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Artificial Intelligence, Criminology and Security Knowledge Production: Experiences of University Lecturers in South-West Nigeria

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Abstract

Integrating artificial intelligence (AI) into higher education raises questions about academic expertise, knowledge production, and research ethics, yet little empirical work has examined its role in criminology and security studies in Nigeria. This study explored how university lecturers and researchers in South-West Nigeria use AI to produce, interpret, and validate criminological and security knowledge. Guided by Trist and Bamforth's Sociotechnical Systems Theory (STS), it adopted an exploratory qualitative design informed by an interpretivist orientation. Four universities were purposively selected to capture both public and private institutional contexts within one region: the University of Ibadan and Federal University Oye-Ekiti (public), and Lead City University and Dominion University, Ibadan (private), all of which host criminology and security-related teaching and research. Twenty-four participants, 12 lecturers and 12 senior researchers or postgraduate supervisors with relevant AI experience, took part in semi-structured, in-depth interviews, and the data were analysed using reflexive thematic analysis. Participants used AI for teaching preparation, literature synthesis, academic writing and research organisation, but did so selectively, reserving the interpretation of sensitive, context-dependent material for themselves. They treated AI outputs as provisional, verifying them against original sources, the wider literature and local knowledge. Gains in efficiency and accessibility were weighed against concerns about misinformation, fabricated references, confidentiality, academic integrity, and accountability. The study advances three concepts: selective sociotechnical integration, negotiated epistemic authority and institutionally conditioned responsible AI use. It argues that AI-assisted scholarship is a sociotechnical process requiring human oversight, institutional guidance, and context-sensitive validation, and it foregrounds the epistemic and ethical implications of AI use for criminology and security scholarship in Nigeria.

Keywords: *Artificial intelligence, criminology, security studies, knowledge production, university lecturers, Nigeria.*

Introduction

Artificial intelligence (AI) has moved rapidly from a specialised technological field to an influential component of contemporary education, research and professional practice. Generative artificial intelligence (GenAI), in particular, comprises systems capable of producing text, analysing information and supporting a range of cognitive tasks, and its public availability has intensified this transformation. Miao and Holmes (2023) note that GenAI is developing faster than many institutional and regulatory frameworks can adapt, raising questions about data privacy, academic integrity, human agency, ethical use and the validation of AI-supported outputs. These developments invite scholars to ask not simply whether academics use AI, but how its incorporation alters established practices of teaching, research and knowledge production.

Higher education has become a principal site of AI adoption and debate. AI applications now span teaching, learning, assessment, information retrieval, writing assistance and research support, and the systematic review by Wang et al. (2024) demonstrates the breadth of research interest in AI-

enabled educational practices. Yet this expansion also changes the relationship between academic expertise and technological systems. When researchers use AI to generate or refine text, organise information, analyse data or assist interpretation, the technology may influence not only the efficiency of academic work but also the processes through which evidence is selected, meanings are constructed and claims are justified. Miao and Holmes (2023) accordingly stress the importance of human-centred approaches to the ethical and pedagogical use of GenAI in education and research.

These concerns are especially consequential for criminology, where knowledge production depends on interpreting complex social behaviour, empirical evidence and theoretically informed explanations of crime. AI is beginning to enter substantive criminological work rather than remaining confined to administrative or educational uses. Pacchioni et al. (2025), for example, examined the capacity of GenAI to identify and reformulate techniques of neutralisation, showing that AI can engage with established criminological concepts while also exposing the pitfalls of applying such systems to criminological analysis. Criminological knowledge often rests on the contextual interpretation of human experiences, social relationships and institutional processes that cannot be reduced to computational pattern recognition. The question is therefore not only what the technology can do, but how its outputs are interpreted, scrutinised and incorporated into disciplinary knowledge.

The implications extend to security studies and criminal justice research, where AI is being considered for information processing, transcription, translation, investigation and decision support. Camello et al. (2025) identify a range of potential GenAI applications across criminal justice workflows while emphasising the importance of understanding limitations and the conditions of responsible adoption. In security-related research, the stakes are heightened because the quality of knowledge may shape assessments of threats, risks, vulnerabilities, and institutional responses, so that AI-assisted outputs can acquire practical significance beyond the academy. Research on predictive policing shows how the quality and representativeness of data can affect algorithmic outputs and reproduce or amplify existing bias (Almasoud & Idowu, 2025). The use of AI in criminology and security scholarship thus poses an epistemological problem: how does AI affect the processes through which knowledge is produced, interpreted and validated?

This problem arises because academic knowledge is never produced by tools alone. It is shaped by researchers' expertise, disciplinary conventions, methodological choices, institutional expectations and peer scrutiny. AI can redistribute some of these activities between researchers and technological systems: it may identify patterns, summarise the literature or generate preliminary interpretations, while the researcher remains responsible for accuracy, contextual relevance and evidential support. The boundary between assistance and intellectual contribution can, however, blur as systems perform more sophisticated tasks. Understanding this shifting relationship requires attention to researchers' actual experiences, rather than reliance on studies of technological capability or purely normative discussions.

The issue is particularly pertinent in Nigeria, where universities are responding simultaneously to expanding digital technologies, resource constraints and emerging demands for AI-related competencies. Eleje et al. (2025) examined lecturers' perceptions of AI adoption in Nigerian higher education and identified concerns about academic integrity, student dependence and the need for institutional support. Peters and Olojede (2025) similarly identify opportunities associated with GenAI while drawing attention to academic honesty, over-reliance, institutional policy and data governance. These studies confirm that AI is an important issue within Nigerian universities. However, the emerging Nigerian literature is largely concerned with adoption, perceptions, educational benefits and general institutional implications, rather than with how AI transforms knowledge production within specialised fields such as criminology and security studies.

This constitutes an empirical and conceptual gap. International research has begun to examine specific applications of GenAI in criminology and criminal justice, but little attention has been paid to the experiences of academics who work directly with criminological and security knowledge, particularly in Nigeria. We know too little about how these academics use AI in everyday teaching and research, how they judge the credibility of AI-assisted outputs, and how they negotiate the boundary between human expertise and machine-generated knowledge. Adoption alone cannot answer these questions; what matters equally is how academics incorporate, question, modify, reject or validate AI-supported information within established disciplinary practices.

Against this background, the study explores the experiences of university lecturers and researchers regarding the use of AI in criminology and security knowledge production in South-West Nigeria. It is guided by three research questions:

1. How do university teachers and researchers use AI in criminology teaching and security-related research in Nigeria?
2. How does AI use influence the production, interpretation, and validation of criminological and security knowledge?
3. What opportunities, challenges and ethical concerns do university teachers and researchers experience in using AI for criminology and security knowledge production?

Literature Review

AI in Higher Education and Academic Practice

Generative Artificial Intelligence (GenAI), including tools such as ChatGPT, Claude, Gemini and DALL·E, is built on large foundation models trained on extensive datasets to generate human-like textual, visual and other outputs. Its emergence has generated considerable enthusiasm and

concern among higher education practitioners, particularly regarding its implications for teaching, learning, assessment and academic work (Lindell & Utterberg Modén, 2025; Lindell & Modén, 2025). Baidoo-Anu and Owusu Ansah (2023) report that ChatGPT attracted over a million users within a week of its public release on 30 November 2022, prompting widespread debate about its implications for educational practice. Nevertheless, evidence of pedagogical and institutional integration remains uneven across university teaching, learning and assessment (Virmani et al., 2026).

Empirical studies demonstrate the expanding applications of AI in higher education, alongside the influence of human attitudes on its adoption. Chen et al. (2020) identify its potential to streamline administrative processes, support assessment and improve teaching quality. Similarly, Malik et al. (2023), drawing on 245 undergraduate students from 25 Indonesian institutions, report the usefulness of AI in writing instruction, particularly for grammatical checking, plagiarism detection, translation and writing improvement. However, Kim and Kim (2022) demonstrate that the integration of AI into teaching is partly dependent on instructors' attitudes, with STEM teachers recognising its potential for instructional scaffolding while expressing concerns about changes to their professional roles.

The breadth of AI applications in education is further illustrated by Wang et al. (2024), whose review of 2,223 publications and detailed examination of 125 studies identify adaptive learning, intelligent assessment, prediction, educational management and emerging generative applications as major areas of development. Although their findings establish higher education as an important context for AI research, they also highlight underexplored areas and the need for stronger theoretical and methodological development. More recent reviews demonstrate the growing influence of GenAI on academic practice. Belkina et al. (2025) identify diverse applications in teaching and learning but note uneven evidence regarding innovation and implementation, while Qian (2025) observes an increasing scholarly focus on GenAI for instructional support and academic tasks.

In all, these studies suggest that AI adoption in higher education extends beyond the automation of routine activities to the reorganisation of academic practices and the distribution of tasks among lecturers, researchers, students and technological systems. Its significance therefore lies not only in improving educational efficiency but also in transforming how academic work is undertaken. This broader development provides a basis for examining AI beyond its pedagogical applications, particularly its emerging role in scholarly research, disciplinary expertise and academic knowledge production.

AI and Academic Knowledge Production

The growing integration of GenAI into academic practice has extended its influence to research and scholarly knowledge production. AI tools can support literature searching, summarisation, language editing, coding, data organisation, methodological brainstorming, evidence synthesis and the preparation of research outputs. A systematic review of GenAI in postgraduate research by Mabirizi et al. (2025) identifies potential improvements in research productivity and efficiency, particularly in writing, literature reviews and data analysis. However, the review also highlights concerns relating to plagiarism, fabricated information, over-reliance and inadequate AI literacy.

These developments demonstrate the potential of GenAI to facilitate research activities but also raise questions about the reliability and credibility of its outputs. Adel and Alani (2025), examining ChatGPT's capacity to support literature synthesis, identify hallucination as a significant limitation, as generative systems can produce plausible but inaccurate information. This is particularly consequential in academic research, where claims must be supported by verifiable evidence and references must correspond to authentic publications. Menczer et al. (2024) similarly examine factuality challenges associated with large language models and the opportunities for fact-checking. Extending this concern to evidence synthesis, Clark et al. (2025) demonstrate the growing interest in AI-assisted evidence production while emphasising the importance of evaluating the reliability and appropriateness of such processes.

The literature consequently suggests that AI-assisted research should not be understood as the replacement of human scholarly judgement but as an evolving relationship between human expertise and technological capabilities. Miao and Holmes (2023) advocate a human-centred approach to GenAI in education and research, emphasising human agency, data protection, ethical validation and institutional responsibility. Accordingly, although AI can facilitate information processing and research activities, researchers remain responsible for assessing the accuracy, relevance, contextual appropriateness and methodological defensibility of generated outputs.

This distinction is important because academic knowledge production involves more than accessing and processing information. It also requires interpretation, critical engagement, theoretical positioning and the validation of evidence within established disciplinary standards. AI may therefore influence not only the efficiency of research but also the ways academics exercise professional judgement, establish credibility and determine what constitutes acceptable scholarly knowledge.

AI in Criminology and Security Knowledge Production

The implications of AI for academic knowledge production are particularly significant in criminology and security studies, where research involves the interpretation of crime, offending, victimisation, insecurity, threats, risk and institutional responses. AI is increasingly being explored in criminal justice activities, including administrative processing, investigation and decision support. A 2025 National Institute of Justice landscape study identifies potential GenAI applications in transcription, translation, investigation and decision support, while highlighting the importance of understanding technological limitations and the conditions influencing adoption (Camello et al., 2025). Although these applications primarily concern criminal justice operations, they illustrate the expanding relationship

between AI, crime-related information and security practices.

Within criminology, empirical research examining the application of GenAI to disciplinary concepts is still emerging. Pacchioni et al. (2025), for instance, examined GPT-4's capacity to identify and reformulate techniques of neutralisation, demonstrating its potential to undertake particular classification and reformulation tasks while highlighting the limitations of applying generative systems to criminological constructs. This illustrates how AI may contribute to the examination and organisation of criminological knowledge, although its outputs still require disciplinary interpretation and validation.

Beyond these specific applications, AI has implications for criminological scholarship through literature discovery, qualitative data organisation, coding, evidence synthesis, teaching-material development and preliminary interpretation of research findings. However, criminological knowledge often concerns complex social relationships, institutional practices and context-dependent meanings that may not be adequately represented through computational classification or automated summaries. Consequently, the usefulness of AI in criminological research depends partly on researchers' capacity to assess its outputs against established theoretical perspectives, empirical evidence and contextual realities.

Similar considerations apply to security studies, where knowledge production increasingly involves extensive information processing, threat identification, intelligence interpretation, risk assessment and the analysis of rapidly changing security environments. Narula et al. (2025), through a systematic mapping of 123 studies, identify an expanding AI security research landscape encompassing trustworthy AI, adversarial robustness, privacy, data security and generative AI. Similarly, a systematic review of AI in military cybersecurity by Maathuis and Cools (2025) identifies data availability and evaluation methods as important considerations in the application of AI to the protection of national assets and responses to adversarial activities.

These developments indicate that AI can influence not only the volume and speed of security information processing but also how threats are identified, categorised and interpreted. Nevertheless, the capacity to process extensive information does not automatically establish the validity of security knowledge. Its credibility remains dependent on the quality of underlying information, appropriate analytical procedures, contextual understanding and human scrutiny.

Thus, the criminology and security literature demonstrates the growing relevance of AI to disciplinary research and professional practice. However, operational applications in criminal justice and cybersecurity should be distinguished from its use in academic knowledge production. For university lecturers and researchers, the more pertinent questions concern how AI is incorporated into disciplinary teaching and research, how its outputs are evaluated against criminological and security knowledge standards, and how academics negotiate the relationship between technological assistance and professional expertise.

Ethical and Epistemic Challenges of AI-Assisted Knowledge Production

The expanding use of AI in academic practice has generated ethical and epistemic concerns that extend beyond questions of technological efficiency. These concerns relate particularly to the reliability of generated information, academic integrity, privacy, algorithmic bias, transparency, accountability, authorship and intellectual dependence. A systematic review by Alfiras et al. (2026) identifies privacy and data protection, algorithmic fairness, transparency and explainability, well-being and human oversight as major governance concerns in education, while highlighting the limited representation of low- and middle-income contexts in the evidence base. Similarly, Zhu et al. (2025) identify privacy, bias, inequality, transparency and regulatory weaknesses as recurring challenges associated with AI-enabled education.

From an epistemic perspective, the reliability of AI-generated information presents a fundamental concern for academic knowledge production. Hallucinated information, fabricated references, inaccurate interpretations and embedded biases may compromise the credibility of research outputs, particularly where researchers accept generated information without independent verification. These limitations are especially consequential in criminology and security studies, where inaccurate interpretations of crime, offending, victimisation and security threats may distort the understanding of complex social realities.

Academic integrity constitutes another important dimension of this challenge. The use of AI in drafting, editing, synthesising and interpreting research materials raises questions about authorship, originality, intellectual contribution and accountability. Although AI can support scholarly activities, excessive dependence may weaken critical engagement and obscure the extent to which researchers have independently evaluated the information presented in their work. Similarly, the use of potentially sensitive research materials in AI systems raises concerns about confidentiality, data protection and the ethical responsibilities of researchers.

These challenges demonstrate that AI's implications for academic knowledge production cannot be understood through a simple distinction between benefits and risks. Its capacity to improve productivity and accessibility may coexist with vulnerabilities relating to information accuracy, intellectual responsibility and the credibility of scholarly outputs. Responsible integration therefore requires researchers to maintain critical oversight, verify generated information, protect research data and remain accountable for their scholarly contributions. Understanding how academics experience and negotiate these ethical and epistemic tensions is consequently important for examining the place of AI in contemporary university research.

AI Adoption and Academic Knowledge Production in Nigeria

AI adoption in Nigerian higher education is developing within institutional environments characterised by varying levels of technological infrastructure, accessibility, digital capacity and institutional preparedness. Existing studies demonstrate growing academic engagement with AI, although their populations, methodological approaches and substantive concerns differ considerably.

Eleje et al. (2025), studying lecturers at Nnamdi Azikiwe University, identify increasing engagement with AI alongside concerns about academic integrity, student dependence and critical thinking. However, their quantitative approach provides limited insight into how academics incorporate AI into research practices and the production of disciplinary knowledge. Similarly, Owan et al. (2025), examining 456 postgraduate students in two public universities, investigate the relevance of AI to literature reviews, methodological design and data analysis. Their predictive correlational approach and focus on postgraduate students, however, offer limited understanding of how lecturers and experienced researchers use AI to produce, interpret and validate academic knowledge.

Peters and Olojede (2025) identify learner support, accessibility and scalability as potential benefits of GenAI in Nigerian higher education, while highlighting concerns relating to academic honesty, cognition, infrastructure, access and affordability. Moving beyond student-oriented applications, Adebayo and Adekunle (2026), through a qualitative study involving stakeholders in two public universities, indicate that AI can support productivity, research and decision-making, while institutional governance influences its outcomes. Bakre and Tukur-Bello (2026) examine ethical considerations associated with AI-driven education in selected Nigerian universities, drawing on students' use of AI. Asuquo and Santas (2025) also examine AI applications in research and academic writing among academic staff at Nasarawa State University and the University of Abuja.

Collectively, these studies establish the growing relevance of AI to Nigerian higher education, particularly in relation to academic adoption, teaching and learning, research productivity, academic writing and institutional governance. Nevertheless, important empirical and disciplinary limitations remain. Much of the existing literature concentrates on general educational applications, student experiences, adoption patterns and broad ethical concerns. Although some studies have considered lecturers and academic staff, less attention has been devoted to how academics in specialised disciplines incorporate AI into their knowledge-producing activities and negotiate its implications for professional expertise, research credibility and disciplinary standards.

This limitation is particularly significant in criminology and security studies, where the production of credible knowledge requires critical interpretation of crime-related evidence, social realities, institutional practices and security threats. The extent to which AI-generated information reflects these disciplinary and contextual considerations cannot be established solely through studies of general adoption or perceived usefulness. It requires an examination of academics' actual experiences, including how they use AI, the activities for which they consider it appropriate, how they verify its outputs, and the opportunities and challenges they encounter in their scholarly work.

The present study addresses this gap by exploring the experiences of university lecturers and researchers involved in criminology and security-related scholarship in South-West Nigeria. Rather than treating AI adoption as an indicator of technological acceptance or resistance, the study examines how AI is incorporated into academic knowledge production and how academics negotiate the relationship between technological capabilities, disciplinary expertise, contextual understanding, and the validation of scholarly knowledge. In doing so, it extends existing discussions of AI in higher education beyond general adoption and pedagogical applications to the epistemic, professional, and disciplinary implications of AI-assisted criminology and security scholarship.

Theoretical Framework

Sociotechnical Systems Theory (STS) originated in the work of Trist and Bamforth (1951), whose study of mechanised coal mining showed that technological change could not be understood independently of changes in work organisation, human relationships and patterns of cooperation. Later developments retained the central proposition that technological and social systems are interdependent rather than separate domains (Baxter & Sommerville, 2011), and Bostrom and Heinen (1977a, 1977b) carried this proposition into information systems research. This is an appropriate framework because it explains technological change as the outcome of interactions between technical systems and the social, organisational and institutional environments in which they are embedded. The approach

In this study, STS implies that the use of AI in criminology and security scholarship is shaped not only by the capabilities of AI technologies but also by lecturers and researchers, students and research assistants, institutional policies, research ethics, disciplinary conventions, technological infrastructure and wider professional contexts. Recent scholarship similarly emphasises that AI systems operate within sociotechnical environments in which technological characteristics interact with organisational arrangements, human practices and contextual conditions (Dobbe & Wolters, 2024).

The framework is analytically useful in three respects. First, it directs attention to how academics incorporate AI into literature searching, writing, data analysis, synthesis and teaching preparation, and how those practices shape the generation, interpretation, verification, validation and dissemination of knowledge. Second, it does not presume that AI will either improve or diminish knowledge production; it asks under what conditions particular technological practices become meaningful and consequential. Third, it accommodates both the

opportunities and the constraints that academics experience, including questions of expertise, human judgement, institutional governance, accountability and ethical responsibility. STS therefore allows AI to be examined as an integral component of an evolving academic system rather than as an isolated tool, and it structures the analysis that follows: the integration of AI into academic practice, the validation of AI-generated knowledge, and the institutional conditions of responsible use.

Methodology

The study adopted an exploratory qualitative design informed by an interpretivist approach to examine how lecturers and researchers in criminology and security-related fields experienced and interpreted artificial intelligence (AI) in academic knowledge production. The design recognised AI not merely as a technological tool but as an emerging feature of academic practice whose implications are shaped by disciplinary experiences, professional judgement and institutional contexts. The interpretivist orientation provided a framework for understanding how academics constructed meanings around AI and negotiated its implications for producing, evaluating and communicating knowledge (Creswell & Poth, 2024).

The study was conducted in South-West Nigeria across four purposively selected universities: the University of Ibadan (UI) and Federal University Oye-Ekiti (FUOYE), both public institutions, and Lead City University (LCU) and Dominion University (DU), both private institutions in Ibadan, Oyo State. The institutions were selected to capture variations in public and private university contexts and their engagement with criminology and security-related teaching and research. Purposive sampling was employed to recruit 24 participants comprising 12 lecturers in criminology, security studies, criminal justice, and related disciplines, and 12 senior researchers or postgraduate research supervisors. The lecturers were selected based on their teaching responsibilities and experience with AI in teaching preparation, literature reviews, academic writing, or research, while the senior researchers and supervisors were selected based on their involvement in research evaluation, methodological decision-making, and postgraduate supervision. Where professional responsibilities overlapped, participants were classified according to their principal role relevant to the study. Recruitment was undertaken through email invitations and referrals. Sample adequacy was guided by information power, which recognises that qualitative sample requirements depend on the study aim, sample specificity, quality of dialogue and analytical strategy (Malterud et al., 2016).

Data were generated primarily through semi-structured, in-depth interviews, supplemented by institutional AI policies and related documents. The interviews explored participants' academic backgrounds, experiences and purposes of AI use, its applications in knowledge production, perceived opportunities and limitations, and ethical concerns relating to academic integrity, authorship, confidentiality, data protection, transparency and accountability. Particular attention was given to AI applications in literature searching and synthesis, data analysis, interpretation, academic writing and the verification of AI-generated information. Probing questions encouraged participants to explain specific experiences and professional judgements concerning the acceptance, evaluation or rejection of AI-generated outputs (Creswell & Poth, 2024).

Interview data were analysed using reflexive thematic analysis, following the processes of familiarisation, initial coding, theme development and review, refinement, and construction of the analytical narrative (Braun & Clarke, 2006, 2021). Coding was inductive and interpretive, focusing on patterns of meaning relating to AI-assisted research, efficiency, accuracy, verification, bias, professional judgement, authorship, confidentiality and changing research competencies. The analysis recognised the researcher's interpretive role in developing themes and explaining how AI-related practices shaped the production, evaluation and legitimisation of criminological and security knowledge. Methodological reflexivity was maintained through notes documenting assumptions, analytical decisions and emerging interpretations. An audit trail, attention to divergent accounts and comparisons across participant categories and institutional contexts supported analytical transparency. Contextual descriptions enhanced transferability, while credibility, dependability and confirmability were addressed in accordance with Lincoln and Guba (1985). Ethical approval was obtained before data collection, and participation was voluntary and based on informed consent. Anonymity and confidentiality were protected through participant codes or pseudonyms, removal of identifying information, and secure data storage. Participants' accounts of AI use were interpreted within their professional and institutional contexts rather than automatically classified as academic misconduct.

Results

Three themes emerged from the results of the study. They included emerging practices of AI use, the negotiation of knowledge, expertise and validation, and the opportunities, risks and ethical boundaries of AI use. Extracts are identified by data source, participant category, institution, and interview date.

Emerging Practices of AI Use in Criminology and Security Scholarship

The use of AI was described by the majority of the participants as an increasingly important resource for preparing teaching materials, improving academic writing, reviewing literature, synthesising information and organising research activities in recent times. Its use has extended across several tasks, yet no participant regarded AI as a substitute for professional judgement. One participant explained:

> "For me, AI is mainly for preparing lecture materials and improving academic writing, but its use has gradually extended to literature searches, synthesising studies and organising research materials. I still regard these as forms of assistance rather than replacing the

researcher because the substantive academic decisions remain mine. Its usage depends much on the information you want." (IDI/Researchers and Postgraduate Supervisors/UI/April 2026)

This account shows both the range of tasks for which AI was used and the participant's insistence on retaining responsibility for academic decisions: AI assisted existing work rather than determining the content or direction of scholarship.

Literature review emerged as a prominent application. Many participants used AI to identify conceptual connections and organise information, while continuing to consult original publications. A lecturer explained:

> "Literature review is probably where I notice the greatest difference. AI helps me identify concepts and connections across a large body of literature much faster. However, I still return to the original articles because the initial synthesis can overlook important arguments or present an author's position differently from the original text." (IDI/University Lecturer/DU/May 2026)

AI-assisted synthesis was thus combined with direct engagement with published literature, not substituted for it. Participants also differentiated between tasks according to their perceived suitability for AI assistance. A lecturer at another institution stated:

> "I am more willing to use AI for brainstorming, editing and organising information than for interpreting sensitive research data. Where an issue requires knowledge of the Nigerian security environment or understanding participants' experiences, I prefer to depend more heavily on my own expertise and the original evidence." (IDI/University Lecturer/FUOYE/April 2026)

This account demonstrates that AI use was selective: preliminary and supportive tasks were delegated more readily than the interpretation of sensitive information or of experiences requiring contextual understanding. Overall, participants incorporated AI into several aspects of teaching and research, particularly information organisation, writing and literature engagement, and the extent of use depended on the nature of the task and the perceived need for direct scholarly judgement.

Negotiating Knowledge, Expertise and Validation

Participants' accounts revealed that the availability of fluent AI-generated responses did not translate automatically into confidence in their accuracy. Participants negotiated a distinction between information that appeared plausible and knowledge that could be substantiated through credible sources, empirical evidence and disciplinary reasoning, so that the authority of AI outputs remained open to scrutiny. They described checking sources, comparing claims with existing literature, and assessing consistency with their own research evidence. One participant stated:

> "I do not automatically trust an AI-generated answer because it appears scholarly. I check the original sources, compare the information with other literature, and consider whether it fits the evidence from my research. For me, credibility comes from verification rather than from the sophistication of the AI response." (IDI/University Lecturer/LCU/May 2026)

Source verification and comparison with existing evidence were thus treated as integral to AI use. The participant did not dismiss AI-generated information but regarded its credibility as requiring independent assessment. Participants also reflected on the relationship between AI and academic expertise. One lecturer explained:

> "AI has made me reconsider what academic expertise means. It can retrieve and organise information faster than I can, but it does not necessarily understand why a particular issue matters in the Nigerian context. My role has therefore shifted towards questioning, contextualising and validating what the system produces." (IDI/University Lecturer/DU/May 2026)

Here the participant distinguished the capacity to retrieve and organise information from the ability to evaluate its contextual significance, and located expertise in the latter. The relevance of local knowledge was emphasised further by a senior researcher:

> "One concern is that AI may provide a technically convincing explanation that does not fully capture our local realities. Nigerian criminological experiences are sometimes very context-specific. If the researcher accepts a generalised explanation without bringing in local evidence and knowledge, the technology can make the research appear stronger while actually weakening its contextual validity." (IDI/Researchers and Postgraduate Supervisors/UI/April 2026)

This account warns that generalised explanations may misrepresent the social and institutional circumstances of Nigerian criminological and security research. Across these extracts, participants approached AI-generated knowledge through verification, contextual interpretation and disciplinary judgement.

Opportunities, Risks and Ethical Boundaries

Participants identified efficiency and accessibility as important benefits, and raised concerns about inaccurate information, insufficient verification, confidentiality and responsibility for AI-assisted work. One described the benefits as follows:

> "AI can reduce the time required for some routine academic activities and make research resources more accessible. For researchers working with limited institutional support, that can be significant. However, the benefit depends on whether researchers have the skills to interrogate the information rather than simply accepting whatever the technology provides." (IDI/University Lecturer/LCU/May 2026)

Most participants associated AI with reduced time on routine activities and wider access to research assistance, but made those gains conditional on researchers' ability to assess generated information critically. Concerns about misinformation were apparent in another account:

> "The greatest danger is that inaccurate information can appear authoritative. AI can produce references that look genuine or combine information in ways that are difficult to detect immediately. This creates a particular problem for early-career researchers because insufficient verification may allow misinformation to enter academic work and eventually become treated as established knowledge." (IDI/Researchers and Postgraduate Supervisors/UI/April 2026)

Some participants identified the possibility that unverified claims or references might be incorporated into academic work and, over time, acquire the status of established knowledge. Ethical responsibility was a further concern:

> "The researcher cannot transfer responsibility to the technology. If confidential interview data are entered into an AI system, there are questions about privacy and consent. Similarly, if AI contributes substantially to an academic paper, there should be transparency about its use. Ultimately, accountability for the research must remain with the human researcher." (IDI/University Lecturer/FUOYE/April 2026)

Confidentiality, consent, transparency and human accountability were therefore treated as inseparable from AI-assisted research, and using AI did not remove the researcher's responsibility for protecting participants or ensuring the integrity of academic outputs. Taken together, participants recognised both the benefits and the limits of AI, weighing efficiency and accessibility against misinformation, inadequate verification and the inappropriate handling of research data.

Discussion of Findings

The discussion interprets each theme through STS and then synthesises them into a single account of AI-assisted scholarship. Each theme yields a distinct conceptual contribution.

Selective Sociotechnical Integration

This study highlights the AI integrated into the routines of lecturers and researchers in both public and private universities, particularly in lecture preparation, academic writing, literature synthesis and research organisation. The integration was, however, selective. Participants used AI as an aid to existing activities while retaining responsibility for substantive scholarly decisions, so that adoption is better understood as the reorganisation of academic work than as the replacement of human intellectual labour.

STS explains this pattern. Trist and Bamforth (1951) demonstrated the importance of understanding technological arrangements alongside the social organisation of work, and Bostrom and Heinen (1977a, 1977b) applied sociotechnical principles to information systems, stressing that technological success depends partly on its relationship with human and organisational arrangements. AI-assisted scholarship involves an interaction between technical capabilities, such as information processing and text generation, and social elements, including disciplinary expertise, academic expectations and established research practices. The interaction is visible in participants' accounts: although AI facilitated synthesis and the organisation of materials, researchers continued to consult original publications and to assess the relevance of generated information. Efficiency gains thus did not remove the intellectual work of connecting concepts, evaluating competing arguments and developing defensible interpretations. AI redistributed academic labour, reducing some routine tasks while increasing the importance of checking, contextualising and evaluating outputs.

This study is consistent with Yusuf et al. (2024), who mapped generative AI applications across educational and research activities, including writing assistance and productivity, while Miao and Holmes (2023) recognised the potential of GenAI but emphasised human agency and appropriate institutional arrangements. Therefore, these works support treating AI as a resource embedded in academic practice rather than merely a technological innovation. Nwali and Udumukwu (2025), who examined AI-powered tools in academic writing and peer review among Nigerian academics, highlighted perceived usefulness and facilitating conditions. Their findings supply a national point of comparison; the present study adds a qualitative account of how academics describe incorporating AI into their work, and of why they delegate some tasks and not others.

That selectivity is the study's main empirical finding. Participants were more comfortable using AI for brainstorming, editing and information organisation than for interpreting sensitive data or experiences requiring contextual understanding. In STS terms, a technology's suitability depends on the fit between its capabilities and the social requirements of a task. The fit is poorest in criminology and security research, where crime, policing and insecurity are shaped by institutional, historical and community-level circumstances. The study therefore proposes *selective sociotechnical integration*: AI assists academic work while researchers retain responsibility for its intellectual direction. Adoption should accordingly be judged not by frequency of use but by whether integration preserves critical engagement with evidence and scholarly autonomy.

Negotiated Epistemic Authority

AI-assisted knowledge production involved a continuing negotiation between generated information and academic judgement. Participants did not treat fluency or apparent sophistication as evidence of credibility; they checked original sources, compared claims with other literature, and tested consistency with research evidence. Local knowledge remained central to evaluating AI-generated explanations of criminological and security phenomena.

STS clarifies why validation cannot be separated from the social organisation of academic work. In Bostrom and Heinen's (1977a, 1977b) terms, the technical subsystem generates or organises information, while the social subsystem supplies the disciplinary standards and professional judgement by which that information is evaluated. Validation is therefore a scholarly practice, not a

technical property of the AI system. This is particularly relevant to hallucination. Farquhar et al. (2024) examined the detection of hallucinations through semantic entropy, underlining the importance of assessing the reliability of generated responses. For criminology and security scholarship, AI-generated claims must be treated as provisional until their evidential foundations are established, since incorrect legal references, fabricated publications or misleading summaries could weaken arguments and distort policy discussion.

The findings also extend beyond factual accuracy to expertise. Participants accepted that AI retrieves and organises information rapidly but insisted that disciplinary judgement is needed to assess meaning. Expertise was thus redistributed, not eliminated: as information processing becomes easier, researchers must devote more attention to evaluating output quality, identifying omissions and determining relevance to specific research questions. Expertise cannot be reduced to retrieval; it also involves evaluating evidence, understanding context and developing defensible explanations.

Contextual validity is the sharpest concern for Nigerian criminology and security studies. Participants cautioned that generalised AI explanations may not represent local experiences and institutional realities. The findings do not establish that AI systems invariably privilege Western knowledge, but they show why generated claims must be evaluated against Nigerian evidence and diverse scholarly perspectives. Miao and Holmes (2023) likewise emphasised human agency, cultural and linguistic diversity and institutional safeguards, reinforcing the point that the value of AI-assisted knowledge depends on the context in which outputs are interpreted and applied. In criminology, this may require testing broader theoretical explanations against specific patterns of policing, community security, victimisation and institutional authority in Nigeria. The resulting concept is *negotiated epistemic authority*: AI influences how information is produced and organised, but academic credibility continues to depend on verification, contextual understanding and disciplinary accountability.

Institutionally Conditioned Responsible Use

Participants regarded AI as both an opportunity and a potential source of risks that require careful oversight. Its benefits included greater efficiency and accessibility, while its risks encompassed misinformation, insufficient verification, threats to confidentiality, and accountability concerns. Accordingly, the effects of AI use depend not only on the technology's capabilities but also on users' skills, institutional resources, and the ethical safeguards in place. Baxter and Sommerville (2011) argued for integrating social and technical considerations in systems design and implementation, and this principle applies directly to Nigerian universities: access to AI tools alone cannot guarantee meaningful research benefits. Researchers also need training, appropriate infrastructure, access to credible scholarly sources, and clear guidance on acceptable use. Yusuf et al. (2024) identified productivity and research applications among the areas examined in GenAI scholarship, while Miao and Holmes (2023) cautioned that educational and research uses require human-centred implementation and institutional safeguards. A balanced interpretation follows: AI can assist academic work, but its benefits depend on how, and under what conditions, it is used.

The misinformation concern shows why technical capability must be accompanied by critical judgement. Following Farquhar et al. (2024), plausible but inaccurate outputs can enter academic writing when sources are unchecked, and in criminology and security studies such errors may distort the representation of crime, the interpretation of evidence and the credibility of recommendations on policing and public security. Ethical responsibility poses a further sociotechnical challenge. Participants identified privacy, consent, transparency and accountability as pressing considerations, especially for interview transcripts and security-related information. The Nigeria Data Protection Act (Federal Republic of Nigeria, 2023) provides a legal framework for personal data, and Miao and Holmes (2023) offer broader guidance on privacy, human agency and responsible AI use.

These responsibilities operate at two levels. Researchers must exercise professional judgement where sensitive information is involved, while universities must provide policies, research ethics procedures, staff development and data-management safeguards. When such arrangements are absent or unclear, responsible practice depends too heavily on individual interpretation, creating inconsistent approaches across departments and institutions. Ethical adoption cannot be reduced to personal caution; it requires alignment between the technical system, users' competencies, and the institutional environment, because inaccurate information or inappropriate disclosure can affect participant welfare and public trust. The study therefore proposes *institutionally conditioned responsible AI use*, a position that avoids both technological determinism, which assumes AI will automatically improve research, and technological rejection, which overlooks its contributions.

Conclusion

This study examined how university lecturers and researchers in South-West Nigeria experience the integration of AI into criminology and security knowledge production. Its findings reveal that AI has become a significant but selectively deployed resource, used for lecture preparation, literature searching and synthesis, writing and the organisation of research materials, without any unqualified transfer of scholarly responsibility to technology. Most participants described a negotiated adoption in which perceived usefulness is weighed against the need for human judgement, source verification and contextual understanding.

The study also shows that AI is reshaping rather than eliminating academic expertise. The capacity to process information efficiently does not guarantee accuracy, contextual relevance or epistemic credibility, a distinction that carries particular weight in Nigerian criminology and security studies, where explanations of crime, violence and insecurity must be sensitive to local institutions, social

relations and lived experience. Scholarly competence now includes interrogating, validating and situating AI-assisted outputs within disciplinary knowledge and empirical evidence. Moreover, the benefits and risks of AI are inseparable: efficiency and wider access to research support are constrained by misinformation, potential bias, confidentiality concerns and uncertainty about transparency and accountability, so responsible use cannot rest on individual discretion alone.

The study's central contribution is to conceptualise AI-assisted criminological and security scholarship as a sociotechnical process of knowledge production, articulated through selective sociotechnical integration, negotiated epistemic authority and institutionally conditioned responsible AI use. AI is best understood as an aid to scholarly inquiry, not an autonomous authority or a substitute for the researcher. Its ultimate contribution to Nigerian criminology and security studies will depend on whether its efficiencies can be harnessed without compromising contextual validity, ethical responsibility and the integrity of knowledge.

Implications And Recommendations

The findings of this study carry implications for institutional governance, researcher capacity, disciplinary knowledge production, research ethics and future scholarship. Across them, the value of AI in criminology and security studies depends not on technological access but on the institutional and scholarly conditions governing its use.

Institutional governance. Universities should adopt clear, proportionate policies on AI use in teaching and research, specifying acceptable applications, disclosure requirements, verification responsibilities, and safeguards for confidential data. Rather than blanket restrictions, policies should distinguish routine assistance, such as language editing and information organisation, from substantive uses involving interpretation or the generation of scholarly content. This would promote responsible innovation, reduce inconsistency across departments and protect research integrity.

Researcher capacity. Capacity development should become an integral part of research support. Universities and research centres should provide practical training in AI literacy, source verification, bias recognition, data protection and the assessment of generated information. For criminology and security researchers, training should emphasise the difference between plausible explanations and empirically substantiated claims, equipping them to verify references, compare AI-generated summaries with original publications and retain responsibility for theoretical interpretation and analytical decisions.

Disciplinary and contextual integrity. Because AI explanations of crime, violence and insecurity may overlook the institutional, historical and sociocultural conditions shaping Nigerian experience, researchers should test generated content against original literature, empirical evidence, participants' accounts and local knowledge. AI should serve as an analytical aid and not as an authoritative source of contextual understanding, so that efficiency does not weaken the validity, depth or contextual relevance of scholarship.

Research ethics and accountability. Researchers, supervisors, ethics committees and journal editors need coordinated guidelines on confidentiality, data security, disclosure and the verification of AI-assisted outputs. Disclosure should be proportionate to the nature of AI involvement and consistent with institutional and publication policies. Researchers must remain accountable for the accuracy, originality and ethical integrity of their work, with particular caution where sensitive interviews or identifiable participant information are involved.

Future research. Comparative qualitative studies should examine how AI practices vary across disciplines, university types, resource environments and career stages, and should include postgraduate students, journal editors, research administrators and ethics committees. Longitudinal research would help establish how trust, verification practices and perceptions of expertise evolve as AI technologies and institutional policies change.

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