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EFFECT OF FORENSIC ACCOUNTING TECHNIQUES ON FRAUD PREVENTION: EVIDENCE FROM FCT MDA

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ABSTRACT
Fraud remains a significant threat to accountability and transparency in the Nigerian public sector. This study examined the efficacy of forensic accounting techniques in preventing fraud, focusing on litigation support services, employee fraud awareness, expert consultation (witness), and whistleblowing (forensic anonymous communication). A descriptive research design was adopted, with primary data collected using structured questionnaires administered to staff across selected Ministries, Departments, and Agencies (MDAs) in the Federal Capital Territory, Abuja. The data were analyzed using Structural Equation Modeling (SEM) with Maximum Likelihood Estimation (MLE) in Stata 17 to estimate relationships among the constructs. Findings revealed that litigation support services, whistleblowing mechanisms, and anonymous communication had statistically significant positive effects on fraud prevention, indicating that effective legal mechanisms and anonymous reporting systems are critical tools for curbing fraud. In contrast, expert consultation (witness) and employee fraud awareness exhibited statistically insignificant effects, with employee fraud awareness showing a negative coefficient, suggesting that awareness alone, without institutional support or enforcement, may be insufficient to reduce fraudulent practices. The study recommends that public institutions institutionalize litigation support services, strengthen formal whistleblowing procedures, and better integrate expert consultation into fraud risk management frameworks for optimal effectiveness.

INTRODUCTION

Corruption and fraudulent practices in Nigeria's public sector have deep historical roots, intensifying in sophistication since independence in 1960. Despite democratic reforms after 1999, systemic fraud, weak enforcement, and political interference persist. Nigeria ranked 145th out of 180 countries in the 2023 Corruption Perceptions Index, scoring 24/100 (Transparency International, 2023). Fraud manifests through procurement fraud, payroll fraud, revenue diversion, financial statement manipulation, and asset misappropriation. Procurement fraud alone is estimated to cost about ₦1.3 trillion annually, while payroll fraud involving ghost workers has generated substantial losses (ICPC, 2023; OHCSF, 2023).

These persistent challenges have strengthened the need for specialized tools to detect, investigate, and prevent fraud, leading to the emergence of forensic accounting as a strategic instrument in Nigeria's public sector. The establishment of the ICPC in 2000, EFCC in 2003, and NFIU in 2004 created institutional demand for forensic expertise. Key forensic accounting techniques include litigation support, employee fraud awareness, expert consultation, and whistleblowing. Employee fraud awareness involves educating public sector personnel on fraud risks, detection red flags, and ethical conduct, while expert consultation engages forensic specialists to assess fraud risks, strengthen internal controls, and conduct investigations. Whistleblowing has also gained traction since the Federal Government's Whistleblower Policy of 2016, although fear of retaliation and inadequate legal protection continue to constrain participation (Ezeoha et al., 2025).

Technological advances, including data analytics, digital forensics, machine learning, and blockchain, have increasingly supported fraud detection, investigation, and reporting. However, inadequate technical capacity, limited infrastructure, weak enforcement, insufficient funding, political interference, judicial inefficiency, and shortages of forensic professionals continue to undermine effective fraud prevention. The Federal Capital Territory (FCT), Abuja, provides a strategically relevant setting because it hosts most federal Ministries, Departments, and Agencies (MDAs), alongside major

regulatory, investigative, and oversight institutions. FCT-based MDAs contributed 47% to federal public financial management reforms between 2019 and 2023, highlighting their centrality to national anti-fraud strategies (BPSR, 2023). This study therefore examines the effect of litigation support, employee fraud awareness, expert consultation, and whistleblowing on fraud prevention in FCT MDAs.

Statement of Problem

Fraud in Nigeria's public sector remains a significant challenge, undermining economic development, eroding public trust, and diverting resources from essential services. Despite anti-corruption measures and agencies such as the EFCC and ICPC, procurement fraud costs the government about ₦1.3 trillion annually, while approximately ₦3.7 trillion in oil revenues went unremitted between 2018 and 2022 (ICPC, 2023; NEITI, 2023). These figures highlight gaps in the effective implementation of fraud prevention mechanisms, particularly within the FCT.

Existing literature reports contradictory findings on the effectiveness of forensic accounting techniques. Merit (2025) found that litigation support had no significant impact, whereas Chepngeno and Fred (2020) reported a positive relationship between litigation support and fraud prevention. Omesi and Osamudiamen (2024) found significant effects for expert witness and litigation assistance, while Agbo et al. (2023) reported that investigative assistance significantly affected fraud prevention but expert witness evidence was insignificant. These inconsistencies reveal a critical empirical gap concerning the relative effectiveness of litigation support, employee fraud awareness, expert consultation, and whistleblowing within FCT MDAs.

Methodologically, previous studies have been limited by convenience sampling, restricted samples, and predominantly cross-sectional designs (Enofe & Aigbepue, 2017; Merit, 2025; Agbo et al., 2023). Theoretically, limited application of the Fraud Diamond, Agency, and Broken Windows theories has also constrained understanding of how forensic accounting techniques address capability, agency conflicts, and institutional disorder. This study addresses these practical, methodological, and theoretical gaps by systematically evaluating the effects of selected forensic accounting techniques on fraud prevention among FCT MDAs, providing evidence to inform policy, strengthen accountability, and improve fraud prevention strategies.

The Fraud Diamond extends the traditional Fraud Triangle by incorporating capability, which is particularly relevant where perpetrators possess specialized knowledge and positional authority. Agency Theory explains how information asymmetry and weak oversight can facilitate misconduct, while forensic accounting tools serve as monitoring mechanisms. Broken Windows Theory further emphasizes early detection of irregularities to prevent their escalation into broader institutional fraud and accountability across public institutions nationwide.

Objectives of the Research

i. Examine the extent to which litigation support services are utilized and how they contribute to fraud prevention in the Nigerian public sector.
ii. To evaluate the role of employee fraud awareness in reducing and preventing fraud within public sector institutions in Nigeria.
iii. Determine the effect of whistleblowing (forensic anonymous communication mechanisms) on fraud prevention in the Nigerian public sector.

LITERATURE REVIEW

The Concept of Fraud Prevention

Fraud is a major concern for public sector organizations worldwide, particularly in developing economies such as Nigeria, where it has serious consequences. The Association of Certified Fraud Examiners (ACFE, 2022) indicates that approximately 5% of annual organizational revenue is lost to fraud across sectors, with the public sector being especially vulnerable due to its size, complexity, and relatively weaker accountability systems. Fraud encompasses various deceptive practices aimed at gaining unfair advantage. Okoye and Gbegi (2022) define fraud as a deliberate act that results in the distortion of financial statements through manipulation, falsification, or alteration of accounting records, while Adebayo and Olakunle (2022) describe it as a purposeful act intended to deceive, resulting in loss to the victim and/or gain to the perpetrator through deception, concealment, and breach of trust. Salawu and Oladejo (2021) classify fraud into asset misappropriation, corruption, and financial

statement fraud, each presenting distinct challenges for detection and prevention. In Nigeria's public sector, common forms include procurement fraud, payroll fraud, embezzlement, and corruption schemes (Akindele, 2021; NEITI, 2023). Fraud undermines service delivery, weakens organizational effectiveness, reduces public trust, and creates broader governance challenges (Salawu & Oladejo, 2021; Okaro & Okafor, 2023). The peculiarities of public-sector fraud, including long authorization processes, political influences, and weak accountability structures, therefore require specialized strategies tailored to the structural and operational realities of public institutions.

Limitations of Traditional Auditing and the Need for Forensic Accounting in Fraud Prevention

Although traditional auditing and control measures remain important within public sector organizations, they are often inadequate for addressing increasingly complex fraud schemes. Conventional auditing tends to emphasize financial statement accuracy, regulatory compliance, and sampling procedures rather than comprehensive fraud detection, making it possible for sophisticated fraudulent activities to remain undetected. Traditional approaches are also frequently reactive, responding after fraud has occurred rather than proactively identifying vulnerabilities. Their limited technological capabilities restrict comprehensive analysis of large volumes of transactions, while conventional training may inadequately prepare personnel in fraud-specific detection techniques. In addition, traditional approaches often pay insufficient attention to the behavioral and cultural factors that influence fraudulent conduct.

These limitations are particularly pronounced in Nigeria, where political interference, high staff turnover, inadequate funding, and shortages of specialized personnel constrain effective fraud prevention. Fragmented institutional responsibilities, weak coordination, legal and regulatory loopholes, and the normalization of certain fraudulent practices further undermine existing control mechanisms. Moreover, evolving fraud schemes involving digital manipulation, cross-jurisdictional transactions, and complex financial engineering increasingly exploit weaknesses in conventional detection systems. These challenges demonstrate the need for specialized approaches capable of combining accounting expertise with investigative, technological, and legal skills.

Forensic Accounting as a Strategic Response to Fraud Prevention Challenges

In response to these limitations and the evolving nature of fraudulent activities, forensic accounting has emerged as a specialized discipline designed to strengthen fraud prevention and detection. It represents a synthesis of accounting, auditing, investigative techniques, and legal knowledge for identifying, analyzing, and documenting financial irregularities for preventive and evidentiary purposes. Aremu and Olayinka (2023) describe forensic accounting as the application of accounting, auditing, and investigative skills to produce comprehensive reports that can serve as evidence in legal or administrative proceedings, while Taiya et al. (2021) emphasize its role in identifying financial misconduct and preparing evidence for court proceedings.

Unlike traditional accounting and auditing, forensic accounting examines the substance and purpose of transactions, adopts a skeptical and investigative orientation, and actively searches for evidence of irregularities rather than assuming compliance. Its methodology enables practitioners to trace complex transactions, identify concealed relationships, evaluate internal controls, and preserve evidence for legal proceedings. Forensic accounting can therefore operate both proactively, by identifying vulnerabilities and preventing fraud, and reactively, by investigating suspected fraudulent activities. Its integration with data analytics, artificial intelligence, machine learning, and digital forensic techniques further enhances its capacity to address sophisticated and evolving fraud schemes.

Forensic Accounting Techniques

Forensic accounting employs specialized techniques designed to prevent, detect, investigate, and support the prosecution of fraudulent activities. In this study, four major techniques are examined: litigation support services, employee fraud awareness programs, expert consultation (witness), and whistleblowing (forensic anonymous communication). These techniques provide complementary mechanisms for strengthening fraud prevention, although their effectiveness depends on proper implementation, institutional support, and integration into broader control systems.

Litigation Support Services

Litigation support is a core forensic accounting technique involving the provision of specialized financial expertise in legal matters relating to fraud and financial irregularities. It involves examining complex financial and business disputes, interpreting financial evidence, quantifying monetary

damages, reconstructing financial records, identifying recoverable assets, and preparing expert reports and demonstrative exhibits. Forensic accountants may provide support during pre-filing assessments, discovery, case preparation, and courtroom proceedings. Their specialized analysis helps courts and legal practitioners understand complex financial transactions and strengthens the evidentiary basis for fraud-related proceedings.

Employee Fraud Awareness Programs

Employee fraud awareness represents a proactive forensic accounting technique that focuses on prevention through education, procedural knowledge, and organizational culture. It involves educating employees about fraud risks, indicators, reporting procedures, organizational policies, ethical responsibilities, and appropriate responses to suspected fraudulent activities. Effective awareness programs can enhance employees' ability to identify suspicious transactions and encourage collective responsibility for fraud prevention. The thesis emphasizes that comprehensive programs should incorporate practical training, case studies, ethical decision-making, reporting mechanisms, and leadership commitment rather than relying solely on general awareness.

Expert Consultation and Testimony

Expert consultation represents another important forensic accounting technique involving specialized knowledge and analytical capabilities for identifying, investigating, and documenting fraud. Expert witnesses possess specialized skills that enable them to provide professional opinions and explain complex financial evidence in legal proceedings. Their responsibilities may include analyzing suspicious transactions, evaluating internal control weaknesses, examining financial records, and translating complex forensic findings into objective and understandable evidence. Expert testimony can therefore strengthen the evidentiary quality of fraud cases and assist judicial authorities in understanding sophisticated financial schemes.

Whistleblowing/Forensic Anonymous Communication

Whistleblowing and forensic anonymous communication constitute an important mechanism for reporting suspected fraudulent activities. The technique provides channels through which employees or other stakeholders can disclose illegal, unethical, or improper conduct to appropriate authorities. Effective whistleblowing systems require confidentiality, protection from retaliation, clear reporting procedures, and credible institutional responses. In Nigeria, the Federal Government Whistleblower Policy has provided an important framework for reporting corruption and financial misconduct, although concerns regarding confidentiality, protection, and institutional responsiveness can affect its effectiveness. When properly supported by forensic investigation and other accounting techniques, whistleblowing can facilitate early detection and strengthen fraud prevention.

Impact of Forensic Accounting Techniques on Fraud Prevention Outcomes

Empirical evidence indicates that forensic accounting techniques can contribute to fraud prevention, although their effectiveness varies according to the technique, institutional environment, and level of implementation. The edited thesis identifies litigation support, employee fraud awareness, expert consultation (witness), and whistleblowing (forensic anonymous communication) as the major techniques examined in relation to fraud prevention. Litigation support can strengthen fraud prevention by facilitating forensic investigation, reconstruction of financial records, recovery of misappropriated assets, and presentation of credible financial evidence during legal proceedings. Similarly, employee fraud awareness is intended to strengthen employees' ability to identify fraud indicators, understand reporting procedures, and participate in organizational fraud prevention. Expert consultation provides specialized financial knowledge for investigating suspicious transactions, assessing control weaknesses, and presenting technical evidence in legal or administrative proceedings. Whistleblowing provides reporting channels through which employees and other stakeholders can disclose suspected fraudulent activities, thereby facilitating early detection and investigation.

However, the empirical literature does not provide uniform evidence regarding the effectiveness of these techniques. Studies reviewed in the thesis report significant positive effects for some forensic accounting techniques, while others find insignificant relationships. For example, Adebayo et al. (2024) reported that litigation support had a significant positive effect on fraud management, whereas Agbo et al. (2023) found that expert witness services had a positive but insignificant effect on fraud prevention, while litigation support services had a significant positive

effect. Similarly, studies on whistleblowing generally indicate its potential contribution to fraud prevention, although evidence differs across institutional contexts. Riadi and Ardesti (2025), for instance, reported a positive relationship between whistleblowing and fraud prevention, while other studies have produced mixed results. These inconsistencies suggest that the effectiveness of forensic accounting techniques may depend on organizational structures, institutional support, enforcement mechanisms, and the specific context in which the techniques are implemented.

Review of Empirical Literature

Adebayo et al. (2024) examined the influence of forensic accounting practices on fraud management among selected listed fast-moving consumer goods firms in Nigeria. The study adopted a survey research design and collected primary data using structured questionnaires. Twenty firms were selected from a population of twenty-one listed consumer goods companies using Taro Yamane's sample size determination and simple random sampling. The data were analyzed using Analysis of Variance (ANOVA) and Ordinary Least Squares (OLS). The findings revealed that litigation support had a significant positive effect on fraud management. The study recommended continuous training for management and internal control personnel to improve their ability to identify and prevent fraudulent activities. The study is relevant to the present research because it provides empirical evidence supporting the contribution of litigation support to fraud prevention; however, its focus on listed FMCG firms limits its applicability to public-sector MDAs.

Ardiansyah et al. (2024) examined the relationship between internal control and fraud prevention, with anti-fraud awareness serving as a moderating variable in 28 regional government organizations in Probolinggo, Indonesia. Using a survey of 150 respondents and Structural Equation Modeling-Partial Least Squares (SEM-PLS), the study found that internal control significantly influenced fraud prevention, whereas anti-fraud awareness did not significantly moderate the relationship. The study demonstrates that awareness alone may not necessarily strengthen fraud prevention where appropriate institutional control mechanisms are absent. Its focus on Indonesia's public sector, however, creates a contextual gap regarding Nigerian MDAs. The present study extends this discussion by examining employee fraud awareness alongside litigation support, expert consultation, and whistleblowing within Nigeria's public sector.

Rotimi (2024) investigated fraud investigation and fraud prevention in Nigeria's public sector using a descriptive survey design. The study selected the state with the highest total revenue from each of Nigeria's six geopolitical zones and analyzed responses from 341 public-sector accountants, auditors, and lawyers using ordinal regression. Fraud investigation was represented by legal framework, whistleblower protection, trained investigators, inter-agency cooperation, transparent leadership, and public awareness and education. The findings showed that the variables collectively explained only 12% of fraud prevention, while legal framework and whistleblower protection had negative and insignificant coefficients. The study concluded that fraud investigation alone cannot adequately curb public-sector fraud and recommended combining investigation with other preventive mechanisms. The present study builds on this finding by examining specific forensic accounting techniques, including expert consultation, litigation support, employee fraud awareness, and whistleblowing.

Theoretical Framework

The study is anchored primarily on Fraud Diamond Theory, developed by Wolfe and Hermanson (2004) as an extension of Cressey's Fraud Triangle Theory. The Fraud Diamond incorporates four elements that explain fraudulent behaviour: pressure, opportunity, rationalization, and capability. While pressure represents the motivation to commit fraud, opportunity arises from weaknesses in internal controls and monitoring systems. Rationalization provides the justification through which individuals legitimize fraudulent behaviour, while capability refers to the skills, position, confidence, and ability required to commit and conceal fraud.

The theory provides an appropriate framework for understanding how forensic accounting techniques can prevent fraud within Nigeria's public sector. Litigation support can strengthen detection and prosecution by tracing transactions, reconstructing financial records, and presenting credible evidence, thereby reducing opportunities for fraud and increasing the perceived consequences of fraudulent behaviour. Employee fraud awareness can strengthen employees' understanding of fraud

risks and reporting responsibilities, while expert consultation enhances the ability of institutions to identify, investigate, and document sophisticated fraudulent activities. Whistleblowing mechanisms provide channels for reporting suspicious activities and can increase the likelihood that fraudulent behaviour will be detected. Collectively, these forensic accounting techniques address the conditions that facilitate fraud by strengthening controls, increasing detection, and reducing the opportunity and capability to perpetrate and conceal fraudulent activities.

Research Methodology

This study adopted a descriptive research design using quantitative approaches to examine the relationships between forensic accounting techniques and fraud prevention in Nigeria's public sector. The target population comprised accountants, auditors, investigators, prosecutors, directors, and senior staff across 33 selected Ministries, Departments, and Agencies (MDAs) in the Federal Capital Territory (FCT), Abuja. The population was approximately 2,580 professionals based on personnel data derived from the Integrated Payroll and Personnel Information System (IPPIS) managed by the Office of the Accountant-General of the Federation (OAGF, 2025).

Using Yamane's (1967) formula at a 5% level of precision, a minimum sample size of 347 respondents was obtained. An additional 15% was added to account for potential non-response and incomplete questionnaires, resulting in a final target sample of 399 respondents. A proportionate stratified random sampling technique was employed. First, 11 parastatals were purposively selected based on their relevance, financial operations, and strategic importance, followed by stratified random sampling to ensure representation across professional categories.

Primary data were collected using a structured questionnaire adapted from validated instruments. The questionnaire consisted of six sections covering demographic information, litigation support services, employee fraud awareness programs, expert testimony, whistleblowing mechanisms, and fraud prevention. Items were measured on a five-point Likert scale ranging from 1 = Strongly Disagree to 5 = Strongly Agree. The validity of the instrument was established through expert review and a pilot study involving 40 respondents, while construct validity was assessed using exploratory factor analysis. Reliability was evaluated using Cronbach's alpha.

Of the 399 questionnaires distributed, 380 were completed and returned, representing a 95.24% response rate, and all returned questionnaires were considered valid for analysis. The data were screened and analyzed using descriptive statistics, correlation analysis, and inferential techniques. The primary analytical approach was Partial Least Squares Structural Equation Modeling (PLS-SEM), supported by SPSS and STATA for preliminary and diagnostic analyses. Diagnostic procedures included tests for model specification, normality, multicollinearity, heteroscedasticity, and other relevant assumptions. PLS-SEM was employed to assess the relationships between litigation support services, employee fraud awareness, expert consultation (witness), whistleblowing (forensic anonymous communication), and fraud prevention.

The study is anchored on the Fraud Diamond Theory, which provides the theoretical basis for explaining how forensic accounting techniques can address the conditions underlying fraudulent behaviour.

Data Presentation and Analysis

Assessment of the Measurement Model

Reliability and construct validity are the two primary factors evaluated in assessing the measurement model (Sarstedt et al., 2018). The purpose of this assessment is to verify that the indicators accurately measure their respective constructs. There are two primary types of measurement models that address the relationship between constructs and their indicators: formative and reflective models. In this study, all constructs were specified as reflective models, in which the construct explains and causes its indicators (Tahajujuddin & Kertali, 2018). Hair et al. (2017) opined that several statistical tests, including internal consistency, indicator reliability, convergent validity, and discriminant validity, are necessary for evaluating the measurement model. They propose that analyzing the factor loadings of the indicators is the first step in evaluating a reflective model. Loadings greater than 0.50 are generally recommended, as this indicates that the indicator explains at least 25% of the variance in the construct, thereby demonstrating adequate item reliability. The cross-loadings of the study's independent and dependent variables are shown in Figure 4.1. Indicators falling below the recommended criterion of 0.50 were considered for elimination in the measurement model.

Cross-Loadings and Measurement Model Validation Using CFA

The cross-loadings presented in Figure 4.1 depict the standardized factor loadings generated from the Confirmatory Factor Analysis (CFA), illustrating the strength of the relationship between each observed indicator and its corresponding latent variable: Litigation Support (LSS), Employee Fraud Awareness (EFA), Expert Consultation (ECW), Whistleblowing/Anonymous Communication (WBAC), and Fraud Prevention (FRUD). These loadings provide evidence of the measurement model's validity by showing how well each item reflects its underlying theoretical construct. In CFA, a loading threshold of 0.50 is commonly accepted as the minimum standard required for an indicator to be considered a meaningful measure of a latent variable. A loading of 0.50 indicates that the indicator explains approximately 25% of the variance, thereby demonstrating sufficient reliability and relevance for further analysis.

The results presented in Figure 4.1 show that all indicators had loading values above the 0.50 threshold and were statistically significant ($p < 0.001$), indicating adequate item reliability for inclusion in further analysis. The observed loadings generally ranged from approximately 0.70 to 0.89, implying strong indicator reliability and supporting convergent validity. Specifically, all seven indicators of Whistleblowing/Anonymous Communication (WBAC) loaded significantly on their respective construct, while the five indicators measuring Litigation Support Services (LSS) also demonstrated substantial loadings. For Employee Fraud Awareness (EFA), EFA_4 recorded the lowest loading of 0.668, but all five indicators remained above the minimum threshold. The five indicators measuring Expert Consultation (ECW) and the five indicators measuring Fraud Prevention (FRUD) also satisfied the recommended loading criterion. Since all indicators met the minimum threshold of 0.50, no items were removed based on the CFA results.

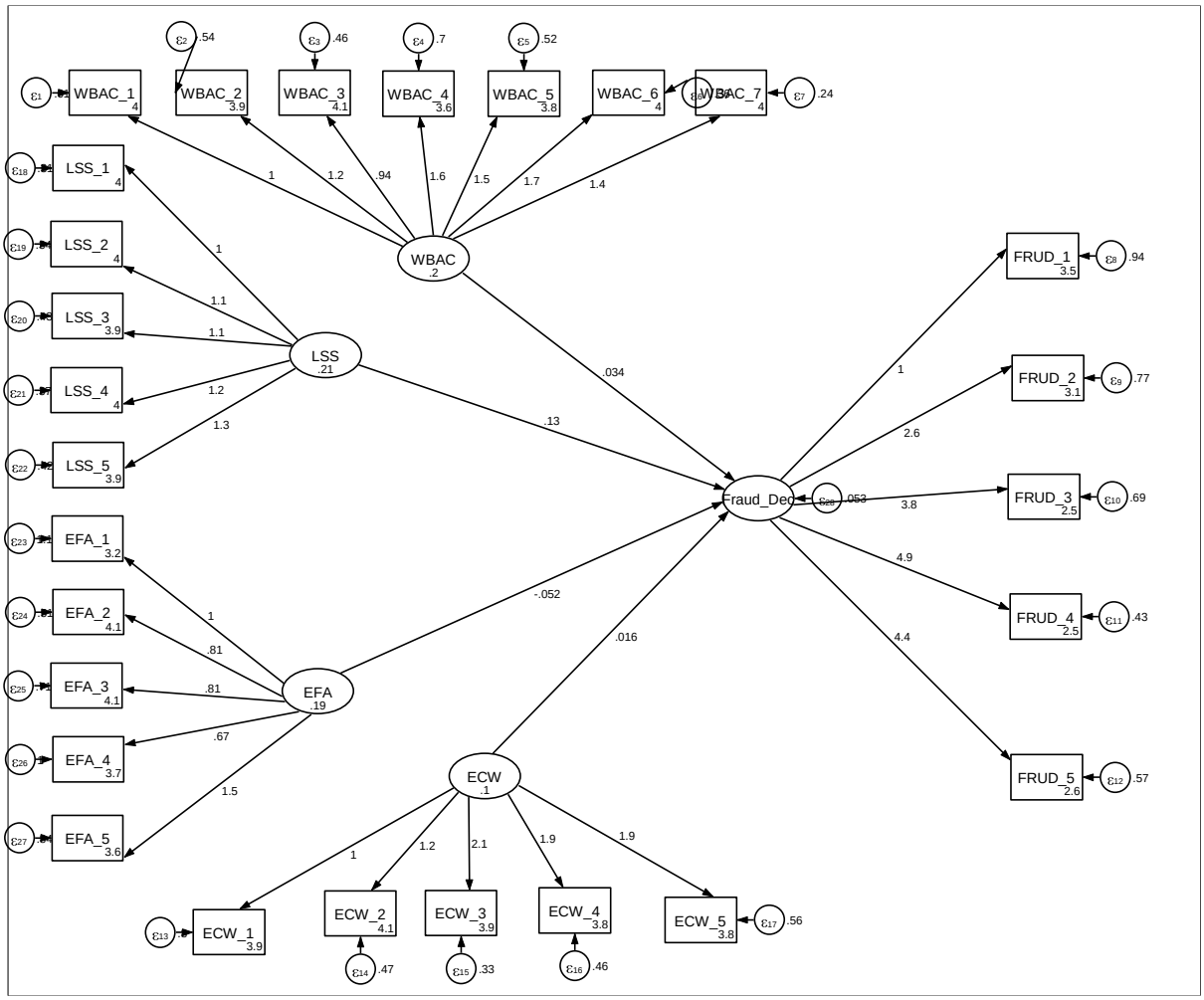


Figure 4.1: Diagrammatic Representation for Cross-Loadings of Latent Variables

Source: STATA SEM Output (2025)

Figure 4.1 above revealed that all indicators of the constructs had loading values above the 0.50 threshold and were statistically significant ($p < 0.001$), according to the standardized loading results from the CFA, suggesting adequate item reliability for inclusion in additional analysis. With loadings ranging from roughly 0.70 to 0.88, all seven indicators (WBAC_1 through WBAC_7) specifically loaded significantly and strongly on the Whistleblowing (Forensic Anonymous Communication) (WBAC) construct. Likewise, the reliability of the five indicators assessing Litigation Support Services (LSS) was confirmed by their substantial loadings (about 0.75 to 0.89).

Particularly, EFA_4 had the lowest loading (0.668), all five items for the construct Employee Fraud Awareness (EFA) exceeded the minimal loading criteria. With scores ranging from 1.24 to 2.06, all five items loaded strongly in the Expert Consultation Services (ECW) example, indicating robust representation of the latent construct. Last but not least, five items measuring Fraud Prevention (FRUD) revealed extremely high and statistically significant factor loadings. Since all indicators met the minimal suggested factor loading of 0.50, no items were removed at this time based on the results.

Table 1: Respondents' Views on Litigation Support Services (N = 380)

Statement	**SD (%)**	**D (%)**	**NI (%)**	**A (%)**	**SA (%)**	**M**	**SD**
I am aware of the litigation support services of clients	2 (0.5)	13 (3.4)	40 (10.5)	241 (63.4)	84 (22.1)	4.03	0.715
Litigation support services have helped reduce fraud	3 (0.8)	24 (6.3)	32 (8.4)	248 (65.3)	73 (19.2)	3.96	0.774
My organization encourages litigation support services	6 (1.6)	18 (4.7)	61 (16.1)	224 (58.9)	71 (18.7)	3.88	0.817
Litigation support services is a major side of fraud detection	7 (1.8)	18 (4.7)	40 (10.5)	231 (60.8)	84 (22.1)	3.97	0.826
Litigation support service correlates with fraud detection	4 (1.1)	39 (10.3)	36 (9.5)	232 (61.1)	69 (18.2)	3.85	0.872

Note. SD = Strongly Disagree, D = Disagree, NI = No Idea, A = Agree, SA = Strongly Agree; M = Mean; SD = Standard Deviation.

The data analysis in table 1 shows that litigation support services are widely recognized and positively perceived in the Nigerian public sector. A majority of respondents (85.5%) are aware of these services, and 84.5% believe they help reduce fraud. Most respondents (77.6%) indicate that their organizations encourage litigation support, while 82.9% acknowledge its key role in fraud detection, and 79.3% perceive a clear correlation between litigation support and fraud prevention. Mean scores range from 3.85 to 4.03 with low standard deviations, reflecting consistent, favorable, and strong agreement that litigation support services are effectively utilized and contribute to fraud prevention.

Table 2: Respondents' Views on Employee Fraud Awareness (N = 380)

Statement	SD (%)	D (%)	NI (%)	A (%)	SA (%)	M	SD
My organization has been a victim of fraud	18 (4.7)	109 (28.7)	65 (17.1)	139 (36.6)	49 (12.9)	3.24	1.141
In the event of fraud, I will report to the responsible party	4 (1.1)	22 (5.8)	9 (2.4)	233 (61.3)	112 (29.5)	4.12	0.794
All employees including top management are responsible to detect fraud	6 (1.6)	29 (7.6)	14 (3.7)	198 (52.1)	133 (35.0)	4.11	0.908
Public sector employees face pressure to meet demands beyond authority	13 (3.4)	62 (16.3)	34 (8.9)	203 (53.4)	68 (17.9)	3.66	1.057
I have regularly attended fraud prevention training in the last 3 years	14 (3.7)	72 (18.9)	29 (7.6)	186 (48.9)	79 (20.8)	3.64	1.118

Note. SD = Strongly Disagree, D = Disagree, NI = No Idea, A = Agree, SA = Strongly Agree; M = Mean; SD = Standard Deviation.

The data from Table 2 indicates that nearly half of respondents (49.5%) reported their organizations had experienced fraud, reflecting moderate variation in experiences (mean = 3.24, SD = 1.141). A large majority (90.8%) are willing to report fraud when it occurs (mean = 4.12, SD = 0.794), and 87.1% recognize that all employees, including top management, share responsibility for fraud detection (mean = 4.11, SD = 0.908). Additionally, 71.3% acknowledged facing pressure to meet demands beyond their authority (mean = 3.66, SD = 1.057), and 69.7% reported attending fraud prevention training in the past three years (mean = 3.64, SD = 1.118).

Table 3: Descriptive Statistics and Frequency Distribution on Whistleblowing

Statement	SD (%)	D (%)	NI (%)	A (%)	SA (%)	M	SD
I am well familiarized with the Whistleblowing Act of 2016	3 (0.8)	27 (7.1)	57 (15.0)	174 (45.8)	119 (31.3)	4.00	0.906
My organization has a formal mechanism that encourages reporting of wrongdoing (Whistleblowing policies)	6 (1.6)	35 (9.2)	43 (11.3)	207 (54.5)	89 (23.4)	3.89	0.921
I would report any corrupt activity if there is an incentive & protection of informers	3 (0.8)	18 (4.7)	27 (7.1)	213 (56.1)	119 (31.3)	4.12	0.794
I am aware of instances of whistleblowing in my organization	16 (4.2)	55 (14.5)	57 (15.0)	172 (45.3)	80 (21.1)	3.64	1.093
There is a whistleblower hotline facility available for employees, public, customers and suppliers to report suspected fraud and corruption	8 (2.1)	42 (11.1)	62 (16.3)	178 (46.8)	90 (23.7)	3.79	0.995
The identity of the whistleblowers remains confidential	11 (2.9)	22 (5.8)	40 (10.5)	180 (47.4)	127 (33.4)	4.03	0.966
Information provided is used and after preliminary analysis, investigation is opened into the matters	3 (0.8)	15 (3.9)	49 (12.9)	208 (54.7)	105 (27.7)	4.04	0.796

Note. SD = Strongly Disagree, D = Disagree, NI = No Idea, A = Agree, SA = Strongly Agree; M = Mean; SD = Standard Deviation.

The data of Table 3 shows that respondents generally have strong awareness of whistleblowing mechanisms and their role in fraud prevention within Nigerian public sector organizations. Most respondents are familiar with the Whistleblowing Act of 2016 (77.1%) and report that formal reporting mechanisms exist in their organizations (77.9%). A high proportion (87.4%) are willing to report corruption when incentives and protections are provided, while confidence in confidentiality protections

is also strong (80.8%). Awareness of actual whistleblowing cases and hotline facilities is slightly lower (66.4% and 70.5%, respectively), but overall, 82.3% believe that reports lead to investigations. Mean scores (3.64–4.12) indicate generally positive perceptions, and standard deviations (0.794–1.093) suggest moderate consistency in responses, reflecting broad recognition of whistleblowing as an effective fraud prevention tool.

Table 4: Respondents' Views on Fraud Prevention in the Nigerian Public Sector

Statement	SD (%)	D (%)	NI (%)	A (%)	SA (%)	M	SD
Forensic accounting techniques have significantly improved fraud prevention in the Nigerian public sector	22 (5.8)	54 (14.2)	0 (0)	0 (0)	304 (80.0)	4.34	1.333
The adoption of forensic accounting techniques enhances fraud detection in public sector corporations in Nigeria	24 (6.3)	114 (30.0)	0 (0)	0 (0)	242 (63.7)	3.85	1.545
Fraud detection mechanisms in the Nigerian public sector have become more effective with forensic accounting interventions	13 (3.4)	68 (17.9)	39 (10.3)	183 (48.2)	77 (20.3)	3.64	1.096
The use of forensic accounting has led to a reduction in fraudulent activities within Nigerian public sector institutions	0 (0)	110 (28.9)	0 (0)	0 (0)	270 (71.1)	4.13	1.362
Forensic accounting techniques should be fully integrated into fraud prevention policies in the Nigerian public sector	106 (27.9)	0 (0)	0 (0)	100 (26.3)	174 (45.8)	3.62	1.683

Note: SD = Strongly Disagree, D = Disagree, NI = No Idea, A = Agree, SA = Strongly Agree. Figures in parentheses represent percentages.

The data in table 4 indicates that respondents generally perceive forensic accounting techniques as effective in preventing and detecting fraud in Nigeria's public sector. A strong majority (80%) agree that these techniques improve fraud prevention, while 63.7% believe they enhance fraud detection. Around 68.5% report improved detection mechanisms, and 71.1% observe a reduction in fraudulent activities due to forensic accounting. Furthermore, 72.1% support full integration of forensic accounting into anti-fraud policies. Mean scores range from 3.62 to 4.34, reflecting moderate to strong agreement, while standard deviations (1.096–1.683) suggest some variation in perceptions, likely due to differences in institutional exposure, implementation, or readiness.

Discussion of Findings

This study examined the effects of litigation support services, employee fraud awareness, expert consultation (witness), and whistleblowing (forensic anonymous communication) on fraud prevention in Nigeria's public sector.

The study revealed that litigation support services have a significant positive effect on fraud prevention. This indicates that public institutions that effectively utilize forensic investigations, expert reports, financial evidence, and courtroom assistance are better positioned to detect and prevent fraudulent activities. The finding suggests that integrating litigation support into anti-fraud strategies strengthens investigative and legal processes. This result agrees with Adebayo et al. (2024), Lawal et al. (2020), and Ajibade et al. (2019), who reported positive effects of litigation support on fraud control and legal outcomes.

Employee fraud awareness was found to have a negative and statistically insignificant effect on fraud prevention. This suggests that awareness alone may not be sufficient to prevent fraud where institutional support, monitoring, enforcement, and effective reporting mechanisms are inadequate. The finding is consistent with Ardiansyah et al. (2024) and Abdul Latif et al. (2021), who emphasized that fraud awareness requires complementary organizational mechanisms to produce meaningful preventive outcomes.

The study further revealed that expert consultation (witness) has a positive but statistically insignificant effect on fraud prevention. Although forensic experts provide specialized knowledge for investigating financial misconduct and presenting evidence, their preventive contribution may be

limited when their services are not strategically integrated into fraud risk management, internal controls, and routine investigations. This finding is consistent with studies reporting insignificant effects of expert witness services on fraud prevention.

Finally, whistleblowing (forensic anonymous communication) was found to have a positive and statistically significant effect on fraud prevention. The result indicates that confidential reporting mechanisms can facilitate the early identification of fraudulent activities and strengthen institutional responses to misconduct. This finding supports previous studies that identified whistleblowing as an important mechanism for detecting and preventing fraud. However, fear of retaliation, inadequate protection, and weak institutional responses may limit its effectiveness.

Policy Implications of the Findings

The findings have important implications for fraud prevention in Nigeria's public sector. The significant effect of litigation support suggests the need to strengthen legal and forensic capacity within public institutions and improve collaboration with anti-corruption agencies such as the EFCC and ICPC.

The insignificant effect of employee fraud awareness indicates that awareness programmes should go beyond general education by incorporating practical training, sector-specific fraud risks, reporting procedures, and institutional support. Although expert consultation was insignificant, public institutions should integrate forensic experts into fraud risk assessment, internal control reviews, and investigations to improve their preventive value.

The significant effect of whistleblowing highlights the need to strengthen confidential reporting systems. Public institutions should provide secure reporting channels, protect whistleblowers from retaliation, investigate reports promptly, and provide appropriate feedback.

Conclusion

The study concludes that litigation support services and whistleblowing (forensic anonymous communication) significantly and positively contribute to fraud prevention in Nigeria's public sector. Employee fraud awareness has a negative and insignificant effect, indicating that awareness alone may not prevent fraud without adequate institutional support and enforcement. Expert consultation (witness) also has a positive but insignificant effect, suggesting the need for greater integration of forensic expertise into fraud risk management and internal control processes. Overall, effective fraud prevention requires coordinated application of forensic accounting techniques supported by strong institutional controls, enforcement, and accountability.

Recommendations

i. Public institutions should strengthen litigation support capacity through staff training and collaboration with anti-corruption agencies.

ii. Employee fraud awareness programmes should be practical, continuous, and supported by effective monitoring and reporting mechanisms.

iii. Forensic experts should be strategically integrated into fraud risk assessment, investigations, and internal control processes.

iv. Public institutions should strengthen whistleblowing systems by ensuring confidentiality, protection from retaliation, prompt investigation, and appropriate feedback.

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