

**MODERATING EFFECT OF PROFESSIONAL ETHICS ON ATTITUDE
REQUIREMENT OF ACCOUNTANTS AND FRAUD RISK ASSESSMENT IN
NIGERIAN PUBLIC SECOR**

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ABSTRACT

Fraud in the public sector remains a difficult challenge in Nigeria, where the misappropriation of public funds and financial malpractices undermine trust in government institutions and slow socioeconomic progress. Effective fraud risk assessment (FRA) is essential for curbing these malpractices, as it ensures that the mechanisms designed to detect, prevent, and respond to fraud are robust and responsive. Central to FRA is the performance of professional accountants, whose attitudes, and ethical orientations can influence how fraud risks are identified, assessed, and managed. This study explored the moderating effect of professional ethics on attitude requirements of accountants and fraud risk assessment in the Nigerian public sector. This study

was carried out using quantitative approach and cross-sectional research design, a survey method of data collection and a self-selection (convenience) sampling technique. Primary data were collected by means of questionnaire. The population of the study comprised of the 10,196 Nigerian public sector accountants from the office of the Accountant General of the Federation, out of which a sample size of 404 was scientifically selected. The dependent variable is Fraud Risk Assessment; the independent variable is Professional Attitude Requirement whereas the moderator is Professional Ethics. Descriptive statistics and Partial Least Square Structural Equation, reflective measurement model was used while Stata version 17.0 was the research technique. The result of the study revealed that Professional Attitude Requirement has significant positive effect on fraud risk assessment. This study recommended that, accountants should undergo training and retraining exercise as a means of growing in the required attitude to be able to effectively discharge their responsibilities of assessing the risk of fraud.

KEYWORDS: - Accountants, Attitude Requirement, Fraud Risk Assessment, Professional Ethics.

1.0 INTRODUCTION

Fraud in the public sector remains a significant impediment to transparency and accountability in many emerging economies, and Nigeria is particularly challenged by pervasive fraudulent practices that compromise public trust and hinder socioeconomic development. The implementation of robust Fraud Risk Assessment (FRA) practices has been recognized as essential for detecting, preventing, and mitigating such malpractices. However, the efficacy of FRA does not solely rely on technical expertise; it is also profoundly influenced by the attitudes and ethical orientations of professional accountants. In this context, the attitude requirement of accountants, their readiness, commitment, and proactive stance in detecting fraud can determine the success of FRA initiatives. Yet, without a strong ethical foundation, even technically proficient accountants might fail to translate their positive attitudes into effective fraud prevention strategies (Ademola et al., 2017; Cohen et al., 2010).

In essence, FRA is directly connected to the accountants' ability in the detection, prevention and response to fraud in an audit (Chui, 2010). FRA is carefully chosen as the special area for this study because every ministry, department and agency of government is not immune to the multiplicity of risks from internal and external sources. FRA comprises a vibrant and iterative course for identifying and assessing risks to the achievement of organisational objectives. It requires those in authority to reflect on the effect of changes in the external environment and within its own activity model which may render internal control less effective. The Committee of Sponsoring Organizations of the Tread way Commission (COSO, 2020) internal control framework, identifies risk assessment as one of the five components of internal control and

considers its significance in relation to potential and actual fraud in any government establishment.

Hence, attitudes according to the International Ethics Standards Board for Accountants (IESBA, 2022) are the mind-set that underpins ethical behaviour, mainly professional scepticism, objectivity, and commitment to the public interest. Whereas, Public sector refers to all organisations which are not privately owned and operated, but which are created, managed and financed by the Government on behalf of the public (International Federation of accountants [IFAC], 2019). Basically, the public sector is made up of organisations which are set up and controlled for the good of the public, whose objective is the provision of services, not for profit motive (Institute of Chartered Accountants of Nigeria [ICAN], 2019).

This research is necessitated because of the growing numbers of accountants getting involved in professional accounting services who should not be, for the reason that they do not understand the attitude requirements they need to possess in order to be effective in the profession. There is hardly a week that passes without the report of fraudulent activities being told in the Nigerian Newspapers. The loss of revenue owing to fraud in the public sector is higher than all sectors of the Nigerian economy put together (ACFE, 2022; EFCC, 2012; ICAN, 2010). All-inclusive fraud statistics are difficult to come by because government agencies and companies tend to keep records of only those frauds that affect their area(s) of interest.

All fraud statistics are based on known frauds and any number that is quoted are considered to be only a minute part of the whole fraud incidences (LawBirdie, 2023; Silverstone &Sheetz, 2007).Although, statistical data are not readily available to find out the level of fraud in the Nigerian public sector, researchers have argued that fraud has become prevalent and a cankerworm that has resisted all treatments as reflected by several national news outlets. Examples are: N1.4 billion oil subsidy fraud, Premium Times (9th May, 2022); EFCC arrests accountant-general Ahmed Idris over N109 billion loot, The People's Gazette (16th May, 2022); KPMG tagged Nigeria as the most fraudulent country in Africa (Punch, 2013)

Despite growing recognition of the role attitudes and ethics play in fraud prevention, there remains a notable gap in the Nigerian context regarding how these variables interact within the framework of FRA. While earlier studies have either focused on the technical skills of accountants or isolated the impact of ethical requirements like (Ademola et al., 2017), few have examined the dynamic interplay between attitude and ethics using a behavioural theory like the theory of reasoned action. This study aims to address that gap by investigating the moderating effect of professional ethics on attitude requirement of accountants and fraud risk assessment in Nigerian public sector.

In the light of the foregoing, this study raised and found answers to the following research questions:

- i. To what extent does Attitude Requirement (ATR) affect Accountants and Fraud Risk Assessment in Nigerian public sector?
- ii. Does Professional Ethics (PES) moderate the effect of ATR of Accountants and Fraud Risk Assessment in Nigerian public sector?

The main objective of this study is to examine the moderating effect of Professional Ethics on Accountants' Attitude Requirements and Fraud Risk Assessment in Nigerian public sector. In order to achieve this, the specific objectives of this study are to:

- i. Evaluate attitude requirement of accountants and fraud risk assessment in Nigerian public sector.
- ii. Evaluate the moderating effect of professional ethics on attitude requirement of accountants and fraud risk assessment in Nigerian public sector.

In order to achieve the specific objectives of this study, the following research hypotheses were formulated and tested in the study:

- i. H_{01} : Attitude requirement of accountants has no significant effect on fraud risk assessment in Nigerian public sector.
- ii. H_{02} : There is no significant moderating effect of professional ethics on attitude requirement of accountant's and fraud risk assessment in Nigerian public sector.

By applying the Theory of Reasoned Action to the context of fraud risk assessment, this research offers a novel perspective that integrates behavioral intentions with ethical imperatives. The findings are expected to provide valuable insights for policymakers and organizational leaders seeking to strengthen the effectiveness of fraud prevention strategies in the Nigerian public sector. In particular, this study will illustrate how enhanced professional ethics can solidify positive attitudes and foster the social environment necessary for robust FRA, thereby promoting greater transparency, accountability, and governance. Ultimately, the research aspires to contribute to the body of knowledge by clarifying the behavioural implications of ethics in fraud prevention and by suggesting practical interventions that incorporate ethical training and normative reinforcement.

The study focused on professional ethics as a moderator on attitude requirement of accountants and fraud risk assessment in Nigeria. This work covered the 10,196 public sector accountants under the office of the accountant general of the federation in Nigeria. It is from the pool of accountants in this office that government ministries, departments, and agencies who are engaged in enforcement, regulation and investigation rely on for professional assistance in the

areas of fraud and financial crimes detection and prosecution. The survey data was obtained from October, 2023 to February, 2024.

2.0 LITERATURE REVIEW

The study suggests that FRA is the function of accountant's attitude requirement and that, the effect is moderated by professional ethics. The conceptual framework of the study is presented in figure 1.

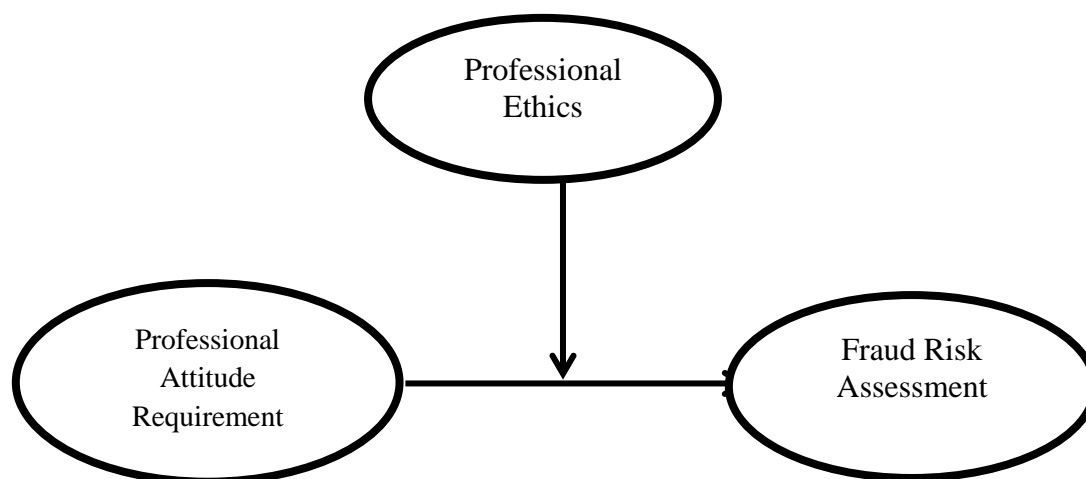


Figure 1: Conceptual Framework

Source: Researcher's Compilation, 2025

2.1 Fraud Risk Assessment (FRA)

The Chartered Institute of Public Finance and Accountancy (CIPFA, 2020) defined fraud as “any intentional false representation, including failure to declare information or abuse of position that is carried out to make gains, cause loss or expose another to the risk of loss”. Fraud likewise includes “false representation, theft, forgery, embezzlement, deception, misappropriation, concealment of material facts, and also cover omission, deception or manipulation of facts and intentional misrepresentation”.

Gilbert and Wakefield (2018) referred to fraud as the act of “unlawfully obtaining, stealing, harming and misuse of organizational assets”. Whereas, Odukoya and Samsudin (2021) affirmed fraud as a global phenomenon which hampers economic developments and growth. The Association of Certified Fraud Examiners (ACFE, 2020) defined fraud as the usage of one's occupation for individual enrichment through the thoughtful misuse or misapplication of the employing organization's resources or assets. Therefore, fraud can be said to be a complex crime incorporating multiple offences and Behaviourial traits.

Fraud risk assessment involves a dynamic and iterative process for identifying and assessing risks to the achievement of organizational objectives. It requires those in authority to consider the impact of changes in the external environment and within its own activity model which may render internal control less effective. Hence, Fraud risk assessment is a systematic and ongoing process that organizations use to identify, quantify, and prioritize the potential risks of fraudulent activities within their operations. This process involves a careful evaluation of internal controls, business processes, and external conditions that may create vulnerabilities. By identifying where and how fraud could occur, whether through misappropriation of assets, financial statement fraud, corruption, or other schemes organizations can develop tailored strategies to mitigate these risks (The Institute of Internal Auditors, 2022).

Mill champ and Taylor (2022) described fraud-risk assessment as “the auditor’s systematic identification and evaluation of factors that may give rise to material misstatement due to fraud” (p. 157). FRA does not only indicate the direction of the audit but supports auditors ascertain the organisation’s environment and scope of audit procedures which are planned purposely to identify the possibility and consequence of fraud occurring in any organisation(Chui, 2010). It consists of an iterative procedure stage. Which are: developing FRA framework populates fraud risk, rate likelihood and significance, identify controls and assess alignment, identify gaps, and remediation.

For this study, FRA is defined as accountant’s attitude and capacity for checking the vulnerability or the chances that fraud may occur within the public sectors’ operating sphere. This symbolizes that the procedures to be adopted will depend upon the organization’s environment, timing and scope of the audit task. It is to be measured using 5-point Likert scale ranging from 5 (strongly agree to 1 (strongly disagree) of 4 items as adapted from Odukoya and Samsudin(2020) and ACFE (2020).

2.2 Professional Attitude Requirement

ProfessionalAttitude is defined as a characteristic mental outlook or a fixed state of mind that generally influences an individual's behaviour towards a situation. It is also referred to as a predisposition or a habit which is generally challenging to alter (Ask.com, 2013). In addition, professional attitude refers to the composite set of behavioral dispositions, ethical commitments, and underlying values that professionals are expected to embody to perform their duties effectively. This requirement goes beyond merely possessing technical competence; it encompasses a commitment to integrity, accountability, and a proactive approach toward ethical decision-making. In the context of accounting and fraud risk assessment, for example, a professional attitude is characterized by a dedication to transparency, a vigilant stance against

fraudulent practices, and the willingness to uphold stringent ethical standards even in the face of external pressures (Ademola et al., 2017; Cohen et al., 2010).

According to the International Federation of Accountants [IFAC], 2022, Section 100, “attitudes” is defined as the mind-set that underpins ethical behaviour; chiefly professional scepticism, objectivity, and commitment to the public interest. In essence, it is evident that attitude affects the behaviour of people especially in the arenas of fraud risk assessment. In practical terms, this means that professionals, particularly in high-stakes fields like accounting, are expected to cultivate and maintain an attitude that reflects both personal integrity and adherence to the broader ethical frameworks established by regulatory and professional bodies. The internalization of these values is critical for fostering an environment where ethical behaviour is not only expected but rigorously practiced, thus contributing to improved organizational governance and public trust.

For this study, the researcher defined attitude as a positive mental approach which influences an individual’s cognitive behaviour towards fraud risk assessment. Attitude or Mind-set is the positive mental outlook of an accountant to prevent, detect and respond to fraud. It is measured using 5-point Likert scale ranging from 5 (strongly agree) to 1 (strongly disagree) of 9 items as adapted from Chui (2010).

2.3 Professional Ethics

Ethics is a conception that is difficult to define but easy to describe. It has been defined severally by diverse writers each claiming theoretical superiority. The disagreement is centred on the point that, ethics border around what is “right or wrong”, “good or bad”, which are very much subjective, fashioned by multiple factors and dependent on individual conviction. Ethics are as a result, the moral values that an individual practises in governing his or her behaviour (Ezeagba&Abiahu 2018).

Accounting as a profession has developed its codes of professional ethics. The essence of the codes, is to provide professional accountants with guiding principle for conducting themselves in a fashion consistent with the tasks of the profession, predominantly when the accountant carries out professional judgment. A professional accountant is indebted with certain ethical obligations to his profession, clients, and the society as a whole, even if at different times such obligations may conflict with his personal interest (Madsen &Safritzi, 1999). In the exercise of professional judgment, an accountant must not let; management pressure, his greed, or selfish interest, overrule his professional and societal requirements. The accounting professional codes of ethics in practice include; “competence, confidentiality, independence, integrity and objectivity” (Akenbor&Onuoha, 2013).

As posited by Ogbonna and Appah(2011),ethics are the moral values that an individual uses in governing his or her behaviour. It's the personal principles by which an individual differentiates between "rights from wrong". Ethics can be defined as the accountant's compliance with the basic five principles of: "objectivity, professional competence and confidentiality, integrity, due care and professional behavior in the discharge of their duties within the work environment. Ethics is seen as a collective agreement between the FA and the public (Ademola, 2017).

Accountants have a duty and responsibility to operate with the highest degree of objectivity and integrity. As ethics is considered an essential constituent of professional accounting. Similarly, the ethical code of conduct serves to regulate members of the profession and is also seen as a way of self-protection for each member of the accounting profession. Ethics is also seen as an accountant's attempt to provide a guide to assist in formulating correct decisions under the circumstances ((Ademola, 2018). The code of ethics is intended as a guideline for the behaviour expected of an accountant in order to protect shareholders and their interests. In addition, according to the Institute of Chartered Accountants of Nigeria (2019), ethics is "the discipline that studies moral duty, distinguishing right from wrong and prescribing the principles that should govern the conduct of professional accountants". Its five fundamental principles of are 'integrity, objectivity, professional competence &due care, confidentiality and professional Behaviour' (p. 2).

In other words, the guidelines serve as a guide for the relationships between accountants, and clients.This study explains professional ethics as, the accountant's exhibition of the essential principles of integrity, confidentiality, objectivity, professional competence and due care, and professional behaviour in the discharge of assigned responsibilities in the Nigerian public sector. This study adapts Ademola et al. (2017), AICPA (2021) and ACFE (2022)measurement of PES using a 5-point Likert scale ranging from 5 (very often to 1 (not at all) of 15 items.

2.4 Theoretical Review

This section discussed the theory on which this research work is anchored, The Theory of Reasoned Action (ToRA)

The ToRA was advanced by Martin Fisherbein and IcekAjzen in 1967, it is primarily used to explain individuals' behaviour through the influence of attitude which dates back to the period of 1918 - 1970. This theory originated from the expectancy-value theories in the social psychology field. Ajzen and Fishbein (1980) emphasised that, the ToRA is "designed to explain essentially any human behaviour in relation to attitude". The basis of the ToRA is premised on the postulation that individuals are rational. It is expected that they will make organised use of the information at their disposal in order to take necessary, reliable and relevant action. In essence,

individuals consider the implications of their actions before they make a decision either to engage or not to engage in a certain behavioural situation (Ajzen&Fishbein, 1980). The ToRA emphasises that in making rational decisions, the intention is the best predictor of behaviour (Fishbein&Ajzen 1975; Popoola2014).

The ToRA posits that an individual's behavioural intention, the precursor to actual behaviour is determined primarily by two factors: the individual's attitude toward the behaviour, and the subjective norms, or perceived social pressures to perform (or not perform) that behaviour (Fishbein&Ajzen, 1975). Applied to fraud risk assessment, this model suggests that if professional accountants hold a favourable attitude toward rigorous fraud detection and prevention, and if they perceive strong normative support (e.g., from regulatory bodies, professional associations, and organizational culture) for ethical conduct, they are more likely to engage in practices that enhance FRA outcomes. In this study, professional ethics is conceptualized as a moderating factor that shapes both the formation of these attitudes and the interpretation of subjective norms, thereby reinforcing the accountants' intent to act diligently in fraud detection

2.5 Review of Empirical Studies

Popoola et al. (2018) studied the moderating impact of attitude on FRA of professional accountants in the fourth industrial revolution. The study used prior literature as the basis of comparison on how attitude has evolved through the years 2010, 2015 and 2020 respectively. Based on the previous literature reviewed, it is observed that, accountants' attitude has evolved from carrying out in-depth investigation to ascertain whether fraud actually exist or not, to determine the perpetrators of such fraudulent acts and to proffer remedial action to curb fraud.

Health Belief Model (HBM) was employed as an underpinning theory in the study to compare the behaviour to prevent and detect fraud to the behaviour to prevent and screen for illness. The inspiration for contrasting accountants in the Nigerian public sector to protective health services rises from the similar expectation that this act can reduce to the barest minimum the likelihood and the severity of harm caused by fraud. The research revealed that, there's a significant positive effect between the attitude of a professional accountant and FRA in the era of the fourth industrial revolution, showing that attitudes affect the behaviour of people most especially in the areas of fraud risk assessment judgment.

Cohen et al. (2010) investigated the role of managers' attitudes in corporate fraud in the United States of America (USA). The dependent variable was corporate fraud whereas, the independent variable was attitude. The study used the case analysis approach to apply the theory of planned behaviour to documented fraud cases, sample was collected from the corporate scandal fact

sheet, which included a list of 61 short vignettes on companies where 39 cases of corporate fraud scandals were examined, using evidences taken from press articles. The results of the analysis suggested that, attitude, is a major fraud risk factor. It further stated that, it is potentially important to strengthen the emphasis on attitude (morals) in the auditing standards that are related to fraud detection.

Chui (2010), examined the effects of fraud specialist and audit attitude on fraud risk assessments and on the development of fraud-related problem representations using fraud risk assessment as dependent variable and attitude as independent variable in the research, which was considered at two levels of fraud specialist and audit. The research design tested the hypotheses of the study experimentally using a 2x 2 between subjects' factorial design. The research participants were randomly apportioned to a particular attitude that could be fraud specialist or audit attitude. The respondents for the study were senior level accounting students. Survey questionnaires were well administered to the research respondents giving them opportunity to make useful comments. The sample size for the study consisted of a total of 85 higher level accounting students, drawn from two large state universities as participants for the study.

The results of the study showed that, a simple difference in attitude can cause individuals to render significantly different judgments and decisions about the same matter that is on FRA. Correspondingly, participants in the fraud specialist attitude and treatment group measured fraud risk significantly higher than individuals in the audit attitude group of both high and low fraud risk conditions. As a consequence, the results have provided evidence to submit that, in a situation of high fraud risk condition, it is likely to increase the fraud risk assessment effectiveness of auditors by inducing them using a fraud specialist attitude or behaviour.

[Ebaid](#) (2022), explored accounting students' attitudes toward integrating forensic accounting education to prepare them for fraud risk assessment. The study explored the current position of forensic accounting education particularly, in Saudi Arabia as an evolving country and the adequacy of its coverage from the perceptions of accounting students in Saudi universities undergoing training as accountants in the future.

Quantitative data was obtained through the administration of survey questionnaires randomly sampled accounting students from four Saudi Arabian universities. The study found that, there is a level of weakness in incorporating forensic accounting into accounting education curriculum in Saudi Arabian universities. This level of weak integration, is not satisfying to many of the students' respondents who believe that, there is great increase in the demand for forensic accounting profession currently because of the vital services they render and there would be more of the demand in the future, hence, the need for greater coverage of forensic accounting

course content in the accounting curriculum in order to equip the students with the requisite attitude that would make them well qualified and competent to face the challenging demands of profession after graduation.

In the studies reviewed collectively, accountant attitude is directly linked to better performance in fraud risk assessment effectiveness. While of the studies had its own strength, they also share some common weaknesses such as; some were silent about the domain or sector covered in the investigation, no mention of the techniques used in data analysis, methodology, theory to anchor the work, the method of sample selection as well as the use of students participants instead of professionals. These are gaps the current study intends to fill by introducing additional variables, using real professionals instead of students, stating clearly the theoretical underpinning and having a clear sample size.

3.0 METHODOLOGY

This study was undertaken using quantitative approach and cross-sectional research design. The study embraced positivist paradigm, a survey method for data collection and self-selection (convenience) sampling technique. Questionnaires were employed by means of Google Form. The population of the study consists of the 10,196 public sector accountants in Nigeria as obtained from the service-wide Staff position who are knowledgeable due to their experience having worked as accountants for years, and as a result, should have response on what they feel should be the required attitude an accountant should possess in order to reduce the prevalence of fraud. The sample size was determined using Cohen et al. (2003) method for computing power for regression coefficients and arrived at 404.

This research used descriptive statistics and “Partial Least Square Structural Equation Modeling” (PLS-SEM) for data analysis while Stata version 17.0 was employed as data analysis technique. Independent variable is Professional attitude Requirement (PSR) measured by the use of 5-point Likert scales of 5 to 1 (strongly agree, agree, neutral, disagree and strongly disagree). Dependent variable is Fraud Risk Assessment (FRA) measured using 5-point Likert scales ranging from 5 to 1 (strongly agree, agree, neutral, disagree and strongly disagree) with the moderator as Professional Ethics (PES) measured by means of 5-point Likert scales of 5 to 1 (very often, often, sometimes, rarely and not at all). Questionnaires were adapted from different sources such as; Ademola et al. (2017); Odukoya and Samsudin (2021); Popoola et al. (2015); etc. The questionnaire comprised of demographic information, close ended questions to get response from all levels of accountants in the public sector in Nigeria.

3.1 Pilot Study

The instrument for this work was subjected to pilot test for validity and reliability. Validity is an indication of the degree to which the research tool measured the constructs being investigated Nyangori and Ndede (2018). Validity tests are of three types, which include content, criterion and related constructs validity. This study focused on content validity which measures the degree to which the sample of the items represents the content that the test is intended to measure.

A pilot study was carried out by taking some of the questionnaires to some of the staff at the headquarters' office of the Accountant General of the Federation in Abuja to be filled by the respondents at random. From the pilot study, the researcher was able to detect questions that needed to be edited and those that were ambiguous. The final questionnaire was then distributed as a Google-form and used to collect the data for analysis after it was edited to ensure its completeness and consistency.

3.2 Model Specification

The model for this study is as presented below;

$$FRA_i = \beta_0 + \beta_1 PATR_i + PES + e_i \dots \dots \dots (i)$$

$$FRA_{it} = \beta_0 + \beta_1 PATR_i + \beta_2 PES + (PATR_i * PES_i) e_i \dots \dots \dots (ii)$$

Equation 2: The effect of the moderator on the variables

Where:

FRA= Fraud Risk assessment

PATR =Professional Attitude Requirements

β_0 = is the intercept

β_1 = is the parameter to be estimated in the equation

β_2 = Moderated variable

PES = Professional Ethics (the moderating variable)

i= Number of samples

e = error term

4.0 RESULTS AND DISCUSSIONS

This survey was undertaken between October, 2023 and February, 2024. Electronic form of the questionnaire was sent out to the WhatsApp platforms of the accountants 216 responses were returned yielding a response rate of 53.5%.

Table 1 report the demographic data on staff profile including sex, age, level of education (qualification) and professional affiliation.

Table 1
Respondents 'profile

Variable	Obs	Mean	Std. Dev.	Min	Max
Sex	216	0.713	0.453	0	1
Age	216	2.028	0.801	1	4
Education	216	2.472	0.909	1	4
Profession	216	1.685	0.557	1	3
Percentage analysis of Qualifications				Total	Percentage
HND				37	17.5%
BSc				60	27.6%
MSc/MA				91	41.9%
PhD				24	11.1%
ICAN				58	27.2%
ANAN				110	51.2%
CIMA				45	17.1%

Source: Stata 17.0 result output (2025)

From Table 1, the respondents are about 71.3% male and 28.7% female; hence, it is assumed that there is gender in-balance in the views of the respondents on the subject matter since the male have more dominance. The average age of the staff is in the range of 40-49 years old. About 41.9% of the respondents have MSc or MA as their highest academic qualification. Another 27.6% of the respondents are BSc holders while 51.2% are professional members of ANAN and another 27.2% are ICAN members. This shows that the respondents are well educated with the required knowledge of the answers they gave in the questionnaire.

Descriptive Statistics

The descriptive analysis for the moderating effect of professional ethics and professional knowledge requirement is shown in Table 2.

Table 2
Summary statistics for indicator variables

Indicator	Mean	Sd	Median	min	Max	N
Q32	4.106	0.985	4	1	5	216
Q33	3.352	1.090	4	1	5	216
Q34	3.222	1.148	3	1	5	216
Q35	3.435	1.076	4	1	5	216
Q36	3.190	1.184	3	1	5	216

Q37	4.116	0.889	4	1	5	216
Q38	3.667	1.078	4	1	5	216
Q39	2.699	1.377	2	1	5	216
Q40	2.500	1.417	2	1	5	216
Q5	4.380	0.798	5	1	5	216
Q6	4.366	0.889	5	1	5	216
Q7	2.495	1.450	2	1	5	216
Q8	3.806	1.091	4	1	5	216
Q9	3.764	1.328	4	1	5	216
Q10	4.366	0.974	5	1	5	216
Q11	4.111	1.111	4	1	5	216
Q12	4.120	1.072	4	1	5	216
Q13	3.926	1.155	4	1	5	216
Q14	4.046	1.238	5	1	5	216
Q15	3.852	1.098	4	1	5	216
Q16	4.282	0.904	4	1	5	216
Q17	3.417	1.330	4	1	5	216
Q18	4.074	0.971	4	1	5	216
Q1	4.394	0.788	5	1	5	216
Q2	4.347	0.685	4	1	5	216
Q3	4.296	0.844	4	1	5	216
Q4	4.097	0.907	4	1	5	216

Source: Stata 17.0 result output (2025)

Table 2, from the three constructs of this study, PATR, PES and FRA, PATR construct, Q37 showed the peak mean value of 4.116 and a S.D of 0.889 (Q32 = 4.106; Q33 = 3.352; Q34 = 3.222; Q35 = 3.435; Q36 = 3.190; Q38 = 3.667; Q39 = 2.699; Q40 = 2.500) whereas the FRA construct disclosed the lowest mean value of 4.097 (Q1 = 4.394; Q2 = 4.347; Q3 = 4.296; Q4 = 4.097). Also, as can be seen in Table 4, the construct of PES indicated mean value of (Q5=4.380; Q6=4.366; Q7=2.495; Q8=3.806; Q9=3.764; Q10=4.366; Q11=4.111; Q12=4.120; Q13=3.926; Q14=4.046; Q15=3.852; Q16=4.282; Q17=3.417; Q18=4.074). This means that respondents generally agree that attitude requirements, professional ethics, and fraud risk assessment are important. The high means of 4.0 across the three constructs indicate that, on average, respondents agree or strongly agree with statements about attitude requirements, ethics, and fraud risk assessment; on a 5-point Likert which is a clearly positive endorsement and not a neutral response

Table 3*Measurement model - Standardized loadings*

Reflective: PATR		Reflective: PES	Reflective: FRA
Cronbach	0.772	0.836	0.739
DG	0.785	0.869	0.836
Rho_A	0.709	0.865	0.744

Source: Stata 17.0 result output (2024)

Table 3 shows the standardized loadings, indicating the strength and direction of the consequence of the variables. The research examined the PLS-SEM measurement model, focusing on professional attitude requirement (PATR), professional ethics (PES) and fraud risk assessment (FRA). The reflective construct for PATR and PES is a tool used to measure the effect of the latent variables. It consists of multiple indicators with standardized loadings, indicating the strength and direction of the consequence on the variables.

Reliability measures for PATR, PES and FRA are Cronbach's alpha (0.772, 0.836 and 0.739) respectively, Dillon-Goldstein's (DG) are 0.785, 0.869 and 0.836 respectively, and while rho_A is 0.709, 0.865 and 0.744 for ATKR, PES and FRA. Higher values for these measures indicate that, the indicators reliably measure their latent constructs. These reliability measures help assess the robustness and consistency of the measurement model.

PATR's Cronbach alpha is 0.772, indicating good internal consistency. PATR is high at 0.772, indicating robust reliability. Rho_A is 0.709, highlighting the reliability of PATR. PES is reliable with Cronbach alpha of 0.836, higher at 0.869, and rho_A of 0.865 while FRA is also reliable, with Cronbach alpha of 0.739, DG of 0.836, and rho_A of 0.744, indicating the proportion of true score variance in the total score for FRA. The findings support the relevance and reliability of the chosen indicators for PATR, PES and FRA in the context of the study. The findings is in line with Chui 2010, Cohen et al. (2010), Ebaid 2022 and Popoola et al. 2018.

Table 4*Discriminant validity - Squared interfactor correlation vs. Average variance extracted (AVE)*

	PATR	PES	FRA
PATR	1		
PES	0.075	1	
FRA	0.088	0.346	1
AVE	0.299	0.346	0.561

Source: Stata 17.0 result output (2024)

Table 4 is focused on discriminant validity, it presents squared inter-factor correlations and Average Variance Extracted (AVE) for the variables PATR, PES and FRA. The squared interfactor correlation amongst PATR, PES and FRA is 0.088, and with all the variables having an AVE of 0.299, 0.346 and 0.561 respectively. These values are presented in the lower triangle of the matrix, indicating the correlations between the latent constructs. It's essential to note that the squared interfactor correlation is lower than the AVE values for PATR, PES and FRA, signifying satisfactory discriminant validity. This indicates that, the latent constructs are distinct and not excessively correlated, supporting the idea that they measure different underlying concepts.

Table 5

Structural model - Standardized path coefficients (Bootstrap)

Variable	FRA
PATR	0.147
p-value	(0.017)
PES	0.548
p-value	(0.000)
r^2_a	0.360

Source: Stata 17.0 result output (2024)

Table 5 is a presentation of the result of the structural model using standardized path coefficients which was gotten through bootstrap analysis. The variable in focus is PATR, with a coefficient value of 0.147 representing a positive significant effect of PATR on the dependent variable (FRA). The p-value of 0.017 suggest a highly significant effect between PATR and the associated construct (FRA) in the structural model. This is in agreement with the findings of Popoola et al. (2018).

Whereas, the moderator PES has the coefficient of 0.548 and the p-value of 0.000 signifying that PES positively and significantly moderates the effect between PATR and FRA. The R-squared adjusted (R^2_a) value of 0.360 provides an insight into the proportion of variance in the dependent variable that can be explained by the independent variable and other variables in the model. This indicates that approximately 36% of the variability in the dependent variable is accounted for by the independent and moderating variables in the model, with PATR being a significant contributor. These findings emphasize the robustness of the effect on PATR and the dependent variable, as evidenced by both the high coefficient and the statistical significance indicated by the low p-value. This finding is in accordance with Ademola et al. (2017); Rehman and Hashim (2020).

Table 6
Correlation of latent variables

	PATR	PES	FRA	PATRPES
PATR1				
PES	0.275	1		
FRA	0.299	0.588	1	
PATRPES	0.784	0.711	0.473	1

Source: Stata 17.0 result output (2024)

Table 6 represents the correlation of latent variables, PATR, PES and FRA. The correlation between PATR and FRA is 0.299 while that of the moderator PES, is 0.588. This strong positive correlation suggests a significant and positive relationship between the latent variable and the moderator, indicating that as PATR increases, there is a corresponding increase in FRA.

5.0 CONCLUSION AND RECOMMENDATIONS

From the study, PATR has a coefficient of 0.147 indicating a positive significant effect of PATR on the dependent variable (FRA) with a p-value of 0.017 suggesting a highly significant effect on PATR and the associated construct (FRA) in the structural model.

The moderator PES also has the coefficient of 0.548 and the p-value of 0.000 signifying that PES positively and significantly moderates the effect of PATR and FRA. These findings emphasize the robustness of the relationship between PATR and the dependent variable, as evidenced by both the high coefficient and the statistical significance indicated by the low p-value.

It will therefore, be concluded on the basis of the findings of the research that, professional attitude of FA is a significant capability requirement in the workplace for the Nigerian public sector accountant to be effective and efficient in carrying out fraud investigation. Hence, it is strongly recommended that PATR should be strengthened and there should be emphasis on attitude in the auditing standards that are related to fraud detection as this will accountants to effectively discharge their responsibilities.

In addition, PES has shown to have significantly moderated PATR of accountants and fraud risk assessment. As a result, it is recommended that, in addition to the attitude to be learned through training and retraining, there should be conscious efforts at exposing the accountants to the basic attitude requirement relevant to the accounting profession as could be required to be effective both locally and internationally and to ensure adherence.

Limitations of the study

Like any study, this study has limitations that the reader should be aware of. The study was cross-sectional, so changes in behaviour overtime were not tracked. Also, the use of closed-ended questionnaire may have restricted the respondents from freely expressing their views on this topic.

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