

SIGNIFICANCE OF FINGERPRINT TECHNIQUES IN CONDUCTING CRIMINAL INVESTIGATION: A CASE STUDY OF THE NIGERIAN ARMY CORPS OF MILITARY POLICE

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Abstract

Globally, criminal investigation has progressively shifted from traditional practices such as reliance on confessions, informants, and eyewitness accounts to forensic techniques that enhance objectivity, reliability, and evidentiary integrity. Thus, this study examined the significance of fingerprint techniques in the criminal justice system, within criminal investigation activities conducted by the Nigerian Army Corps of Military Police (NACMP). The study adopted a longitudinal survey research design from 2020 to 2025. A sample size of 346 was selected using Kregel's and Morgan's sample determination table. A total of 300 questionnaires and 46 in-depth interviews were conducted on the selected respondents. Of the 300 questionnaires distributed, 295 were successfully retrieved (a retrieval rate of 98.3%) and deemed suitable for analysis and interpretation. Quantitative data were analysed using descriptive statistics, while qualitative data were transcribed and thematically analysed in line with the study objectives. The findings revealed a strong relationship between fingerprint techniques and effective criminal investigation within the NACMP, in identifying suspects and exonerating innocent persons through the uniqueness of fingerprint evidence. The study found that the NACMP has made notable efforts to integrate fingerprint techniques, including establishing two forensic laboratories, procuring fingerprint equipment, and implementing capacity-building initiatives. Despite these efforts, the use of fingerprint techniques remains at a developmental stage. The study recommended the establishment and equipping of additional forensic laboratories across NACMP provost divisions and commands, as well as advanced specialised training for forensic personnel, and inter-departmental sharing of relevant personnel databases.

Keywords: Fingerprint, Technique, Analysis, Criminal Investigation.

Introduction

Globally, investigative practices have evolved from reliance on traditional methods such as confessions, informants, and eyewitness testimony to forensic investigative techniques that enhance objectivity, reliability, and evidentiary integrity (Saferstein, 2018). Concerns over wrongful convictions, human rights violations, and the inherent limitations of non-scientific investigative approaches have driven this shift. Similarly, modern criminal justice systems increasingly emphasise evidence-based investigations supported by forensic tools, including fingerprint techniques. Fingerprint techniques remain among the oldest and most reliable scientific methods of personal identification in criminal investigations. This is due to its principles of uniqueness, permanence, and universality. Fingerprints provide scientifically verifiable means of identifying individuals and play a crucial role in crime detection,

investigation, and prosecution. Fingerprint value lies in its uniqueness, permanence, and universal recognition, which enable investigators to link individuals to criminal activity. Within contemporary justice systems, fingerprint techniques serve as both investigative tools and evidentiary mechanisms, strengthening allegations against suspects and supporting prosecutorial outcomes (James & Nordby, 2019; Suresh & Karan, 2023).

In both military and civilian justice systems, fingerprint analysis is essential for linking suspects to crime scenes, verifying identities, detecting impersonation, and enhancing evidentiary credibility. As a result, many advanced criminal justice systems have institutionalised fingerprint techniques as core components of their investigative frameworks. In the United States, fingerprint analysis has been central to criminal investigation for over a century. It is supported by the Integrated Automated Fingerprint Identification System (IAFIS), now incorporated into the Federal Bureau of Investigation's Next Generation Identification (NGI) system. This system enables rapid fingerprint matching across extensive criminal and civil databases, thereby improving investigative efficiency and accuracy (Federal Bureau of Investigation [FBI], 2020). Fingerprint evidence is routinely admitted in United States (US) courts and has significantly contributed to crime-solving and exoneration efforts (National Research Council, 2009). Similarly, in the United Kingdom, fingerprint techniques are integral to policing and criminal investigations, with the National Fingerprint Database (IDENT1) enabling law enforcement agencies to compare latent fingerprints recovered at crime scenes with national records to identify suspects (Fraser & Williams, 2017).

In developing and transitional justice systems, fingerprint techniques have also gained prominence. In India, for example, fingerprint bureaus operate at both state and national levels, supporting criminal investigations and identity verification (Kumar & Sharma, 2019). In South Africa, fingerprint analysis is a key component of criminal investigation within the South African Police Service (SAPS). The Criminal Record and Crime Scene Management (CRCSM) unit relies on fingerprint evidence to investigate violent and property crimes. Empirical studies suggest that fingerprint utilisation has improved case clearances and reduced reliance on confessions obtained through coercive means (Newham, 2014). Similarly, Nigeria's law enforcement agencies, including the Nigerian Police Force, Economic and Financial Crime Commission, and Nigerian Army Corps of Military Police (NACMP), have integrated fingerprinting techniques to enhance their criminal investigation processes (NASMP, 2012).

Within military justice systems, particularly in advanced armed forces such as those of the United States and the United Kingdom, fingerprinting techniques are integrated into criminal investigations and battlefield forensics. The United States Army Criminal Investigation Division (CID), for instance, employs fingerprint and biometric analysis in investigations involving military offences, war crimes, and security breaches (Department of Defence, 2018). This underscores the adaptability and operational relevance of fingerprint techniques across diverse investigative environments. In contrast, the integration of forensic investigative tools, particularly fingerprint techniques, into military criminal justice systems in most African countries remains limited (Okunola, 2021). Such limitations may undermine evidentiary strength, prolong investigations, and increase the risk of wrongful accusations or acquittals due to insufficient forensic linkage. Furthermore, despite advancements in criminal justice and investigation methods, the use of fingerprint techniques remains limited. This

paper, therefore, examines the significance of fingerprint techniques in criminal investigation, with particular reference to NACMP.

Objectives of the Study

The specific objectives of this study are to achieve:

- i. Investigate the significance of fingerprint techniques in NACMP's criminal investigations.
- ii. Assess the efforts made by NACMP toward the utilisation of fingerprint techniques in criminal investigation.

Conceptual Clarification

The Concept of Fingerprint Techniques

A fingerprint is an impression formed by the patterned ridged skin of the fingers when they come into contact with a surface. The term is often used broadly to include impressions made by palms, toes, and the soles of the feet, as these areas are also covered with friction ridge skin. Fingerprint science is grounded in dermatoglyphics, which involves the scientific study of friction ridge patterns on the fingers, palms, and soles of humans (Hamilton, 2010). These ridge patterns are genetically determined, formed during fetal development, and remain permanent throughout an individual's lifetime. The permanence and uniqueness of fingerprints make them a reliable tool for personal identification in criminal investigations. Fingerprints are frequently deposited on surfaces such as glass, metal, and paper at crime scenes, where they may serve as physical evidence linking individuals to criminal activity. Friction ridge skin consists of complex ridge-and-furrow formations that create distinctive patterns classified into three primary types: arches, loops, and whorls (Hamilton, 2010).

Therefore, fingerprint techniques refer to the collection of scientific methods used to detect, develop, record, preserve, classify, analyse, and compare fingerprint impressions for personal identification and criminal investigation (Ezegbogu, 2023). Conceptually, these techniques span the entire investigative process, from crime scene examination through laboratory analysis to courtroom presentation and constitute a core component of forensic science.

Thus, for this study, the fingerprint technique is defined as the systematic process of collecting, processing, and analysing fingerprint impressions using scientific tools such as powders, chemical reagents, tape lifts, brushes, live scanners, and Automated Fingerprint Identification Systems (AFIS).

The Concept of Criminal Investigation

Criminal investigation is a fundamental component of law enforcement and military justice systems, serving as the mechanism through which alleged crimes are examined, suspects are identified, evidence is collected, and facts are established for prosecution and adjudication. Conceptually, criminal investigation is understood as a systematic, lawful, and scientific process aimed at uncovering the truth surrounding criminal conduct. In contemporary societies, criminal investigation integrates legal principles, scientific methods, and investigative skills to ensure justice, public safety, and the protection of individual rights (Newburn, 2017; James & Nordby, 2019). On the other hand, a criminal investigation is a structured process of inquiry conducted by authorised law enforcement officers to gather facts, identify offenders, and secure admissible evidence to enforce criminal law (Osterburg &

Ward, 2014). It involves reconstructing past events related to a crime through systematic collection and analysis of information.

For this study, criminal investigation is defined as the systematic process of establishing the commission of a crime, using forensic methods to collect, preserve, process, and analyse evidence, such as fingerprints, for use in legal proceedings. This reveals criminal investigation as a structured, scientific, and legal process designed to uncover truth and support justice. It encompasses crime detection, evidence collection, suspect identification, and case preparation, all conducted within legal and ethical boundaries.

Literature Review

Relevant lectures were reviewed in line with the study's objectives.

Relevance of Fingerprint Techniques to Criminal Investigations

Fingerprint techniques and criminal investigations are intrinsically linked. Fingerprints provide a reliable means of identifying individuals, supporting crime detection, investigation, and prosecution. The forensic foundation of this relationship is the fact that fingerprint ridge patterns are unique, permanent, and classifiable, making them valuable physical evidence for linking individuals to criminal activity (NASMP, 2012). In modern criminal justice systems, fingerprint techniques function both as investigative tools and as evidentiary mechanisms within the broader forensic framework, providing critical support to allegations against suspects (James & Nordby, 2019).

Similarly, Herrmann et al. (2014) asserted that the primary function of fingerprint in criminal investigation is suspect identification. According to him, latent fingerprints recovered at crime scenes establish a link between suspects and criminal activity, providing corroborating evidence. In his study, Ezgbogu (2023) explained that fingerprint evidence is a cornerstone of forensic admissibility in courts due to its scientific reliability and long-standing judicial acceptance. It corroborates witness statements, supports circumstantial evidence, and strengthens prosecution or defence cases when combined with other forensic data. It is often presented as expert testimony to support criminal charges. It also supports long-term investigative systems such as criminal records management, immigration control, prison management, and missing-person identification. Furthermore, Onyekachi (2019) noted that fingerprint evidence plays a critical role in ensuring fairness and preventing miscarriages of justice.

In view of the aforesaid, it is established that the relevance of fingerprint techniques to criminal investigation is a mutually reinforcing type. The investigators transform invisible fingerprints into documented, comparable evidence, enabling them to identify individuals and link them to crime scenes. This helps reconstruct criminal events, corroborate/refute legal claims, and support profiling and long-term intelligence systems. However, despite the significance of fingerprint techniques among forensic investigative tools in criminal investigations, there is limited data on their relevance to the military justice system. Thus, against this background, this study investigated the significance of fingerprint techniques in NACMP criminal investigations to enhance military criminal justice.

Efforts towards the Use of Fingerprint Techniques in the Criminal Justice System

Both governments and private organisations have made several efforts to use fingerprint techniques in criminal investigations. For instance, the Federal Bureau of Investigation (FBI)

in the USA has developed the Integrated Automated Fingerprint Identification System (IAFIS), a national database for storing and matching fingerprint evidence during criminal investigations (FBI, 2024). In India, the techniques are integrated into the Crime and Criminal Tracking Network System (CCTNS) to improve investigative accuracy. The Central Forensic Science Laboratory (CFSL) and several state-level forensic science laboratories are equipped with modern equipment and technology for collecting and analysing fingerprints (Kumar & Reddy, 2019).

Accordingly, South Africa's Criminal Record Centre (SACRC) operates on advanced AFIS, which helps the South African Police Service solve complex criminal cases (Mokgoro, 2018). In Kenya, the technique is employed within the National Integrated Identity Management System (NIIMS) to aid both civil registration and criminal investigations (Mwangi, 2020). Similarly, Nigeria's law enforcement agencies, such as the Nigerian Police Force (NPF) and the Economic and Financial Crimes Commission (EFCC), have adopted techniques to enhance their criminal investigation processes (Okunola, 2021).

As noted above, significant efforts have been made globally to integrate fingerprint techniques into criminal investigations. It is against this backdrop that this study sought to assess NACMP's efforts to use fingerprint techniques in criminal investigations.

Methodology

This section presents the methodology adopted for the study. It outlines the research design and provides a brief historical background of the study area. It also discussed sampling techniques, sample size, methods of data collection and analysis. Ethically, the study adhered strictly to established ethical standards for academic research. Formal approval was obtained from the heads of the three selected units prior to data collection. Thereafter, informed consent was sought from individual respondents before administering questionnaires and conducting interviews. Respondents were assured of the confidentiality and anonymity of their responses and informed that all information provided would be used strictly for academic purposes. Participation in the study was entirely voluntary, and data were collected only from those who willingly consented.

Brief History of the Study Area

The NACMP is the branch of the Nigerian Army (NA) responsible for maintaining discipline, enforcing military laws, and investigating crimes or infractions committed by military personnel. The Headquarters (HQ) is located at Shehu Musa Yar'adua Barracks, Asokoro-Abuja. Structurally, the Corps comprises HQ, the Department of Special Investigation Bureau (SIB), 8 provost groups, and other units across the 8 NA divisions, commands, and establishments (NASMP, 2012). These groups and units are located across Nigeria. Additionally, the branch has its training school, the Nigerian Army School of Military Police, located in Basawa, Zaria, Kaduna State. The Corps is headed by a Major General serving as the Provost Marshal (Army). Presently, the Corps has a total population of 3,536 personnel, comprising 285 commissioned officers and 3,252 non-commissioned officers (NACMP, 2025).

Research Design

The study adopted a longitudinal survey research design spanning 2020 to 2025. A total of 300 questionnaires and 46 in-depth interviews were administered to and conducted with the

respective respondents, providing the study with quantitative and qualitative data, respectively.

Sampling Techniques

The study employed convenience and purposive sampling techniques. The choice of a convenient sampling technique was necessitated by the operational nature of the NA, which made it impracticable to assemble all NACMP personnel in a single location and at the same time. Additionally, the reluctance of some personnel to participate in the pilot study, stemming from concerns about potential repercussions from superior authorities despite having obtained official permission, influenced the choice of convenience sampling. Consequently, questionnaires were administered to respondents who were readily available and willing to participate during data collection.

Accordingly, participants for the in-depth interviews were selected using purposive sampling. This method was adopted to ensure that only individuals with substantial experience and in-depth knowledge of the subject matter were included in the interviews. The participants comprised heads of units, investigators with practical experience in handling criminal investigations, trained forensic personnel, and forensic laboratory technicians. These categories of participants were deliberately selected for the critical roles they play in applying forensic science, particularly fingerprint techniques, in NACMP criminal investigations. Their professional experience and institutional knowledge enabled them to provide detailed, informed insights relevant to the study's objectives.

Similarly, the purposive sampling technique was utilised to select the three units for the study. The units selected were the HQ NACMP, NASMP, and HQ SIB. The HQ NACMP was selected because it encompasses the Head of the Corps- the Provost Marshal (Army) and other principal staff responsible for policy formulation and strategic decision-making within the Corps. In addition, the headquarters houses the Corps' most recent forensic laboratory, making it a critical unit for examining the significance of fingerprint techniques in criminal investigations. Similarly, NASMP was selected as a primary training institution for all NACMP personnel, where career and professional courses, including criminal investigation and basic forensic science, are taught. This provided the study with access to personnel from different provost units within the NA, thereby enriching the diversity of primary data collected. The HQ SIB was purposively selected as the Corps' principal investigative arm. This made it a valuable source of first-hand information from personnel with substantial experience applying fingerprint techniques in NACMP criminal investigations.

Sample Size

Given that it was not feasible for the study to collect data from all NACMP personnel, a representative sample size was scientifically determined. The sample size was derived using the Krejcie and Morgan sample size determination table (Krejcie & Morgan, as cited in Kenya Project Organisation, 2012), which recommends a sample size of 346 for a population of 3,500 to 3,999. Hence, a sample size of 346 respondents was selected for the study, based on a study population of 3,536 personnel.

Methods of Data Collection

Primary and secondary data sources were utilised in the study. Primary data was collected using questionnaires and in-depth interviews. The questionnaires were administered using

self-administered and researcher-assisted approaches. Two research assistants were drawn from NASMP and the SIB. The involvement of these assistants facilitated effective data collection and helped reassure respondents regarding the confidentiality of their responses. In-depth interviews were conducted with the selected key stakeholders. The interviews were conducted in English in the interviewees' offices. Furthermore, secondary data were obtained from the library and documentary sources, including textbooks, academic journals, magazines, official publications, and relevant online materials.

Method of Data Analysis

Quantitative data obtained through questionnaires were analysed using descriptive statistics, including frequency distributions, percentages, and tables. Each questionnaire was uniformly coded, entered into the computer, processed, and analysed using the Statistical Package for Social Sciences (SPSS) version 27. On the other hand, qualitative data obtained from the 46 in-depth interviewees were systematically organised, transcribed, and analysed thematically in line with the research objectives. The data generated from the interviewees were used to complement the quantitative data, thereby ensuring triangulation. This approach enabled the researcher to compare findings from multiple sources and identify areas of convergence and divergence with existing literature.

Results and Discussion

This section presents and discusses the study's findings.

Table 1: Significance of Fingerprint Evidence in the Nigerian Army Corps of Military Police's Criminal Investigation

Response	Frequency	Percentage
Strongly Agreed	125	36.7
Agreed	173	50.7
Strongly Disagreed	26	7.6
Disagreed	05	1.5
Undecided	12	3.5
Total	341	100

Source: Field Work, 2025

The data presented in Table 1 above show a strong opinion among respondents that fingerprint evidence plays a significant role in solving criminal cases, as reflected by 87.4% who strongly agree or agree. In an affirmative response, a 39-year-old male trained forensic expert in the Nigerian Army School of Military Police (NASMP) explained that:

“The development of fingerprint evidence, which has set an implicit example of a scientific forensic identification, has increased the awareness that the establishment of an identification is achieved through the use of fingerprint techniques. Therefore, I agree that fingerprint evidence plays a critical role in solving crimes, especially in linking suspects to the crime scene, thereby narrowing the scope of the investigation.

I believe that NACMP can effectively utilise the fingerprint technique in its criminal investigation with proper training and equipment”.

Contrary to the above, a 42-year-old male investigator in HQ SIB remarked that:

Although forensic tools, including fingerprint techniques, play a role in certain crimes, I cannot categorically agree or disagree that fingerprint evidence alone can solve a crime, as I have never used it to solve one. This is because, since I joined the Army, I have never attended any forensic course, not to mention knowing the significance of fingerprints in criminal investigation”.

On his part, a 25-year-old male non-commissioned officer in charge of crime data records, narrated that:

“Acknowledged that fingerprint technique is used during investigation for identification of suspect(s) and victims of accident and/or bombs, however, it is yet to be part of crime data recording tools which could be used in identifying habitual offenders”.

The above findings indicate a strong consensus among respondents on the significance of fingerprint evidence in criminal investigations, with a substantial majority affirming its effectiveness in solving crimes and linking suspects to crime scenes. However, divergent views reveal gaps in training, exposure, and institutional integration of fingerprint techniques within NACMP. While forensic experts recognise its investigative value, limited utilisation among some personnel underscores the need for structured training, adequate equipment, and systematic incorporation of fingerprint techniques into crime data management and investigative practices.

Table 2: Acceptance of Fingerprint Evidence during Court Martial Proceedings

Response	Frequency	Percentage
Strongly Agreed	78	22.9
Agreed	165	48.4
Strongly Disagreed	6	1.8
Disagreed	16	4.7
Undecided	76	22.2
Total	341	100

Source: Field Work, 2025

Based on the data presented in the table above, fingerprints are recognised and accepted as evidence by the court martial, as reflected in 71.3% of respondents who agreed or strongly agreed that fingerprint evidence is often accepted during court martial proceedings. This finding was supported by qualitative insights where a 51-year-old male commissioned officer (head of investigation unit) explained that:

“A fingerprint is widely accepted and admitted as evidence by all Nigerian courts. This is in line with Section 68(1) of the Nigerian Evidence Act (2011), which clearly defines what constitutes forensic evidence and identifies who qualifies as an expert witness. The section specifically mentions finger impressions, among other scientific evidence, as admissible in Nigerian courts.”

In a supportive narration, a 38-year-old male forensic expert noted that:

“The use of fingerprints in criminal investigation has proven effective and is a well-respected field within the criminal justice system. A fingerprint analysis conducted by a competent expert leaves no gaps or absence of knowledge regarding the details under examination.”

Regarding the significance of fingerprint evidence in criminal investigations, responses were consistent across all respondent categories. The majority indicated that the primary purpose of fingerprint evidence is to identify suspects and link them to crime scenes. This is based on the uniqueness and permanent nature of human fingerprints. This was elaborated by a 36-year-old female forensic expert who asserted that:

“The development of fingerprints began as a system for identifying individuals in business transactions around 2000 BC, and later expanded to identifying perpetrators of crimes through marks left at crime scenes. Fingerprints can therefore be used to identify suspects and victims, exonerate the innocent, and maintain criminal records.”

Similarly, a 29-year-old male investigator at HQ NACMP further explained that:

“Fingerprints are unique biological marks or patterns left by the ridges on our fingertips whenever they come into contact with a surface. These marks can be lifted and compared with prints stored in a fingerprint database or collected from suspects and victims to identify individuals present at a crime scene. This process ensures that justice is served, particularly in protecting the innocent from wrongful punishment.”

The results above demonstrate that fingerprint evidence is widely recognised and accepted during court-martial proceedings, with a clear majority of respondents affirming its admissibility and legal relevance. Supported by statutory provisions under the Nigerian Evidence Act (2011) and expert testimonies, fingerprint evidence is viewed as a credible and reliable forensic tool for identifying suspects, linking individuals to crime scenes, and protecting the innocent from wrongful conviction. This consensus underscores the evidentiary value of fingerprint techniques and reinforces their importance in strengthening investigative and judicial outcomes within NACMP.

Table 3: Importance of Fingerprint Evidence in Achieving a Positive Investigation Outcome

Responses	Frequency	Percentage
High	285	83.6
Moderate	41	12.0
Low	06	1.8
Do not know	09	2.6
Total	341	100

Source: Field work, 2025.

Table 3 aboveshow that the majority of respondents (83.6%)indicated that fingerprint evidence is highly significant in achieving positive investigative outcomes in NACMP’s criminal investigations.This finding was supported by a 32-year-old male commissioned officer and trained forensic expert, who stated that:

“The use of fingerprint evidence, among other forensic tools, consistently leads to positive investigative outcomes, especially when appropriately lifted and processed. This has significantly contributed to solving several cases of housebreaking and vandalism.”

From the perspective of investigators, a 41-year-old investigator in HQ NACMP observed that:

“The significance of fingerprint evidence in criminal investigations can be rated as moderately assisting in achieving positive outcomes, particularly in this era of technology-driven forensic work. Fingerprints are among the most valuable forms of evidence, widely recognised and admissible in courts. However, their effectiveness depends on maintaining a proper chain of custody to safeguard the integrity and credibility of the evidence.”

Furthermore, a 57-year-old retired non-commissioned officer acting as a forensic laboratory technician highlighted that:

“Those of us in the forensic field must appreciate the role of fingerprint evidence in achieving positive investigative outcomes. Due to the uniqueness and permanent nature of fingerprints, each individual can be distinguished from another. Well-recovered and properly processed fingerprints are therefore highly significant in investigations. Whenever human fingers contact a surface, a trace is left that can be identified, provided the surface is correctly processed to visualise, lift, and analyse the latent prints.”

The results indicate that fingerprint evidence is highly significant in achieving positive investigative outcomes within NACMP, as affirmed by the majority of respondents. Expert and practitioner perspectives confirm that properly recovered and processed fingerprint evidence enhances case resolution, particularly when supported by sound forensic procedures and strict chain-of-custody practices. This underscores the importance of technical competence and institutional capacity in maximising the investigative value of fingerprint techniques.

Efforts Put in Place by the Nigerian Army Corps of Military Police towards the Utilisation of Fingerprint Techniques in Criminal Investigation

To assess NACMP's efforts to use fingerprint techniques in criminal investigations, respondents were presented with a list of observable initiatives to select from. An open-ended option was also included to enable respondents to identify additional efforts not covered in the listed options.

Table 4: NACMP's Efforts towards Utilisation of Fingerprint Technique in NACMP's Criminal Investigation

Types of Military Operational Strategies	Frequency	Percentage
Establishment of two Forensic Laboratories (at HQ NACMP and NASMP)	31	9.1
Procurement of Fingerprint Equipment	11	3.2
Forensic Training of Personnel at UNIBEN	10	3.0
All of the Above	289	84.7
Total	341	100

Source: Field Work, 2025

As reflected above, the majority of respondents (84.7%) indicated that NACMP has implemented all the efforts listed in the table towards the utilisation of fingerprint techniques in its criminal investigations. This view was supported by a 35-year-old female commissioned officer, forensic-trained personnel at HQ NACMP, who stated that:

"The NACMP has established two forensic laboratories, one at HQ NACMP and the second at NASMP, to align itself with international best practices in investigation. There is also an ongoing MOU between NACMP and UNIBEN for forensic training of MP personnel, of which I am a beneficiary. Although we were trained on different aspects of forensic science, including fingerprint techniques at the university, there is no specification on what we specialised in and can do effectively."

Similarly, a 41-year-old male forensic instructor at NASMP noted that:

"The first forensic laboratory in NACMP has been in place for nearly two decades. We use it to teach students basic fingerprint techniques and other aspects of forensic investigation as part of the school curriculum. The laboratory is equipped with fingerprint-processing tools, such as fuming chambers, brushes, tape, and dusting and enhancement powders, which are used to train all MP personnel in basic forensic methods. Despite these efforts, the Corps still lacks adequate forensic laboratories commensurate with the number of provost units saddled with the responsibility of investigation"

Relatively, a 31-year-old male non-commissioned officer and trained forensic investigator at HQ NACMP added that:

"The NA has made several efforts toward the use of fingerprint techniques and other forensic tools to enhance NACMP's criminal investigations. I was privileged to be part of the fourth batch trained in forensic science at UNIBEN. Recently, a significant number of MP personnel from different provost units completed a forensic training program, including fingerprint techniques, organised and sponsored by the United Nations Office on Drugs and Crime (UNODC)."

Accordingly, another 39-year-old male, a trained investigator and forensic expert, stated that:

“The NACMP has made significant efforts to improve its investigative processes using fingerprint techniques. In May 2025, two MP personnel were trained by the Federal Bureau of Investigation (FBI) at the Office of the National Security Adviser in advanced fingerprint techniques. At the conclusion of the training, a fingerprint processing kit containing specialised equipment was issued to the NACMP.”

Authoritatively, a 48-year-old male clerk in the Department of Training at HQ NACMP explained that:

Several measures have been implemented to adopt fingerprinting techniques and other forensic tools to enhance NACMP’s criminal investigations. This includes an MOU with UNIBEN to train personnel in forensic science. To date, 55 commissioned and non-commissioned officers have been trained under this program, and efforts are ongoing to renew the MOU. However, instead of being deployed to forensic laboratories or investigative departments upon return, the trained personnel are often assigned to general police duties. This is largely due to the limited number of forensic laboratories within NACMP.” Additionally, there is the problem of the lack of a database for comparison.

The above findings indicate that NACMP has made notable efforts to integrate fingerprint techniques into its criminal investigations, including establishing forensic laboratories, partnering with academic institutions for training, and providing specialised equipment. While these initiatives have enhanced personnel capacity and investigative processes, challenges remain, such as insufficient laboratory facilities, limited deployment of trained personnel, and the absence of a centralised fingerprint database, which constrain the full utilisation of fingerprint techniques across the Corps. Thus, addressing existing challenges is essential for the full integration of fingerprint techniques into NACMP’s investigative processes.

Discussion of Findings

The primary aim of this study was to examine the significance of fingerprint techniques in NACMP’s criminal investigations. Some of the key findings of the study were discussed in the succeeding paragraphs.

The first objective of the study is to examine the significance of fingerprint techniques in conducting criminal investigations by NACMP personnel. The study revealed that fingerprint techniques play an indispensable role in NACMP’s criminal investigation. The study revealed that fingerprints left at crime scenes are lifted, processed, and compared with those stored in existing records or obtained from suspects or victims to establish the identity of the person present at the crime scene. These findings are consistent with Suresh and Karan (2023), who observed that latent fingerprints are frequently recovered from objects such as weapons, doors, glass surfaces, and documents, and subsequently analysed to establish a suspect’s contact with crime-related locations or objects.

It also revealed that fingerprint evidence is used in NACMP’s criminal investigations to support allegations against suspects, exonerate innocent individuals, link suspects to crime scenes, and provide corroborating and reliable evidence during investigations and court-

marital proceedings. This aligns with the findings of Herrmann et al. (2014), who emphasised the role of fingerprints in linking offenders to criminal activities and corroborating other forms of evidence. The findings also support those of Ezegbogu (2023), who noted that fingerprint evidence strengthens investigations by corroborating witness statements and complementing other forensic evidence, such as DNA, footprints, and tool marks. This underscored the relevance of fingerprint techniques to NACMP's criminal investigations, enabling investigators to transform latent and invisible traces into credible forensic evidence. This helps in suspect identification, crime scene reconstruction, and the validation or refutation of legal claims.

Regarding NACMP's efforts to utilise fingerprint techniques in the criminal investigation process, the findings revealed that NACMP undertook several initiatives to promote the use of fingerprint techniques and other forensic-based investigative tools. These include the establishment of two forensic laboratories, procurement of fingerprint equipment such as fuming chambers, fingerprint processing kits containing powders, tapes, magnifiers, and human capacity development through formal agreements and training programmes. Notably, among the formal training agreements and training was the MoU with UNIBEN to train NACMP personnel in forensics. It was also revealed that additional training has been provided through workshops, seminars, and international collaborations with organisations such as the FBI and the United Nations Office on Drugs and Crime (UNODC) in advanced fingerprint techniques and crime scene investigation.

Furthermore, the findings revealed that the NASMP has integrated fingerprint techniques into its curriculum across all relevant courses, including criminal investigation. These findings align with those of Kumar & Reddy (2019), who reported that fingerprint techniques are gaining prominence not only in developed countries such as the UK and the USA but also in developing and transitional justice systems. The training initiatives corroborate the FBI's (2024) reports, which emphasise periodic training for law enforcement and military personnel in latent fingerprint development, lifting methods, comparison standards, and documentation procedures. Similarly, the findings support Ezegbogu (2023), who noted that forensic training in Nigerian law enforcement agencies is conducted through formal police colleges, civil institutions, forensic workshops, and collaborations with international organisations to reduce examiner error, improve accuracy, and align local practices with international standards. This signifies that NACMP has made significant strategic efforts to promote the use of fingerprint techniques in its criminal investigations. This demonstrates a deliberate commitment to improving forensic investigative capacity and aligning practices with international standards.

Conclusion

The study assessed the significance of fingerprint techniques in conducting criminal investigations with reference to NACMP. NACMP made several efforts towards adopting fingerprint techniques in its criminal investigations. The establishment of forensic laboratories, the procurement of fingerprint equipment, and capacity building had contributed significantly to the settlement of some cases. This strengthens credibility, efficiency, and fairness of NACMP's investigations and prosecutions, thereby enhancing military justice and public confidence. The findings contribute to existing knowledge on fingerprint techniques and the Nigerian criminal justice system, which provides a foundation for informed decision-making on the adoption and expansion of forensic practices within the military.

Recommendations

Based on the findings of this study, the following recommendations are made:

- (1) The NACMP should establish additional forensic laboratories across all Nigerian Army provost divisions and equip them with modern fingerprint technologies, including Automated Fingerprint Identification Systems (AFIS), live-scan devices, and advanced chemical reagents such as Mikrosil, molybdenum disulfide, LCV, and digital imaging software.
- (2) The NACMP should seek authorisation from the NA to enable inter-departmental data sharing, particularly access to personnel databases maintained by the Nigerian Army Finance Corps and Nigerian Army Intelligence Corps, to facilitate rapid fingerprint comparison and suspect identification.
- (3) The NACMP should intensify efforts to provide advanced and specialised training for its forensic personnel through local and international training programs by strengthening collaborations with organisations such as the UNODC and other international partners.
- (4) The NACMP should incorporate fingerprint capturing as a core requirement in the continuous development of its crime database to aid in the identification of repeat offenders, background checks, promotions, and commissioning processes.

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