legal admissibility basis/standards and the scientific admissibility standards. The veracity of the above statement was aptly captured by two Indian scholars in their work where they stated thus:

> For DNA evidence to be admissible in court, it must meet legal standards that typically include relevance, reliability, and adherence to proper procedures. Courts evaluate the degree to which the DNA testing procedures employed are widely acknowledged within the scientific community if the methodologies have been scrutinized by other experts in the field, and whether there is a documented rate of mistakes. The admissibility of DNA evidence is further bolstered by precedents set in previous cases, which affirm the reliability and accuracy of DNA testing methodologies…[21]

On the legal admissibility basis and standards for DNA evidence, it will be pertinent to note that there is no specific legislation regarding the admissibility of Forensic DNA profiling and DNA evidence in criminal trials in Nigeria. This notwithstanding, forensic evidence have always been used as evidence in judicial proceedings in Nigeria from time immemorial. For instance, in *Michael Akpan v Queen*[22] the Nigerian Supreme Court upheld the burglary conviction of the accused based on the finger print evidence found on a louver of a broken window of which expert evidence confirmed that the prints matched that of the Appellant.

The legal basis for such use of DNA evidence in criminal trials in Nigeria is derived from the Nigerian extant law on evidence which is the Evidence Act, 2011.[23] Though DNA evidence was not specifically mentioned in the Evidence Act, it is utilized in criminal trials as opinion of experts. For the admissibility of opinion of experts, the Act provides thus:

> when the court has to form an opinion upon a point of foreign law, customary law or custom, *or of science or art,* or as to the identity of handwriting or finger impressions, the opinions upon that point of persons

[16] (2017) LPELR - 48039 (SC)
[17] (2019) LPELR-47858(SC) Per OKORO, JSC (Pp. 9-10, paras. A-C).
[18] K Cashman & T Henning, 'Lawyers and DNA: Issues in Understanding and Challenging the Evidence' (2012) 24 Current Issues in Criminal Justice Journal, 69-83.
[19] AO Amankwaa & C McCartney, (n 2) at p 1.
[20] BA Garner, *Black's Law Dictionary* (9th Edition, USA: Thomson Reuters, 2014) p.53.
[21] RN Sahoo & CK Mohapatra, 'DNA Evidence in Criminal Justice System: Admissibility, Reliability, and Accuracy' (2024) 20 No. S15, *Nanotechnology Perceptions,* 719–729 at p 723. <https://www.researchgate.net/publication/386746792_DNA_Evidence_In_Criminal_Justice_System_Admissibility_Reliability_And_Accuracy> accessed on 20th March, 2026.
[22] (1961) FSC 251/1960.
[23] Evidence Act, 2011, sections 67 and 68.

> specially skilled in such foreign law, customary law or custom or science or art, or in question as to identity of handwriting or finger impressions are admissible.[24]

The Act further provides that persons that are so specially skilled in the aforementioned fields are called experts.[25] The Act therefore guarantees the admissibility of expert opinion in respect of science or art of which DNA Forensics fall within. In *Omisore& Anor v. Aregbesola&Ors*[26] the Nigerian Supreme Court described an expert witness as one who has made the subject upon which he speaks a matter of particular study, practice or observation and he must have a particular and special knowledge of the subject. In *KunleShonbubi v People of Lagos State*[27] the Court of Appeal allowed a DNA report produced by joint Nigerian and UK experts, affirming that the DNA report is admissible when presented by the qualified officers who supervised the analysis.

From the foregoing it is established that the admissibility of DNA Evidence in criminal trials in Nigeria is hinged on section 68 of the Evidence Act and Nigerian court decisions (judicial precedents).

On the scientific admissibility standards for DNA Evidence in Court, it must first be noted that DNA evidence, just like every other scientific evidence ought to adhere to the normal required scientific method or standard procedure. In South African case of *S v Maqhina*,[28] when a DNA evidence was brought before the court for consideration, it was held by the court that where an accuser's guilt depends on the results of scientific analyses, it is of paramount importance that the testing process, including the control measures applied, be executed and recorded with such care that it can be verified at any time by an objective expert and the trial court.

In general, two scientific admissibility standards are used to judge the admissibility of novel scientific evidence. These scientific admissibility standards are known as Frye standard and the Daubert standard. The Frye standard is known as the '**general acceptance test rule'** which was established in the US case of *Frye v United States.*[29]The court in Frye case ruled that to be admissible, scientific evidence must be adequately established to have acquired general acceptance in the particular field in which it belongs.[30]The 'general acceptance test' rule has been used to ascertain whether scientific findings like DNA evidence can be used as evidence in court. The rule now known as Frye rule stipulates that scientifically produced evidence must be acceptable in the scientific community. The court in that case ruled that it is the responsibility of the party using scientific evidence to establish scientific proof, because such evidence will be widely accepted in scientific community or circle. In *Daubert v Merrel Dow Pharmaceuticals*. Inc,[31] the Frye rule of 'general acceptance test' was expanded to birth the '**Sound-Method Standard'** known as the Daubert rule. The Supreme Court held that scientific evidence must have sufficient validity and reliability to be admitted as relevant "scientific knowledge" that would "assist the the trier of fact. The court in the case stated that scientific evidence standards tacitly forsake the notion of public acceptance as a condition for acceptance in court. That though general acceptance is advantageous, the absence of such acceptability is not inherently damaging, thus a establishing a more flexible standard that focuses on validity and reliability of the methods.

5.0 DNA Evidence: Whether a Conclusive Proof of Guilt in Criminal Trials?

The importance of DNA Evidence in proving the guilt of an accused was succinctly capture in the case of In *Kasa v State*[32] where the Appellant together with another accused person were convicted of culpable homicide punishable with death by the High Court of Sokoto State sitting at Gausau. The victim was discovered dead in her bedroom. The Appellant and the 2nd defendant were arrested in connection with crime. In the course of investigation, a blood-stained shirt and shorts were discovered in the Appellant House. At the conclusion of trial, the Trial Court convicted the Appellant and the 2nd Defendant and sentenced them to death. The Appellant appealed and both the Court of Appeal and the Supreme Court quashed their conviction. The Nigerian Supreme Court held that the discovery of the bloodstained shirt in the Appellant's house has not proved anything worth considering as corroborative evidence in the absence of a forensic report which confirms the stains on the shirt as human blood and that it was the blood of the deceased that stained the shirt.[33] The court further held that the investigation in that regard had not been conducted to its logical conclusion.

---

[24]*Ibid*, section 68(1).
[25]*Ibid*, section 68(2).
[26]Omisore & Anor *v* Aregbesola&Ors, (2015) LPELR-24803(SC) (2015)
[27] (2015) LPELR-24807 (CA).
[28] (2001) 1 SACR 241 (T) 251H-I
[29] (1923) 293 F, 1013 (D.C. Cir. 1923).
[30]*Ibid.*
[31] (1993) 509 U.S. 579, 113 S, Ct. 2786.
[32] (1994) 5NWLR (Pt. 344) 269.
[33]*Ibid.*

The above judgment implies that without forensic analysis, the blood-stained shirt and shorts cannot be relied upon as evidence linking the Appellant to the crime. This case highlights the importance of DNA evidence in criminal trials in Nigeria which would include linking the accused to crime scene, linking the accused to the victim, linking the accused to the alleged crime, exonerating the accused and prevent mistakes and match the crimes performed by the same culprit with different crimes.

Under the Nigerian criminal justice system a person cannot be convicted of a crime unless the two essential ingredients of the crime are proved.[34] These two essential elements comprise the *actusreus* (the guilty act or the physical act or omission) and the *mens rea* (the guilty intent). Aside proving the essential ingredients of a crime, it also an established principle of law that in criminal trials the prosecution must prove the guilt of the accused person beyond reasonable doubt and this burden never shifts.[35] Section 135 of the Evidence Act provides in this regard that if the commission of a crime by a party to any proceedings is directly in issue in any proceeding civil or criminal, it must be proved beyond reasonable doubt.[36] The Act also provides that the burden of proving that any person has been guilty of a crime or wrongful act is, subject to section 139 of this Act, on the person who asserts it, whether the commission of such act is or is not directly in issue in the action.[37] Under section 139 (1) of the Evidence Act, where a person is accused of any offence the burden of proving the existence of circumstances bringing the case within any exception or exemption from, or qualification to, the operation of the law creating the offence with which he is charged is upon such person. On the other Where in any criminal proceedings, the burden of proving the existence of any fact or matter has been placed upon a defendant by virtue of the provisions of any law, the burden shall be discharged on the balance of probabilities.[38] The burden proof in criminal trials in Nigeria is rooted in the Constitutional provision that every person who is charged with a criminal offence shall be presumed to be innocent until he is proved guilty.[39] *In Omoregie v State (2017) LPELR-42466(SC)* the Supreme Court held that:

> 'the law is settled that in criminal cases, the burden of proof that the accused committed the offence for which he is charged lies squarely on the prosecution, who must prove its case beyond reasonable doubt and a general duty to rebut the presumption of innocence constitutionally guaranteed to the accused person. This burden never shifts'

Returning to the context of this sub-topic, the pertinent question which this sub-topic intends to address is whether DNA Evidence alone is sufficient to prove the *actusreus* (the guilty act or the physical act or omission) and the *mens rea* (the guilty intent) and the alleged offence of the accused beyond reasonable doubt? The question as to whether DNA evidence may be used to secure conviction on its own has been subject of discussions for years. Though there are those who assume that DNA evidence alone is conclusive and proves the guilt of the accused, this belief practically is risky as finding the accused DNA sample at crime scene is not sufficient evidence of his guilt. Scholars are of the opinion that though DNA may be collected from crime scenes, it may not be relevant or probative to the progress or resolution of the case.[40] In the Indian case of *PattuRajan v State of Tamil Nadu*,[41] the Supreme Court of India held that DNA evidence is considered opinion evidence under Section 45 of the Indian Evidence Act. The Court went further to note that while DNA testing is increasingly reliable, it is not infallible, and its probative value can vary depending on the context and other corroborative evidence present in the case. The implication of the above case is that the relevancy and significance of DNA evidence in criminal trials is dependent on other available information on the accused relating to the alleged crime.

Moreover, it has also been asserted that the presence of the accused person's DNA at the crime scene is not sufficient evidence of his or her guilt.[42] In *R v Jones* (*William Francis)* it was noted that circumstantial

[34] This principle is rooted in the historic case of Woolington *v* DPP (1935) AC 462.

[35] Okafor *v* The State (2006) 4 NWLR (Pt 969) Page 1; Ani *v* The State (2003) 11 NWLR (Pt 830) 142, Bello *v* State (2012) 8 NWLR (Pt 1302) 207.

[36] Evidence Act, 2011, Section 135(1).

[37] *Ibid*, 2011, Section 135(2).

[38] *Ibid*, Section 137.

[39] Constitution of the Federal Republic of Nigeria 1999 (as amended), Section 36 (5).

[40] AO Amankwaa & C McCartney, 'The Effectiveness of the Current use of Forensic DNA in Criminal Investigations in England and Wales (2021) *WIREs Forensic Science e1414*, 1-9 at p 5. <https://doi.org/10.1002/wfs2.1414 >accessed on 3rd March 2026

[41] Pattu Rajan *v* State of Tamil Nadu (2019) 4 SCC 771.

[42] AS Padmanabhan & S Sapna, 'The Role of DNA Evidence in Criminal Trials – An Enquiry into the extent of Its Relevancy and Conclusiveness' *Centre for Excellence for Criminal Law Proceedings of Three Day International Conference on Nuance of Criminal Investigation and Dynamics of Forensic Evidence (20th to 22nd August* 2021) 22-41 at p.27. <https://www.researchgate.net/profile/Abhishek-Sharma-Padmanabhan/publication/359478704_The_role_of_DNA_Evidence_in_Criminal_Trials_-

nature of the DNA evidence requires that there is other corroborating evidence or an assessment of the specific circumstances of the case to progress or assist in resolving a case.[43] DNA evidence therefore will be less relevant where there is no other evidence establishing that the accused was the culprit of the crime.

From the foregoing, it would be deduced that DNA evidence in criminal trials is corroborative evidence which alone cannot prove the guilt of the accused beyond reasonable doubt. Corroborative evidence's primary objective is to establish a link between the accused and the crime.[44] In many instances, corroboration comes from variety of sources. It can be shown in variety of ways, including by behaviour of the accused, the demeanour of the victim, past remarks, or any other sort of scientific proof including DNA evidence.[45]

6.0 Conclusion

The discussion of this study shows that DNA profiling and evidence have contributed significantly to the successful investigation and proof of crimes through the scientific provision of unique identifiers of individuals. Courts have often admitted DNA evidence due to its value in establishing links between persons accused of committing offences and crime scenes or victims. Where DNA evidence of an accused is discovered at a crime scene, there is a high probability that the accused was present at the crime scene. However, to prove guilt beyond reasonable doubt, additional evidence linking the accused to the offence is required for a complete and conclusive determination of the case.

For DNA evidence to be admissible in court, it must be relevant and must satisfy both legal and scientific admissibility standards, which ensure its reliability. To establish guilt beyond reasonable doubt, all available evidence must be considered holistically, and DNA evidence must align with other facts relating to the case.

Although DNA evidence has strong probative value in linking an accused to a crime scene or victim, it cannot, on its own, establish the guilt of the accused. Even where DNA evidence meets all admissibility requirements, it cannot independently ground a conviction without corroboration from other evidence. Consequently, DNA evidence is regarded as corroborative, operating in conjunction with other available evidence to establish guilt.

Where DNA evidence combines with other supporting evidence to provide a match in criminal trials, it can accurately identify perpetrators of crime, exonerate innocent persons, and enhance public confidence in the criminal justice system.

In view of these significant impacts, this study calls on the Nigerian government to provide the necessary regulations, facilities, and funding to ensure that the legal system evolves in line with advancements in forensic science. This will enhance the effective utilization of DNA evidence in the Nigerian criminal justice system. At present, the use of DNA evidence in criminal trials in Nigeria remains underutilized.

An enquiry into the extent of its relevancy and conclusiveness/links/623e6b648068956f3c4c0a3c/The-role-of-DNA-Evidence-in-Criminal-Trials-An-enquiry-into-the-extent-of-its-relevancy-and-conclusiveness.pdf> accessed on 20th March 2026.

[43] R *v* Jones (William Francis) [2020] EWCA Crim 1021 (03 Aug 2020)). See also FIND Strategy Board. (2019). National DNA database: Annual report, 2017 to 2018. Forensic Information Database Strategy Board. <https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/778064/National_DNA_database_annl_report_2017-18_web.pdf> accessed on 20th March, 2026.

[44] AS Padmanabhan & S Sapna, (n 42).

[45] C Littlejohn, 'Truth, Knowledge and Standard of Proof in Criminal Law' (2020) 197 *Law and Human Behaviour*, 5253-5286