Financial Fraud Detection in Ministries, Departments and Agencies (MDAs) in Nigeria: The Role of Forensic Accounting Skills

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ABSTRACT

The prevalence of financial fraud within government agencies has become a pervasive challenge in the Nigeria public sector necessitating the need for empirical investigating on how to prevent it. Accordingly, this study examines the influence of forensic accounting skills application in thwarting financial fraud in Ministries, Departments and Agencies (MDAs) in Nigeria. Employing a quantitative research method, the study utilizes a survey design method by administering 164 Questionnaire to some staff of 82 MDAs in Nigeria. Five hypotheses were advanced based on the various forensic accounting skills considered. These hypotheses were tested through cross-sectional regression analysis. All but one of the findings meet theoretical expectation and support the hypotheses formulated. In particular, one of the findings reveal that investigative and auditing skills positively influence financial fraud detection in MDAs. Likewise, the study found that legal and litigation skills influence fraud detection positively. It was also found that both analytical and technical skills were found to positively influence financial fraud detection in MDAs. Finally, the study found no significant relationship between ethical skill and financial fraud detection. Therefore, the study concludes that forensic accounting skills are key drivers to financial fraud detection in Ministries, Department and Agencies in Nigeria. All these revelations have some policy and theoretical implications. The outcome from this study will enable regulators, especially the Head of Service and Office of the Accountant General to put appropriate measures in place for continuous staff up-skills relevant to financial fraud detection. With regards to theoretical implications, the study contributes to the extant literature by lengthening the discussions on the usefulness of forensic accounting skills in fraud detection.

Keywords: Forensic Accounting, Skills, Fraud detection, Nigeria, MDAs

INTRODUCTION

The increasing trend in global financial fraud has prompted academics, practitioners, and policymakers to focus on forensic accounting principles to uncover these fraudulent activities. Forensic accounting involves using auditing, accounting and investigative skills to study firms' financial dealings (Nur, Dewi, & Noval, 2020). It is crucial for conducting accounting analyses required in legal procedures within the judicial system. Forensic experts need a holistic perspective that extends beyond numerical data to encompass the practicalities of the business environment. Often used in legal proceedings, forensic accounting helps investigate and uncover fraudulent activities and misappropriation of funds.

Fraud involves deliberate deceptive actions to obtain an unfair advantage or financial benefit. In the corporate sector, fraud often manifests as deceptive practices within business or financial markets (Prabowo & Hendi, 2021). Recently, several prominent corporations have been implicated in significant corporate scandals characterized by fraudulent practices. The Cadbury (Nig) PLC incident in Nigeria is a model of false financial reporting. Lever Brothers (Nig) Plc and Afribank Plc are other examples of Nigerian companies that have engaged in fake financial reporting (Ajayi, 2006). This trend is prevalent in emerging nations besides Nigeria. Organizations and institutions strategically exploit legal ambiguities, enabling them to engage in illicit practices

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to gain unwarranted benefits, constituting clear instances of fraud.

Forensic accountants are expected to use their expertise in accounting and investigative techniques to assess economic losses, determine the value of businesses or assets, and provide assistance ranging from comprehensive analysis and data extraction to a complete understanding of the situation (Walakumbura & Dharmarathna, 2022). Forensic accounting services are primarily used in formulating litigation tactics to mitigate potential fraud in organisations. forensic accountants demand has been rising due to growing societal awareness and heightened intolerance towards fraudulent acts within organizations. This is attributed to the conventional role of auditors, which does not often include fraud identification.

The methods used in fraudulent operations are complex and time-consuming, requiring more than just accounting expertise to detect. Therefore, forensic accountants need extensive expertise encompassing the intricate nature of forensic accounting, characterized by a heightened level of professionalism and thorough investigative skills. To succeed, individuals must possess a comprehensive understanding of financial accounting, as it serves as the fundamental framework for the requisite skill set (Ramaswamy, 2005). The accountant's role involves examining financial management practices to ensure that recorded transactions align with established accounting principles and standards. Forensic accountants' success in uncovering fraud cases depends on their level of financial accounting expertise (Harris & Brown, 2000).

Several researchers, including Grippo and Ibex (2003), Harris and Brown (2004), Ramaswamy (2005), Kranacher et al. (2008), Fenton and Edmund (2011) and Albrecht et al. (2012) have emphasized the significance of understanding forensic accounting in reducing fraud in organizations. Investigative abilities are paramount for a forensic accountant since this role deviates from conventional auditing responsibilities. A forensic accountant is a finance professional who investigates fraudulent actions by individuals who deceive management and manipulate financial systems, resulting in financial losses for an organization (Digabriele, 2008). Prabowo (2013) states that a forensic accountant formulates the procedures involved in fraud investigation, including identifying fraudulent activities, collecting evidence, utilizing various methodologies, and generating comprehensive reports. Qualified forensic accountants possess a set of investigative knowledge and abilities (Hopwood, Leitner, & Young, 2008). According to Grippo and Ibex (2003) the primary objective of a forensic accountant's inquiry is to find instances of fraudulent activity.

The investigative abilities shown by forensic accountants are substantiated by research conducted by Grippo and Ibex (2003), Harris and Brown (2004) and Digabriele (2008). Investigative skill refers to the proficiency possessed by forensic accountants in performing a forensic audit, which integrates accounting, auditing, and legal knowledge to produce findings that can be used as evidence in legal proceedings. A forensic audit assists in legal expertise for testifying experts involved in litigation.

Forensic accountants must be able to assess the entire corporate operation. They often encounter many concepts while assessing the operational procedures of individuals or organizations. A proficient forensic accountant can evaluate all facets, including financial and non-financial. Forensic accountants are often called on to do complex analyses of organizational structures and operational divisions. They place a premium on cost-benefit analyses that factor in the scope of a work being done by a business or government agency (Messmer, 2004). Forensic accountants can determine the scope of illegal operations by analyzing the operational characteristics and components of current ventures (Kranacher et al., 2008).

Forensic accountants need to be able to value businesses (Fenton & Edmund, 2011; Albrecht et al., 2012; Kranacher et al., 2008; Messmer, 2004). The abilities mentioned earlier can be categorized as descriptive, describing business-related matters, and explanatory, providing explanations about the company. These skills form a solid foundation for evaluating evidence presented during a trial to uncover fraudulent practices.

Financial fraud in Nigerian Ministries, Departments, and Agencies (MDAs) has emerged as a significant concern, posing challenges to financial integrity and transparency. Nigeria was rated 33rd most corrupt in the world out of 177 nations in a Transparency International (2013) survey. The same research placed Nigeria 144th in the group's Corruption Perception Index. Instances of misappropriation, embezzlement, and other fraudulent activities have been reported, leading to financial losses and eroding public trust. Idolor (2010) asserts that

fraudulent operations cause billions of naira to be lost annually. The complex and dynamic nature of fraud schemes, coupled with evolving technologies, has made it imperative for organizations to adopt proactive measures to detect and prevent fraudulent activities. Against this backdrop, this study focuses on exploring the impact of forensic accounting skills on enhancing financial fraud detection within the context of Nigerian MDAs. By understanding the prevalent challenges and vulnerabilities, the critical role of forensic accounting in safeguarding public funds and ensuring accountability in government entities becomes apparent. The study's overarching goal is to investigate how Forensic skills (such as investigative and audit, legal, analytical, technical and ethical) are essential in detecting fraud in certain Nigerian government institutions and departments. Scams are becoming more common in Nigerian society, with substantial sums of money involved in these illicit activities, further exacerbating concerns over their potential mitigation or eradication. To effectively address this issue, possessing basic knowledge in accounting is insufficient. Therefore, it is essential to examine the impact of forensic accounting skills in thwarting financial fraud within the Nigerian setting.

Research of this sort has been undertaken in developed nations around the globe; however, there is a paucity of studies conducted in Nigeria. The variations in environmental conditions, legal frameworks among nations, and the intricate methodologies used in perpetrating fraudulent activities contribute to the observed disparities. Directing attention to Nigeria and examining how using forensic accounting skills might effectively reduce fraud inside the country is essential.

Previous studies, such as those by Walakumbura and Dharmarathna (2022), included four factors as indicators of forensic accounting abilities: knowledge of processes, legal background, accounting skills, and knowledge of forensic accounting. However, these variables have been deemed insufficient. This study aims to broaden the scope of forensic accounting by including other abilities such as auditing, investigation, analysis, technological proficiency, ethics, evaluation, and critical/strategic thinking. This approach will strengthen outcomes and discoveries, making them more suitable for broader application and generalizability.

Different researchers have examined the state of forensic accounting and fraud detection techniques in Nigeria, including Beatrice, Tina, and Nkechi (2022), Agboare (2021), Adesina, Erin, Ajetunmobi, Ilogho, and Asiriuwa (2020), Abdulrahman, Ab Yajid, Khatibi, and Azam (2020), Alhassan (2020), Gbegi and Habila (2017), Gbegi and Adebisi (2014), and Efiong (2012). Additionally, research from developed countries, such as Kwaghfan and Gberindyer (2020), Elias (2014), Digabriele (2008), Degboro and Olofinsola (2007), Howard and Sheetz (2006), and Bozkurt (2003), have employed various methodologies. The conclusions from these investigations exhibit diverse outcomes and lack definitive findings. While some argue that forensic accounting abilities are vital in detecting instances of fraud, others conclude that acquiring these skills does not substantially enhance fraud detection within organizations. Nevertheless, other scholars have determined that the presence of forensic accounting skills significantly impacts the decision-making process of managers regarding deceptive practices.

This study provides valuable contributions to the current body of literature in the field of forensic accounting by enhancing our comprehension of the necessary skills and knowledge needed for detecting fraud effectively. As a result, researchers will get significant benefits from this research endeavour.

This research will benefit academic institutions, professional forensic accounting institutions, and regulators. Its findings will contribute to a comprehensive comprehension and recognition of the nexus between forensic accounting abilities and fraud detection. This would facilitate the ability of institutions and regulators to provide further recommendations for enhancing forensic auditors and institutions and their adherence to the ethical skills and knowledge necessary for their job to mitigate fraud.

LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

Investigative and Auditing Skills and Financial Fraud

Investigative skills are defined as having a highly curious approach and being willing to look into opinions and/or facts that may suggest fraud (Davis et al., 2010; Bhasin, 2013). Put another way, investigative skills are the capacity to examine or analyze factual information, which is also necessary for the identification of money laundering by looking through all relevant sources (Bhasin, 2013). To be possess an investigative skill, the

forensic accountant is required to search furnish proof and evidence in support of any claim.

One of the core skills every accountant should have is investigative skills. Where unravelling of fraud is the key outcome, then the auditing skill comes handy. Nwaze, (2012) perceives both analytical and investigative as necessary forensic accounting skills addressing financial issues in conformity with relevant standards required by courts of law.

Studies such as, Fenton and Edmund (2011); Albrecht et al., (2012); Grippo and Ibex, (2003); Davis et al., (2010); Hodges and Burchell, (2003); and Digabriele, (2008) have classified the exposure to forensic accountants' expertise into four attribute skills for investigation which among others include investigative skills.

Alamu (2016) sees forensic accountants as an auditor and private investigators possessing required forensic knowledge and skills with emphasis on investigative skill. The way of utilizing investigative and analytical skills to discover financial irregularities consistent with court injunctions is a forensic accounting (Pedneault et al., 2012). Nada et al (2014) generally classify forensic accounting into investigative accounting and judicial support. While the ormer focuses on an independent examination of financial crime, the later focuses on consulting, expertise and other services.

Furthermore, certain proficiencies are identified to be possessed by forensic accountants, namely analytical skills, communication skills, computing skills, technological skills, and investigative skills, are classified as either vital or essential skills (Albrecht, Albrecht, Albrecht, & Zimbelman, 2012; and Davis, Farrell, & Ogilby, 2010). Consequently, the study hypothesized that:

Ho_1: Investigative and auditing skills applications significantly influence financial fraud detection in Nigeria.

Legal and litigation Skills

Litigation and legal skills are the skills that assist accountants in a way that involves existing lawsuit. Primarily, it covers issues connected to financial or economic losses. Calculating the financial damage caused by a contract breach is a common litigation support assignment. In order to settle their clients' legal disputes, either before or during litigation, many attorneys now consider hiring forensic accountants to be essential to the process (Oyedokun, 2013).

According to Crain et al., (2015) forensic accountant are expected to possess several skills among which include litigation skills. Uyioghosa and Doris, 2022 examine the effects of various forensic accountant skills/characteristics on fraud detection in the public sector in Nigeria, using Edo State as a case study. The forensic accountant skills examined are litigation, accounting/auditing, investigative, analytical/technical, and communication skills. Utilizing a primary source of data, their findings reveal that litigation skills and accounting/auditing skills have positive and statistically significant effects on fraud detection ability, Investigative skills had a positive but not statistically significant effect and analytical/technical skills and communication skills both have positive and statistically significant effects on fraud detection. Their findings emphasize the need for forensic accountant in public sector across the country to show competence in ligation skills so as to get the best out of forensic accountant.

(Haroun et al., 2020) investigate the application of forensic accounting skills in detecting tax evasion in Lagos state, Nigeria. They adopted the survey design, and administered a questionnaire to 301 respondents made up of forensic accountants and Lagos internal revenue workers. They proxied the forensic skills into four components: honesty, high integrity, communication skills (HHICS), forensic audit, investigation, interviewing skills (FAIIS), arbitration, mediation, litigation skills (AMLS), and detection, prevention, deterrence skills (DPDS). Based on the multiple regression data analysis techniques they used, they found a statistically significant positive relationship between the AMLS and the ability to detect tax evasion; other components also show a positive and significant relationship. Consequent upon the above, the study conjecture that legal and litigation skills of forensic accountants will enhance fraud detection. Accordingly, the study hypothesized that:

Ho_2: legal and litigation skills applications significantly influence financial fraud detection in Nigeria.

Analytical Skills and Financial Fraud

Analytical skills are skills that enables forensic accountant observe, interpret, research and analyse data to enable him make informed decision. Analytical skills are essential for licensed forensic accountants. Forensic accountants are required to examine source papers and financial records to assess the accuracy of each transaction and ascertain if the business recorded it fairly. The statistics on the reports may not always be supported by the documentation. Fraud investigation and litigation support both demand analytical and critical thinking abilities (Kalsom et al (2010).

Deductive analysis, critical thinking, unstructured problem solving, investigative flexibility, and analytical proficiency are among the important abilities of forensic accountants. Others include verbal correspondence, written correspondence, specialized legal expertise, and poise (Digabriele, 2008). Additionally, in the view of the AICPA, a forensic accountant should have specific abilities and traits, such as investigative, analytical, and communication skills, in addition to the core competencies (traditional accounting fields), basic forensic knowledge, and specialized forensic knowledge.

According to Tuanakota (2010), a forensic accountant must possess several key qualities. Firstly, they should be creative, enabling them to perceive situations others may consider ordinary and interpret them differently. Secondly, they should be curious, demonstrating a strong desire to investigate and uncover the truth behind events and circumstances. Thirdly, they should be persistent, refusing to give up even when faced with challenges in obtaining necessary documents or information. Fourthly, they should possess common sense, allowing them to maintain a realistic perspective on the matter at hand. Howard S. and Sheetz, M. (2006) suggested that the use of investigative and analytical abilities for the goal of resolving financial challenges in a way that satisfies standards demanded by courts of law is known as forensic accounting

Additionally, they should have business sense, going beyond a mere understanding of transaction recording and how the business operates. Lastly, they should exhibit self-confidence, having faith in their abilities and the validity of their findings. Fraud has been seen throughout several generations (Prabowo, 2013). Also, the essential skills of forensic accountant examined by Albrecht et al. (2009) are analytical skills, technology skills, and communication skills, knowledge of law, accounting, human behavior and business. Consequently, the study hypothesized that:

Ho_3: Analytical skills applications significantly influence financial fraud detection in Nigeria.

Technical Skills and Financial Fraud

The International Federation of Accounting described forensic accounting as a necessary skill for a professional to demonstrate their expertise. As per IFAC (2005), the essential competencies for a forensic accountant should include technical, investigative, intellectual and interpersonal skills.

Tan and Libby (1997) have categorized auditing abilities into two classifications: technical and non-technical. Technical skills refer to the fundamental talents that an auditor has, which are shown by their procedural knowledge and other clerical competencies within the realm of general accounting and auditing. Bonner and Lewis (1990) assert that the talents include three distinct categories, namely: (1) proficiency in accounting and auditing, (2) specialized expertise in derivative contracts, and (3) a comprehensive understanding of fundamental business principles. According to the findings of Harris and Brown (2000), a comprehensive understanding of forensic accountants' requisite competencies and technical proficiencies has been established. Individuals often possess a basic understanding of criminal law and civil law, as well as a conceptual grasp of trial proceedings and their outcomes.

Forensic accountants use technical and innovative approaches in analyzing and formulating strategies to uncover and decipher the methods employed by perpetrators of fraudulent activities to obfuscate their actions. In addition, it is essential for forensic accountant to effectively convey their discoveries to relevant stakeholders, particularly those well-versed in accounting and auditing. In contrast, non-technical skills include interpersonal abilities, such as effective communication, leadership, collaboration, and relationship-building (Murtanto & Gudono,

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1999). In the study conducted by Tan and Libby (1997), the authors categorized the subject matter into three distinct domains, including interpersonal skills, psychological features, and cognitive ability.

The classifications mentioned earlier have delineated that certain proficiencies possessed by forensic accountants, namely analytical skills, communication skills, computing skills, technological skills, and investigative skills, are classified as either crucial or core skills (Albrecht, Albrecht, Albrecht, & Zimbelman, 2012; and Davis, Farrell, & Ogilby, 2010). Based on empirical evidence, it is important to possess a range of competencies to thrive in the future. These competencies include financial accounting, taxes, company valuation, business acumen, risk management, internal control, communication (Grippo & Ibex, 2003), and proficiency in detecting and addressing fraud schemes (Albrecht et al., 2012). Furthermore, it is important to enhance certain abilities of forensic accountants, including financial accounting, legal expertise, and internal control risk management (Davis et al., 2010).

Currently, forensic accountants are using their distinct skill sets to fulfil a range of responsibilities and are often engaged to ascertain the presence of intentional falsification concerning a company's financial documentation (Digabriele, 2008). Fraudulent misrepresentation encompasses a variety of deceptive practices, such as inflating the value of inventories' value, improperly allocating expenditures to misstate profits, and engaging in theft (Harris & Brown, 2000; Messmer, 2004). The proficiency of forensic accountants is evaluated based on their acquired abilities in carrying out their professional duties (Morrow & Goetz, 1988). Professionalism is closely associated with acquiring specialized abilities that detect fraudulent activities perpetrated by individuals who violate ethical standards (Kalbers & Fogarty, 1995). Individuals who demonstrate the ability to generate novel ideas are highly valued in the professional domain. Accordingly, the study postulates the fourth hypothesis as stated hereunder:

H_{O4}: Technical skills applications significantly influence financial fraud detection in Nigeria.

Ethical Skills and Financial Fraud

Integrity is a crucial quality that is essential to the accounting profession, and forensic accountants should apply it to every aspect of their investigations. An ethics is the consensus between the public and forensic accountants (Bay, 1997). It helps those who utilize financial reports—investors, managers, financial advisors, the government, and the general public—make informed decisions on how to take informed economic decision devoid of fraud. This crucial component of the forensic accountant's design serves as a set of rules to guarantee the provision of high-quality services and the preservation of the professional image in front of clients. As the expert in charge of creating inquiry reports, the forensic accountant must adhere to ethical standards and produce findings that are more precise, dependable, timely, comprehensible, pertinent, and thorough (Ogbonna, 2010). (Ogbonna, 2010). In the same way that society expects law enforcement to operate with integrity, everyone who collaborates with an agency of law enforcement should also be held to this standard. There is no question that you require a strong code of morality and ethics when your primary responsibility is to find and eliminate criminals.

According to Yasmin (2023), forensic accounting helps with financial restatement and recovery, guarantees compliance, uncovers fraud, and promotes moral behaviour. Their multidisciplinary knowledge protects the financial integrity of the firm. Consequently, the study posits the fifth hypothesis as:

H_{O5}: Ethical skills applications significantly influence financial fraud detection in Nigeria.

RESEARCH METHODOLOGY

Population, Sample Size and Sampling Technique

The population of the study covers all staff in audit and accounting department of federal ministries, departments and agencies (MDAs) in Nigeria who are members of either Chartered Institute of Forensic and Certified Fraud Investigators of Nigeria (CIFCFIN) or Association of Certified Fraud Examiners (ACFE) as at December 31, 2022. Out of the various ways of determining sample size, the study utilizes the suggestions of Roscoe (1975)

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and Garson (2006) for sample size determination. Their recommendations are essential since sample size selection has a significant impact on the precision of research estimations and the study's ability to draw conclusions or make generalizations. The number of subjects or observations included in a study is referred to as the sample size (Sekaran & Bougie, 2016).

Table 1: Determination of Sample Size

Number of explanatory variable	5
Multiple of 8 required for each explanatory variable (8 x 5)	40
Number required for testing R-square	50
Number required for testing R-square with 5 explanatory variables	90
Number required to reach the minimum of 104	14
Minimum number required for testing regression coefficients	104
Possible sample loss (58% of 104)	60
Sample size determined	164

Roscoe (1975) suggests that sample size that is above 30 but lower than 500 is appropriate for studies. In a similar vein, Garson (2006) asserts that 104 is the minimum sample size required to test regression coefficients and at least eight times the number of independent variables plus 50 for testing R-Square. Consistent with the suggestion of Roscoe (1975) and Garson (2006), the final sample size of 164 was arrived at after building 58% possible sample loss into the minimum of 104 size required for testing regression as shown under Table 1. Accordingly, staff of 82 MDAs resulting into a sample size of one hundred and sixty-four (164) respondents were selected, consisting of two staff from each of the 82 MDAs. The staff of these MDAs were selected using a purposive sampling techniques.

Purposive sampling, according to Akpa (2018) is a non-probability sampling technique where researchers use their knowledge to select particular individuals who aid the study in achieving its objective. This sampling technique is appropriate for this study because not all MDAs have staff with requisite forensic skills and knowledge needed for this study.

METHODS OF DATA COLLECTION

the study utilizes both survey and descriptive research designs. While the former enables the study to characterize the descriptive properties of the variables used in the study, the latter allows the study to collect needed data through the administration of questionnaires. Similarly, the two designs allow the study to empirically determine the most forensic accounting skills that lead to fraud detection in the MDAs. Accordingly, the study relies majorly on primary source of data through the administration of questionnaire which was necessitated by the objectives of the study. In order to facilitate statistical analysis and hypothesis testing and derive relevant findings on the relationship between five forensic accounting abilities and fraud detection, questionnaires are used as the only data source. This provides consistency and reliability in data collecting. The questionnaire instrument utilized in this study comprises of two parts. Part one covers six items relating to demographic information about the background of the respondents which include- gender, age, highest educational qualification, professional affiliation, years of experience as an auditor or an accountant. In contrast, part two explores the view of the respondents on the effect of forensic accounting skills on financial fraud detection among Ministries, Departments and Agencies (MDAs) in Nigeria. Essentially, part two covers six constructs ranging from fraud detection, investigative and auditing skills, legal and litigation skills, analytical skills, technical skills and ethical skills.

Consistent with the objectives of the study, fraud detection is treated as the dependent variable and it was measured by five items. Whereas the remaining five constructs are treated as the explanatory variables. Each of these constructs was regarded as latent variables and measured using five items each as informed by extant literature. A close-ended format was utilized for the development of these items through the Likert scale-type question on five (5) point scale, ranging from strongly agree to strongly disagree. This scale point is chosen because it allows a neutral stance of the answer to all the questions. Consequently, Score 5, represents strongly agree view and Score 1 represents strongly disagree view while Score 3 represents neutral view. Scores 4 and 2 on the other hand, represent agree and disagree views respectively. There are twin reasons for the administration of questionnaire. First, it allows the study to measures those six constructs utilized in the study as there are no specific proxies or unit of measurement for them. Secondly, survey research allows the study to convert non-numeric responses to numeric ones for various statistical analyses. This second reason makes this study a quantitative research approach.

Technique of Data Analysis

The survey data collected for this study were analysed using multiple analytical techniques. In the first instance, the demographic characteristics of the participants were analysed using basic percentages. This approach is simple as it facilitates easy compression. In the second and third instances, the study employed descriptive and inferential statistics respectively. Descriptive statistics on the one hand, allows the study to derive basic characteristics of all the metric variables employed in relation to the data collected from the questionnaire. The statistics provides the minimum, maximum, range, mean and standard deviations of all the constructs utilized. On the other hand, inferential statistics enables the study to test the hypotheses formulated in the study and provide answer to all the research questions raised. The study utilized SPSS software for the analysis of the study.

Consistent with the inferential statistics employed, the study adopted a multiple regression technique through the utilization of OLS regression. The regression analysis allows the study to examine the coefficients, t-values and the probabilities associated with all the explanatory variables which permits the determination of the influence, direction, and size of the impacts of the independent variable on the dependent variable. Nevertheless, the overall outcomes were evaluated based on the R-Square (R^2) representing the coefficient of determination. The R^2 measures the degree to which the independent variables collectively account for the variation in the dependent variable of the research. The Fisher Exact Test (F-statistics) Value was used to assess the fitness of the research model employed. This provides further evidence to support the assertion that the observed association between the independent variables and the dependent variables is not attributable to random occurrences.

The regression analyses employed was preceded by several robustness diagnosis tests including tests for multi-collinearity and normality tests. These tests allow the study to determine the credibility of the findings obtained via regression analysis. A normality test was performed to assess the distribution of the data. This is done through examining the skewness and kurtosis of the variables and the Shapiro-Wilk test. The multi-collinearity test specifically evaluates the correlation among the independent variables by considering the tolerance value and the variance inflation factor (VIF). The study used a test value of 10% significance level to determine whether to accept or reject the null hypotheses formulated.

Model Specification

Equation 3.1 was utilized to capture the effect of forensic accounting skills on financial fraud detection among Ministries, Departments and Agencies (MDAs) in Nigeria. FRDi represents the dependent variable while explanatory variables from the equation are IASi, LLSi, ALSi, TCSi, and ETS.

$$FRD = \beta_0+\beta_1 IAS+\beta_2 LLS+\beta_3 ALS+\beta_4 TCS+\beta_5 ETS\ldots+ \varepsilon_i$$

Where:

FRD = Financial fraud detection

IAS = Investigative and auditing skill

LLS = Legal and litigation skill

ALS = Analytical skill

TCS = Technical skill

ETS = Ethical skill

$\beta_1 - \beta_5$ = Coefficients of explanatory variables

β_0 = Constant or Intercept

ε_i = Error Term

RESULT

Analysis of Questionnaire Returned

Table 2 shows that a total of 164 questionnaires were distributed out of which 154 were returned. However, 7 were found not to be usable because they were not properly filled or some questions were not attended to. In all, 147 questionnaires were found usable and utilized for analysis.

Table 2: Questionnaire Returned

Number of questionnaire distributed	164
Number of questionnaire not return	10
Number of questionnaire returned	154
Number of questionnaire not usable	7
Number of usable questionnaire	147

Demographic Profile of the Respondents

This section presents the demographic summaries of the respondents. These summaries represent the characteristics of the respondents based on their gender, age, highest educational qualification, professional affiliation, years of experience as a professional accountant and as a forensic accountant as presented under Table 3.

Based on the gender distribution of the respondents, 68% (n=100) of the total sample (N=147) are male while the remaining 32% (n=47) are female. In relation to the age distribution of the respondents, the result shows that 47 respondents representing 32% of the total sample (N=147) are between the age of 25 - 35. Majority of the respondents fall within the age bracket of 36-55 representing 42% (n=62). The oldest respondents who were 56 years and above represent 26% (n=38) of the respondents.

As for the educational distribution, 11% (n=16) of the respondents holds Ordinary National Diploma (OND) as their highest educational qualification while 52% (n=77 of the respondents on the other hand, hold a first degree as their highest qualification. The remaining 37% (n=54) of the respondents have postgraduate as their highest qualifications.

In a similar vein, the spread of the respondents along professional qualifications line showed that 47% (n=69) and 26% (n=38) of the respondents are members of Association of National Accountants of Nigeria (ANAN)

and Institute of Chartered Accountants of Nigeria (ICAN) respectively. Similarly, 6% (n=9) of the respondents are affiliates of Associate Certified Chartered Accountants (ACCA). 21% (n=31) of the respondents did not belong to any of the professional body. Regarding the distribution of the respondents based on forensic accounting certification, 71% (n=105) of the total sample (N=147) are members of Chartered Institute of Forensic and Certified Fraud Investigators of Nigeria. (CIFCFIN) while the remaining 29% (n=42) are members of Association of Certified Fraud Examiners (ACFE).

Finally, the distribution of the respondents based on their years of experience as forensic accountants shows that 25% (n=37) of the respondents have less than 3 Years experience. In a similar vein, 45% (n=66) of the respondents have between 3 – 10 Years working experience. Similarly, the result shows that. Few respondents representing 14% have a decade working experience, while 16% (n=24) of the respondents have above 15 Years working experience as forensic accountant.

Reliability and Sample Adequacy Analysis

4.3.1)Reliability Analysis: This section assesses the reliability of all the latent variables employed using Cronbach's alpha scale and sample adequacy using Kaiser-Meyer-Olkin Measure of Sampling Adequacy. The reliability test measures whether all the items measure the expected construct. Table 4 shows the reliability results in relation to Cronbach's Alpha based on both unstandardized and standardized items. Regarding the unstandardized Alpha, the Cronbach's alpha coefficient is 0.729 while that of the standardized coefficient is 0.758.

Table 4: Reliability Analysis

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
0.729	0.758	30

The coefficients of the two measurements are high as expected suggesting that the items measure their respective construct as required as higher values greater than 0.60 indicate higher agreement between items and response values for each participant across a set of questions are consistent. Based on these coefficients all the items used in this study are sufficiently consistent and their internal consistency are reliable.

Sample Adequacy Analysis

Table 5 shows the result of sample adequacy using KMO and Bartlett's Test of sample adequacy. The Bartlett's test was performed in order to confirm whether the items and sample are adequate and suitable for analysis. The KMO is high as expected with a coefficient of 0.782. Likewise, the value of Bartlett's test of sphericity is significant at a value Table 4

Table 3: Demographic Profile of the Respondents

S/N	Demographic Characteristics		Frequency		Percentage	
	Variables	Category	Distribution	Cumulative	Percent (%)	Cumulative (%)
A	Gender	Male	100	100	68	68
		Female	47	147	32	100
B	Age	25 – 35	47	47	32	32
		36 – 45	31	78	21	53
		46 – 55	31	109	21	74

		above 56	38	147	26	100
C	Highest Education	OND	16	16	11	11
		HND/BSc	77	93	52	63
		MSc/MBA	31	124	21	84
		PhD	23	147	16	100
D	*Professional Affiliation	ANAN	69	69	47	47
		ICAN	38	107	26	73
		ACCA	9	116	6	79
		Nil	31	147	21	100
E	*Forensic Accounting Certification	CIFCFIN	105	105	71	71
		ACFE	42	147	29	100
F	Years of experience as a forensic	Less than 3 years	37	37	25	25
		3 – 6 years	50	87	34	59
		7 –10 years	16	103	11	70
		11 – 16 years	20	133	14	84
		above 15	24	147	16	100

* Respondents were required to choose only one option they affiliate with the most.

of 1%. In line with the rule of thumb of significance value of less than 5% (Coakes & Ong, 2011), the adequacy of all the constructs considered in this study are assumed and satisfactory.

Table 5: Sample Adequacy Analysis

Kaiser-Meyer-Olkin Measure of Sampling Adequacy		0.782
Bartlett's Test of Sphericity	Approx. Chi-Square	1415.67
	Df	435
	Sig.	.000

Descriptive Statistics

Table 6 presents the aggregate descriptive properties of all the variables employed in the study. In particular, the table contains the minimum, maximum, mean, standard deviation (St. Dev.) Statistics. Consistent with the method specified in the previous chapter, the sample size is 147 as represented by the N-Statistics. The minimum values for all the six variables are between 1.60 to 2.0 suggesting that most of the respondent chose Disagree and above from possible options. In contrast the maximum values for FRD, IAS, ALS and ETS is 4.6 while that of LLS and TCS are 5.0 and 4.40 respectively. The mean value for all the variables is greater than three suggesting that on average, most of the respondent chose at least the Agree option from all the possible options.

Table 6: Descriptive Statistics

Var	N Stat.	Min. Stat.	Max. Stat.	Mean Stat.	Std. Dev. Stat.
FRD	147	1.60	4.60	3.4218	0.58151
IAS	147	1.80	4.60	3.4544	0.59429
LLS	147	1.00	5.00	3.3170	0.64737
ALS	147	2.00	4.60	3.0109	0.41860
TCS	147	1.60	4.40	3.2857	0.48427
ETS	147	1.60	4.60	3.1714	0.62153

The values of standard deviation across the variables are consistently similar indicating little or no much concern for possible deviation from the mean.

Post Estimation and Diagnosis Tests

This section presents the outcome from various post estimation and diagnosis tests. Specifically, these tests include bivariate correlation test, test of variance inflation factor (VIF) and normality test. The outcome from these tests are discuss under the succeeding subsections.

Pairwise Correlation

This section assesses the pairwise correlation among the variables of interest in order to detect possible level of multi-collinearity before proceeding with further analysis. The two pairwise correlations utilized are bivariate correlation and test of variance inflation factor (VIF) and Tolerance. Table 4.6 presents the outcome of the two tests.

Panel A of Table 4.6 presents the bivariate correlation matrix using Pearson correlation coefficients. The panel revealed the magnitude and direction of correlation between Fraud detection (FRD) and five forensic accounting skills (IAS, LLS, ALS, TCS and ETS). The panel shows that the Spearman correlation coefficients among various bivariate are consistently less than 0.70 which is consistent with the idea that there is absence of any problem of multi-collinearity. Kennedy (2008); Tabachnick and Fidell (2008) observe that a coefficient of less than 70% indicates absence of multicolinearity among the independent variables. Equally, coefficient exceeding 80% or 90% could lead to collinearity problem (Field, 2013; Gujarati & Porter, 2009).

Table 7: Bivariate Correlation Matrix

VAR	FRD	IAS	LLS	ALS	TCS	ETS
FRD	1.000					
IAS	0.443**	1.000				
LLS	0.507**	0.488**	1.000			
ALS	0.226**	0.120	0.080	1.000		
TCS	0.512**	0.537**	0.670**	0.256**	1.000	
ETS	-0.046	-0.135	0.012	0.200*	-0.091	1.00

Source: Correlation Matrix Results Using SPSS 20

** and * Correlation is significant at the 0.01 and 0.05 levels respectively.

Consistent with the hypotheses of the study, the correlation coefficient between FRD and *IAS* is positive and significant at 1% level indicating the possibility of investigating and auditing skills of forensic accountant in enhancing fraud detection. Regarding other variables of interest, Panel A of Table 4.5 shows that the bivariate correlation between FRD and LLS, FRD and ALS, FRD and TCS are positive and significant at 1% except the bivariate correlation between FRD and ETS which is not significant. This finding provides preliminary support for the possibility of financial fraud being detected through all the forensic accounting skills considered except the ethical skills.

Panel B

Variance Inflation Factor (VIF)

Variable	VIF	Tolerance (1/VIF)
IAS	1.49	0.670304
LLS	1.98	0.506207
ALS	1.16	0.861387
TCS	2.23	0.449284
ETS	1.10	0.905954
Mean VIF	1.59	

Panel B of Table 4.6 presents the outcome of test of VIF and tolerance to further confirm the absence of multicollonearity among the independent variables. The VIF values for all the variables are consistently lower than the maximum tolerable value. According to Field (2013) and Hill et al. (2011) the maximum allowable value for VIF is 10 and a minimum tolerance value of 0.10. To sum up, there is absence of multi-collinearity between the explanatory variables as the magnitude of all the correlation coefficients are quite small and values of VIF and tolerance fall within the allowable threshold.

Normality of Test

Normality of the error term was conducted using both Kolmogorov-Smirnova and Shapiro-Wilk tests. The test was conducted on both the standardized and unstandardized residuals as presented under Table 8. Using Kolmogorov-Smirnova, the Statistics is 0.064 with a significance level above 5%. Similarly, the Statistics value for Shapiro-Wilk is 0.986 with a significance value greater than 5%. The revelation from this findings sows that the normality of the error term is assumed and OLS is appropriate for regression analysis.

Table 8: Test of Normality

	KS[a]			SW		
	Stat.	DF	Sig.	Stat.	DF	Sig.
Unstandardized Residual	.064	147	.200*	.986	147	.127
Standardized Residual	.064	147	.200*	.986	147	.127

*. This is a lower bound of the true significance.

[a]Lilliefors Significance Correction;

KS (Kolmogorov-Smirnov) SW (Shapiro-Wilk)

Empirical results

This section presents the results of the cross-sectional regression analysis in relation to the effect of forensic accounting skills on financial fraud detection in Nigeria. Table 9 shows the regression result based on ordinary least square (OLS). The utilisation of OLS is consistent with the idea that the normality distribution of the error term is assumed as revealed in the previous section.

The coefficients of F-statistics is 15.40 and statistically significant at 1%. This Statistics indicates that the model employed in the study is well fitted and consistent with the idea that the regression analysis employed is sufficient in testing the hypotheses of the study. Table 9 also revels the coefficient of determination as measured by R and adjusted R squares. The R-square has a value of 0.3531 suggesting that the five forensic accounting skills ((investigative and auditing skills, legal and litigation skills, analytical skill Technical skill and ethical skill) jointly contribute in explaining the variation in financial fraud detection by 35% which is satisfactory.

Utilizing regression analysis based on OLS, the result from Table 9 shows that the relationship between fraud detection (FRD) and investigative and auditing skills (IAS) is positive and statistically significant at 5% level. Specifically, the coefficient of IAS is 0.18 suggesting that IAS influences fraud detection among MDAs in Nigeria. This result is consistent with the first hypothesis which states that *"Investigative and auditing skills applications significantly affect financial fraud detection in Nigeria".* Regarding the association between fraud detection (FRD) and legal and litigation skills (LLS), the results from Table 4.8 reveals that the coefficient of LLS is 0.25 and statistically significant at 1% level. This result shows that legal and litigation skills have a positive and a direct effect on fraud detection to the extent of 25%. That is, a unit increase in legal and litigation skill will lead to corresponding increase in fraud detection by 25%. This revelation is consistent with the second hypothesis which states that *"legal and litigation skills applications do not significantly affect financial fraud detection in Nigeria*".

Concerning the relationship between fraud detection (FRD) and analytical skill (ALS), the results from Table 4.8 reveals that the coefficient of ALS is 0.20, positive and statistically significant at 10% level. This result shows that analytical skill has a direct effect on fraud detection. That is, ALS has the propensity of detecting financial fraud in MDAs in Nigeria. This revelation lead to the acceptance of the third hypothesis which states that *"analytical skill significantly affect financial fraud detection in Nigeria.*"

Table 4.8 also shows that the nexus between fraud detection (FRD) and technical skill (TCS) is positive and statistically significant at 10% level. Specifically, the coefficient of TCS is 0.22 suggesting that TCS leads to fraud detection in MDAs in Nigeria. This result is consistent with the fourth hypothesis which states that "technical skill does not significantly affect financial fraud detection in Nigeria".

With respect to ethical skills, employing OLS, Table 9 shows that the relationship between fraud detection (FRD) and ethical skill (ETS) is negative and statistically not significant at any acceptable level. Precisely, the coefficient of ETS is -0.033 and not significant indicating that ETS does not lead to financial fraud detection among MDAs in Nigeria. This finding leads to the rejection of the fifth hypothesis which states that "ethical skills significantly affect financial fraud detection in Nigeria".

Table 9: Regression Results on the Effect of Forensic Accounting Skills on Financial Fraud Detection

	Panel A OLS
Variable[a]	DV=FRD
IAS	0.1815

	(2.24)**
LLS	0.2539
	(2.97)***
ALS	0.1970
	(1.94)*
TCS	0.2200
	(1.81)*
ETS	-0.0338
	(-0.51)
Constant	0.7440
	(1.80)*
F-Stat	15.40***
R-Square	0.3531
Adjusted R-Square	0.3302

***, ** and * indicate that values are significant at 1%, 5% and 10% respectively.

Absolute values of t-statistics are in parentheses.

DISCUSSIONS OF FINDINGS

Investigative and Auditing Skills on financial Fraud Detection

The study hypothesizes a significant effect of investigative and auditing skills on financial fraud detection among MDAs in Nigeria. Based on the data collected and analyzed, the outcome from the linear regression reveals that investigative and auditing Skills enhances financial fraud detection. This finding is consistent with the findings of Ojo-Agbodu, Abiola and Ndubusi (2022), Oranefo and Egbunike (2021), Agboare (2021), Alhassan (2020), Adesina, Erin, Ajetunmobi, Ilogho and Asiriuwa (2020), Sumartono, Urusamah and Hamdani (2020) but contradict the findings of Abdullahi, M1amuda and Kauji (2023), Ogwiji (2023), Beatrice, Tina and Nkechi (2022), Obiora, Onuora and Amodu (2022).

There are possible reasons that can be linked to the findings of this study. In one part, investigative and auditing skills are one of the specialized knowledge of forensic accountants to recognise fraudulent activities and scrutinise them. In other part, investigative and auditing skills provide avenue for legal proceeding through the provision of required evidence.

Legal and Litigation Skills on financial Fraud Detection

The findings from the regression analysis lead the acceptance of the hypothesis of the study which states that legal and litigation skills significantly influence financial fraud detection among MDAs. Consistence with the hypothesis, the result shows that legal and litigation skills spur financial fraud detection in Nigeria. This finding is line with the findings of Agboare (2021), Adesina, Erin, Ajetunmobi, Ilogho and Asiriuwa (2020), Sumartono, Urusamah and Hamdani (2020), Abdulrahman, Ab-Yajid, Khatibi and Azam (2020), Kwaghfan and Gberindyer

(2020). But it is contrary to those of Abdullahi, Mamuda and Kauji (2023), Ogwiji (2023), Beatrice, Tina and Nkechi (2022), Obiora, Onuora and Amodu (2022), Okoye, Adeniyi and Igbojindu (2020), Okoye, Adeniyi and James (2019), Olaoye and Adebayo (2019).

Analytical Skill on financial Fraud Detection

Consistent with the hypothesis of the study, the result from the cross-sectional linear regression shows that analytical skill engenders a positive significant effect on fraud detection. This finding indicate that analytical skill can dampen financial fraud in MDAs. This finding confirms the findings of Abdullahi, Mamuda and Kauji (2023), Ogwiji (2023), Beatrice, Tina and Nkechi (2022), Adesina, Erin, Ajetunmobi, Ilogho and Asiriuwa (2020), Sumartono, Urusamah and Hamdani (2020), Abdulrahman, Ab-Yajid, Khatibi and Azam (2020), Kwaghfan and Gberindyer (2020). However, it is in contrast to those of Gbegi and Habila (2017), Aduwo (2016), Ogutu and Ngahu (2016), Okafor and Agbiogwu (2016), Enofe, Agbonpolour, and Edebiri (2015), Eliezer and Emmanuel (2015), Enofe, Agbonkpolor and Edebiri (2015), Enofe, Idemudia and Emmanuel (2015). The possible reason for the finding of this study is that with analytical skill, forensic accountant has the capacity to gather and evaluate relevant fraudulent data, assess risks, and carry out cost benefit analyses.

Technical Skills on financial Fraud Detection

The study hypothesizes a significant effect of technical skill on financial fraud detection among MDAs in Nigeria. Based on the data collected and analyzed, the outcome from the linear regression reveals that technical skill heightens financial fraud detection. This finding is consistent with the findings of Ogwiji (2023), Beatrice, Tina and Nkechi (2022), Obiora, Onuora and Amodu (2022), Enofe, Utomwen and Danjuma (2015), Oladejo and Oluwaseun (2015), Onodi, Okafor and Onyali (2015), Elias (2014), Augustine and Uagbale-Ekatah (2014), Mukoro, Faboyede and Eziamaka (2014), Odelabu (2014), Peter, Masoyi, Ernest and Gabriel (2014). However, it is in contrast to those of Alhassan (2020), Adesina, Erin, Ajetunmobi, Ilogho and Asiriuwa (2020), Sumartono, Urusamah and Hamdani (2020), Abdulrahman, Ab-Yajid, Khatibi and Azam (2020), Kwaghfan and Gberindyer (2020), Okoye, Adeniyi and Igbojindu (2020), Okoye, Adeniyi and James (2019), Olaoye and Adebayo (2019).

Ethical Skills on financial Fraud Detection

Contrary to the hypothesis of the study, the results of the study reveal a no significant effect of ethical skill on financial fraud detection among MDAs in Nigeria. This finding is in line with the studies of Eliezer and Emmanuel (2015), Enofe, Agbonkpolor and Edebiri (2015), Enofe, Idemudia and Emmanuel (2015), Enofe, Utomwen and Danjuma (2015), Oladejo and Oluwaseun (2015), Onodi, Okafor and Onyali (2015), Elias (2014), Augustine and Uagbale-Ekatah (2014), Mukoro, Faboyede and Eziamaka (2014), Odelabu (2014), Peter, Masoyi, Ernest and Gabriel (2014) but contrary to those of Ojo-Agbodu, Abiola and Ndubusi (2022), Oranefo and Egbunike (2021), Agboare (2021), Alhassan (2020), Adesina, Erin, Ajetunmobi, Ilogho and Asiriuwa (2020), Sumartono, Urusamah and Hamdani (2020) which have position influence.

The major reason that can be linked to this finding is that ethics is a relative concept. Therefore, what constitute a deviant behaviour in some instance may constitute a norm in other instances. A forensic accountant may be confronted with some ethical issues which may or may not allow him or her to detect fraud.

Policy Implication of Findings

The study's theoretical, practical, and regulatory implications represent our contributions to knowledge and are anticipated to benefit forensic accountants, regulators, policy makers, and other researchers. One of the study's key policy implications is that the variables used imply that staff members of the various MDAs must constantly upskill in forensic accounting skills in order to intensify the fight against financial fraud in Nigeria. This, however, provides effective and efficient monitoring of staff with required training in respect forensic accounting skills to help increase the financial fraud detection in Ministries, Departments and Agencies.

Government should implement a policy requiring MDAs to conduct regular fraud risk assessments. This proactive approach will help identify potential vulnerabilities and enhance the development of targeted fraud

prevention measures. Enact and enforce comprehensive legislation to protect whistle blowers who report fraudulent activities within MDAs. Providing legal safeguards for individuals reporting misconduct encourages a culture of transparency and accountability.

Government should establish regulations that mandate MDAs to continually strengthen and update their internal control systems. This includes segregation of duties, dual authorization processes, and regular audits to mitigate the risk of fraudulent activities. MDA must enhance regulations related to procurement processes within MDAs to ensure transparency and accountability. This includes the use of technology to track procurement transactions and prevent fraudulent practices such as bid rigging and kickbacks.

Standard setters should develop and implement specific forensic accounting standards within the regulatory framework. These standards should guide MDAs in adopting best practices for forensic accounting methodologies, ensuring consistency and effectiveness in fraud detection efforts. Government should establish specialized units within law enforcement agencies or the judiciary to handle fraud investigations in MDAs. This involves creating policies that allocate resources, define responsibilities, and streamline the legal process for investigating and prosecuting fraud cases.

The organization's management should mandate periodic external audits by independent auditing firms. This ensures an unbiased assessment of financial records and helps identify irregularities that may be overlooked in internal audits. Also, encourage the adoption of advanced data analytics tools and technologies for continuous monitoring of financial transactions. Policies should support the integration of these tools into MDAs' operations to detect patterns indicative of fraud.

Implement regulations that necessitate leadership within MDAs to undergo training on fraud awareness and prevention. This ensures that top management is well-informed about the risks and actively supports fraud prevention efforts. Enforce policies requiring periodic asset declaration by public officials and conducting lifestyle audits. This helps identify discrepancies between declared assets and actual wealth, acting as a deterrent against corrupt practices.

Establish policies that promote transparency by requiring MDAs to disclose financial information, including budgets, expenditures, and financial reports, to the public. Public scrutiny can act as a deterrent and foster accountability. Facilitate collaboration between regulatory bodies, law enforcement agencies, and MDAs for information-sharing and coordinated efforts in fraud detection and prevention. Clear policies should outline the mechanisms for such collaboration.

In Nigeria, most accounting staff of Ministries, Departments and Agencies in Nigeria do not have basic knowledge of forensic accounting and what it entails thereby paving way for manipulative accounting activities with less skills to mitigate such. This gives the management greater motivation and opportunity to manipulate the accounting reports for personal gains. Based on this, policy makers such as the Office of Accountant General and Auditor General for the Federation should make use of the findings from this study to improve on the forensic accounting of various accountant also encourage additional certification of accountant in forensic accounting education. The two offices can create forensic accounting laboratory or make it mandatory for various MDAs to establish a unit saddle with that responsibilities.

Furthermore, the effects of forensic accounting skills on financial fraud detection in Ministries, Departments and Agencies, as shown by the empirical evidences, may have an acceptable explanation. This has significant policy implications for the fight against financial fraud detection. First, the staff of the MDAs must be certified to have investigative and auditing skills, analytical skills and ethical skills to form part of forensic accounting team within his Unit or department otherwise the fight against financial fraud will remain a mirage. Therefore, this necessitates the inclusion of staff with investigative and auditing skills, analytical skills and ethical skills in MDAs forensic accounting laboratory in Nigeria.

Government must implement regular and specialized training programs focused on forensic accounting techniques. These programs should cover the latest tools, methodologies, and case studies, providing professionals with practical skills and real-world insights. Foster partnerships with reputable forensic accounting

professional bodies and institutions. Encourage MDAs' staff to pursue certifications and memberships in these organizations to stay updated on industry best practices and standards.

These policy and regulatory changes, when implemented collectively, can significantly strengthen the overall fraud detection framework in Nigerian MDAs, promoting a culture of accountability, transparency, and integrity within the public sector.

CONCLUSIONS AND RECOMMENDATIONS

Conclusions

The study investigates the effects of forensic accounting skills on financial fraud detection among some Ministries, Departments and Agencies in Nigeria. The skills possessed by a forensic accounting expert are expected to influence the level of financial fraud detection in Nigerian Ministries, Departments and Agencies. There have been reported cases of financial scandals around the world which has also been reported in Nigerian MDAs. This, necessitates the need to examine the extent to which forensic accounting skills influence the level of financial fraud detection in Nigeria. Forensic accounting is a specialized field within accounting that combines accounting, auditing, and investigative skills to analyse financial information for legal purposes. Forensic accountants are often involved in investigating financial fraud, embezzlement, and other financial irregularities. To be effective in this field, individuals need a specific set of skills. These skills collectively enable forensic accountants to investigate financial discrepancies, provide expert testimony, and contribute to legal proceedings related to financial fraud or other financial crimes.

The study found a significant positive relationship between investigative and auditing skills and financial fraud detection. Consistent with this finding, the study concludes that application of investigative and auditing skills lead to the detection of financial fraud in the Nigerian MDAs.

The findings from the study revealed a significant positive association between legal and litigation skills and financial fraud detection. In line with this finding, the study concludes that application of legal and litigation skills lead to financial fraud detection in the Nigerian MDAs.

The results from analysis of data show that analytical skill has a significant positive effect on financial fraud detection. Based on this finding, the study concludes that application of analytical skill stimulates financial fraud detection in MDAs in Nigeria.

The results from analysis of data show that technical skill significantly affect financial fraud detection positively. In line with this finding, the study concludes that technical skill enhances financial fraud detection in MDAs in Nigeria.

The study found no significant association between ethical skill and financial fraud detection. Accordingly, the study concludes that financial fraud in MDAs in Nigeria cannot be detected through the application of ethical forensic accounting skill.

Recommendations

Following the conclusions highlighted in the preceding section, this study proffers the following recommendations.

The study concludes that forensic accounting skills influence fraud detection in MDAs. Consequently, the study recommends that federal government should intensify effort in creating forensic accounting units in various MDAs so as to mitigate excessive occurrence of fraudulent activities.

The study documents the relevance of investigative and auditing skills in fraud detection. Hence, it is recommended that forensic accountant should prioritize investigative and auditing skills in addition to other skills. The incessant of financial fraud in MDAs will be thwarted by forensic accountant through the application of this investigative and auditing skills.

Consistence with the conclusion of the study regarding the influence of application of legal and litigation skills on fraud detection, this study recommends that forensic accounting experts should strive to equip themselves with these skills. As financial fraud committers continuous to deploy different ways in perpetrating their activities, forensic accountants must not relent in advancing their legal and litigation skills. This will further exacerbate their skills in detecting fraud of any kind.

In order to foster a culture of integrity and transparency within the public sector, forensic accountant must possess analytical and technical skills in discharging their roles and responsibilities. These skills enable forensic accountant observe, interpret, research and analyse data to enable him make informed decision which will alter the tendency of committing fraud.

Government should mandate and support ongoing professional development for forensic accountants within MDAs. This can include attending conferences, workshops, and webinars to stay abreast of emerging trends, technologies, and legal developments. Facilitate networking events and forums where forensic accountants within MDAs can connect with their peers, share experiences, and build a collaborative community. Networking enhances the exchange of knowledge and fosters a supportive professional environment. Encourage cross-functional training by exposing professionals in other financial and non-financial roles to basic forensic accounting principles. This broadens the organization's overall resilience against fraud.

The findings emphasized the importance of a holistic approach to fraud detection, encompassing a combination of skilled professionals, updated technology, robust policies, and collaborative efforts between regulatory bodies and MDAs. Overall, the study highlighted the necessity for a commitment to transparency and accountability within Nigerian MDAs. Strengthening forensic accounting skills emerged as a pivotal strategy in fostering a culture of integrity and resilience against financial fraud.

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