



THE RELATIONSHIP BETWEEN PROFESSIONAL SKEPTICISM AND FRAUD DETECTION BY TRAINED AUDITORS

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Abstract

This study examined the relationship between professional skepticism and fraud detection by trained auditors in Edo state. Structured as a qualitative research, primary data was employed as a source for data for empirical analysis which was derived through distribution of questionnaires. The purposive sampling technique was employed to determine a sample size of 56 auditors operating with the ICAN qualification (license) from a population of all the Auditors in Edo State. The data obtained from the distribution of questionnaires was analyzed using Logit regression analysis, and the findings of the study suggested that professional skepticism and fraud detection by trained auditors in Edo state had no significant relationship. Further research revealed that training in fraud detection has a negative significant relationship with search for knowledge, suspension of judgment, and interpersonal understanding, while training in fraud detection has a positive significant relationship with self-confidence, but this was not significant. This study recommended that auditors should possess a higher sense of interpersonal understanding, because it will lead to greater fraud detection as well as possess a higher sense of self-confidence as it will increase fraud detection.

Key Words: Professional Skepticism, Fraud detection by trained auditors, Search for Knowledge, Suspension of Judgment, Interpersonal Understanding, Self-Confidence.

1. INTRODUCTION

The expansion of corporation necessitates a greater demand for an auditor, particularly an external auditor. The external auditor bears a significant role and obligation to assure users of financial statements, such as



investors, creditors, and others, that the financial statements they receive are accurate and consistent with applicable standards and principles. Financial statement major misrepresentation is extremely likely, and frequently occurs. The misstatement that results from the accidental conduct is then classified as an error. Meanwhile, if a purposeful conduct results in an omission, it is classified as fraud. The auditor is responsible for assembling evidence to ascertain if the financial statements are free of material misstatement as a result of errors or fraud (Said & Munandar, 2018). Detecting fraud is challenging because it is covert, and people require plans and techniques to conceal it. It will hurt financial statement users, including shareholders, creditors, the general public, and the government.

On a regional and international basis, both academically and technically, there has been an increasing degree of debate on "Professional Skepticism (PS) in auditing." PS is defined in the professional standards as an attitude that involves a critical mind, an awareness of conditions that may signal possible misstatement due to fraud or error, and a critical evaluation of audit evidence. Given this description, it's clear that PS cannot be simply quantified. Neither is it something that can be developed suddenly. It is a skill that auditors must continually develop and polish. It is essentially a skill, similar to professional judgment that keeps the auditor vigilant to any given situation. An auditor should possess a skeptical mindset, which will keep him vigilant for situations that could result in significant misstatement. Eguasa and Emeni (2015) assert that, auditors must embrace professional skepticism throughout their job in order to avoid audit failure. Tuanakotta (2011) emphasizes that a lack of professional skepticism impairs an auditor's sensitivity to actual or possible fraud, as well as to red flags indicating an error (accounting error) and fraud. Competence of the auditor is also critical in detecting fraud. Competence is acquired by knowledge, formal education, certification, training, and audit experience at client companies (Said & Munandar, 2018; Insani & Yuliana, 2020).

Despite substantial international study on fraud, few studies on the subject have been undertaken in Nigeria. Because research methods and results are impacted by and usually reflect economic, social, and legal issues unique to the countries in which the studies were conducted, the extensive worldwide findings may not be applicable in Nigeria. The outcomes of this study are supposed to shed light on auditors' responsibilities with respect to professional skepticism and methods of identifying fraud. The literature show that auditor skepticism and financial crises was done in Nigerian by Umoren and Asogwa (2017). They did not, however, evaluate auditors' professional skepticism from the perspective of fraud detection, but rather from the perspective of the financial crisis, and how professional skepticism could have helped the financial crisis by reducing errors and improving audit quality. Also, Okoye, Idowu, and Udegbumam (2019) investigated the impact of forensic accounting and financial fraud detection through interview process in selected federal ministries in Enugu State. The study's scope was limited to only Enugu State, and it focused solely on fraud detection through interview process. Fraud can be detected using a variety of audit procedures, including journal entry testing, accounting estimates inspection, and looking for major irregular transactions at various stages of the audit process. People who commit fraud are deceitful, and simply asking them questions in an interview is not enough; they could lie or distort the truth outright. Based on the limitations and gaps in this area, this study investigates the impact of PS on fraud detection by trained auditors in order to fill in the knowledge gaps highlighted by earlier investigations.

This study seeks to explore the relationship between professional skepticism (PS) and fraud detection; it also addresses how various characteristics of PS theoretically affect fraud with respect to fraud training. Four (4) hypotheses have been formulated in line with the objectives of the study. The broad objective of



this study is to examine the relationship between Professional Skepticism and Fraud detection by trained auditors in Edo State. The specific objectives are:

1. To examine the impact of auditor's search for knowledge on fraud detection by trained auditors in Edo State.
2. To examine the impact of auditor's suspension of judgment on fraud detection by trained auditors in Edo State.
3. To examine the impact of auditor's interpersonal understanding on fraud detection by trained auditors in Edo State.
4. To examine the impact of auditor's self-confidence on fraud detection by trained auditors in Edo State

Research Hypotheses

The following hypotheses stated in null form are developed for the purpose of this study:

1. There is no significant relationship between auditor's search for knowledge and fraud detection by trained auditors in Edo State.
2. There is no significant relationship between auditor's suspension of judgment and fraud detection by trained auditors in Edo State.
3. There is no significant relationship between of auditor's interpersonal understanding and fraud detection by trained auditors in Edo State.
4. There is no significant relationship between auditor's self-confidence and fraud detection by trained auditors in Edo State.

In order to achieve the above objectives, we focused on investigating how auditors in Edo State with fraud detection by trained auditors exhibit Professional Skepticism. It aimed at determining which of the several PS features is more applicable by auditors in Edo State, and which has a greater impact on fraud detection. This results of this research will assist a wide range of stakeholders, including academics, audit firms, clients, the government, and researchers to understand the most applied PS characteristics and which aid the detection of fraud amongst auditors in Edo state. Scholars who are interested in the subject will have a source of information as well as a foundation for future research. Also, this study will help audit firms improve their performance since they will learn that all they needed to do was grasp the attitude of professional skepticism (PS) and recognize which perspective of PS is best suited for them. This will increase audit quality while also enhancing their chances and capabilities of detecting fraud. Above all, the findings and recommendations from this study will be used to influence future research in forensic accounting and fraud detection by trained auditors in businesses.

The significant limitation of this study was inadequately filled questionnaires at the pre-test stage, although this was only because the recipient found some questions perplexing, this was resolved by reconstructing the questionnaire with straight forward questions and avoiding double barrel questions. Also, the problem of truth in filling of questionnaires was initially a problem but the measurement scale for some questions was restructured after the pre-test to capture the actual count of the respondents.

This paper is structured into five subsections. Section one deals on the introduction, two centers on the literature review and justification of hypotheses formulated. Three, outlines the methodology and design, four is on the analysis and results while five is the conclusion and recommendations.

2. REVIEW OF LITERATURE



This section discusses the relevant literature and theoretical framework on the influence of professional skepticism on fraud detection. These comprises of fraud, fraud detection, experience and professional skepticism.

Fraud

Fraud is defined in the International Standards on Auditing (ISA)-240 (2008) as a purposeful act committed by one or more individuals, management, governance organs, employees, or third parties. The emphasis on the term "fraud" in this definition is evident in the phrase "Intentional Act," which indicates that fraud is committed with the intent to defraud.

The Association of Certified Fraud Examiners (2010) defines fraud as the intentional misuse or misapplication of an employer's resources or assets for personal gain. Thus, it is defined as any act of misappropriation, theft, or embezzlement of company assets occurring inside a given economic environment. Fraud can refer to any deliberate activity conducted by management at any level with the intent of deceiving, confounding, swindling, or cheating investors or other stakeholders (Ile & Odimmega, 2018).

Fraud is defined as any action, behavior, or vocal utterances that are intentionally designed to deceive and/or mislead. It is a series of activities committed with the intent of obtaining money, property, or services, evading payment for services, or obtaining personal or business advantages. However, fraud is often defined as any act intended to deceive. This term encompasses all acts, omissions, and concealments relating to a breach of a lawful or equitable obligation, confidence, or justly reposed proof that results in harm to another or results in the taking of undue and conscienceless advantage of another. Obasi, Eguasa, Omage and Nwano, (2022) opine that, Fraud is distinct from similar terms like as forgery, hoax, and mistakes in that it implies a more affirmative activity, one that is evil in character, such as continuing or acting dishonestly with the aim of cheating or deceiving someone. The focus of this paper, is fraud detection. Studies have showed or measured fraud detection in various ways; i.e, experience in detecting fraud over time, by training exposures etc.

According to Bayuandika and Mappanyukki (2021), no organization has become free of fraud because these issues are mostly caused by human vulnerabilities. Because not all honest individuals have high integrity, the rules and procedures that have been established are heavily influenced by those who have the capacity to implement them. As a result, most firms now require a separate unit to handle fraud detection. The design, planning, or methods for detecting material inconsistencies or the indications of possible fraud are referred to as fraud detection. The profession argued that it was the role of management to develop suitable internal control measures to prevent, discourage, and identify fraud in their firms (Kuria & Muturi, 2015). By recognizing and proving fraud to explain its erroneous financial statements, the auditor's capacity to detect fraud is a quality needed on the job.

Training as a Measure of Fraud Detection

Internal auditing involves constant training of internal auditors in order to be effective. Fraud detection is challenging, and one rationale internal auditors have trouble tracing and detecting abnormalities is that they lack experience in spotting manipulated financial data. Internal auditors benefit from fraud training because it allows them to gain valuable experience, enhance their performance, and improve their capacity to spot signs of fraud (Eguasa & Obasi, 2018; Bierstaker et al., 2012). Bierstaker et al. (2012) investigated the effect of auditor training on fraud detection. A comparison study was undertaken, with some auditors attending fraud detection-specific training and others attending generic internal auditing courses. They



discovered that auditors who took fraud courses were more likely to detect it than those who took more broad auditing courses.

Professional skepticism

Professional skepticism, as defined by the International Standards on Auditing (ISA), is an attitude that includes a critical mind and a critical assessment of audit evidence. It requires ongoing investigation to determine whether audit information is obtained and the evidence suggests that critical observations arising from fraud exist (Akhidime, Obasi & Eguasa, 2018).

Low professional skepticism is one of the reasons for audit failure. Auditors who do not have a skeptical mindset will only uncover misstatements due to human mistake (Human Error) and will have a tough time uncovering fraud-related misstatements. Objectivity manifests itself in skepticism. Cynicism, criticism, and insults are not synonymous with skepticism. The following questions will be addressed by an auditor with proper professional skepticism: (1) What information do I require? (2) What is the best way for me to obtain this information? (3) Is the information I am getting understandable? Because of his professional skepticism, the auditor will inquire about any hints that point to suspected fraud (Tmothy, 2005; Bayuandika & Mappanyukki, 2021).

Measuring Professional Skepticism

Search for Knowledge

Search for knowledge refers to a sense that drives auditors to seek more knowledge to clarify complex situations (Royae, Nezhad & Azinfar, 2013). Fullerton and Durtschi (2004) discovered that when confronted with red flags, highly skeptical auditors tend to request additional information. Auditors specifically requested additional information when they discovered questionable linkages, chances for fraud, and indicators of employee fraud. In this context, Sayed-Hussin, Iskandar, Saleh, and Jaffar (2017) argued that the auditor's capacity to assess the risk of substantial misstatement in relation to fraud matters is significantly impacted by the auditor's quest for knowledge. With a high degree of PS, auditors are more likely to double-check information before making judgments.

Suspension of Judgment

Suspension of judgment is an attitude of withholding audit judgment until the audit evidences are sufficiently obtained (Hurtt, 2010). Bailey, Daily, and Philips (2005) and Quadackers, Groot, and Wright (2009) discovered that the requirement for disclosure had a significant effect on auditors' skeptical judgments, implying that auditors halt their judgment prior to making a conclusion. The study demonstrates that doubters would invest more time in critical probing for decision-enhancing answers. Agarwalla, Desai and Tripathy (2017) also proved that withholding judgment could avoid making unethical decisions or prevent others from making unethical decisions.

Interpersonal Understanding

Understanding the motivation and integrity of the information sources is referred to as interpersonal understanding (Hurtt, 2010). Jahari and Kiswanto (2017) investigated whether interpersonal understanding has a significant effect on an auditor's capacity to detect fraud and found that there was a positive correlation between interpersonal understanding and fraud detection abilities. McAllister, Blay, and Kadous (2016) corroborated these findings. Carpenter and Reimers (2013) discovered that a partner's influence on fraud detection is predisposed by interpersonal understanding. According to the findings, there is a correlation between interpersonal understanding and fraud indicators, or auditors' fraud judgments and actions.



Self-confidence

The feeling of self-worth and belief in one's own talents is referred to as self-confidence (Hurtt, 2010). Lee, Su, Tsai, Lu, and Dong (2016) examined the correlation between auditor self-confidence and performance. Self-confidence is an individual's subjective assessment of one's own abilities; it has a significant impact on one's behaviors, motives, and perseverance. The findings revealed a correlation between the auditor's self-confidence and audit quality. Mhlongo (2015) also studied the impact of self-confidence on professional judgment. The findings demonstrated that self-assurance had a major impact on audit judgment. When an auditor's self-confidence is applied effectively to the audit judgment, the quality of the audit judgment may improve. PS necessitates some level of self-assurance, which is necessary for collecting audit evidence during the audit (Hurtt, 2010).

Flowing from the cognitive dissonance theory, as proposed by Leon Festinger in 1977. According to this theory, humans prefer consistency. As a result, humans will choose to adopt attitudes that do not oppose one another and avoid adopting actions that contradict their attitude. Inconsistency is defined as dissonance. When a human conflict emerges between two cognitions or a conflict between behavior and attitude, it is referred to as cognitive dissonance (Festinger, 1957). When detecting fraud, this hypothesis helps explain the auditor's disbelief if cognitive dissonance occurs (Noviyanti, 2008). The auditor's fraud detection will heighten with high professional skepticism, and vice versa (Atmaja & Sukartha, 2021; Agustina, Nurkholis & Rusydi, 2021).

Review of related studies and justification of hypotheses

Fullerton and Durtschi (2004) investigated whether higher levels of skepticism are associated to behaviors that could help internal auditors detect fraud more effectively. Internal auditor's responses to a questionnaire were classified as high or low skeptics using the Hurtt Skepticism Scale (Hurtt 2003). The auditors were presented with a variety of fraud symptoms in order to see if higher levels of skepticism boost the motivation to seek out more information and, as a result, improve fraud detection. Internal auditors who scored higher on the skeptical scales had a considerably higher urge to enhance their information search related to fraud symptoms, according to the findings. For several personality traits, the discrepancies between the high and low skeptical groups are narrowed after training.

Auditors' involvement in preventing, detecting, and reporting fraud was examined by John (2010). The questionnaire was distributed to 200 people in Nigeria using convenience sampling. Bankers, managers, investors, and accountants all participated in the survey. A response rate of 92 percent was achieved with the return of 184 surveys. Over 90% of the respondents stated that they were aware of what auditors do. Respondents also had high expectations for auditors' roles in preventing and discovering fraud.

A study conducted by Enofe, Ukpebor, and Ogbomo (2015) investigated the impact of accounting ethics on the generation of auditor professional skepticism. The study also looked into other factors that could have an impact, such as audit fee, audit tenure, and level of auditor experience, among others. The data was analyzed using Ordinary Least Squares regression analysis of primary data obtained by a well-structured questionnaire that was distributed to a sample of 75 auditors and then evaluated. According to the findings of the study, there was a positive and statistically significant relationship between accounting ethics and professional skepticism among auditors and other professionals.

Said and Munandar (2018) investigated the role of time budget pressure on the independent auditor's professional skepticism and competence on fraud detection. The study used a survey approach, with 103 external auditors filling out a questionnaire. According to the findings, if auditors have a high level of



professional skepticism and skill, the likelihood of fraud detection is similarly high. Furthermore, the influence of auditor competence on fraud detection cannot be moderated by time budget constraints. This indicates that, no matter how pressed for time or money auditors are, detecting fraud is still achievable if they are competent. In contrast, the findings reveal that auditors with a high level of professional skepticism are unable to uncover fraud when working under time constraints.

In Malaysia, Sarah, Cheot, Chin, Lee, and Tong (2018) used Hurtt's Professional Skepticism Model to investigate the relationship between the six professional skepticism characteristics (questioning mind, search for knowledge, and suspension of judgment, interpersonal understanding, self-confidence, and self-determining) and auditor fraud detection. A cross-sectional study was undertaken on auditors who were members of the Malaysian Institute of Accountants by distributing 700 survey questionnaires. Data was analyzed using Pearson Correlation Analysis and Multiple Linear Regression Analysis on 252 sets of questionnaires. According to the MLR study, the questioning mind had the highest and most notable influence on auditors' fraud detection, followed by self-confidence and self-determination, whereas suspension of judgment, search for knowledge, and interpersonal understanding had no significant influence. In a nutshell, auditors and statutory authorities should focus more on cultivating the qualities of a questioning mind, self-confidence, and self-determination in order to improve their ability to detect fraud. The study aided auditors by providing insight into the development of skeptical qualities in auditors, which leads to greater fraud detection and consequently improved audit quality in Malaysia.

Shofia (2019) used professional skepticism as a moderating variable to investigate the effect of independence, experience, and gender on the auditor's capacity to detect fraud. It analyzed data using the Moderated Regression Analysis (MRA) with SPSS 20.00 for Windows and 84 respondents. The study's findings revealed that the auditor's ability to detect fraud was significantly enhanced by independence and expertise, while gender had a Positive but not statistically significant impact on the auditor's ability to detect fraud. Furthermore, the findings of this study revealed that professional skepticism could attenuate the association between independence, experience, gender and the auditor's capacity to detect fraud.

An analysis by Insani and Yuliana (2020) examined the impact on fraud prevention of employee and professional skepticism. Primary data in the form of questionnaires were employed to collect data for the study. The hypothesis was tested using multiple linear regression analysis. According to the findings of the study, fraud knowledge and professional skepticism have an impact on fraud prevention.

In the context of internal auditors for the public sector, Agustina, Nurkholis, and Rusydi (2021) investigated the effect of competence, independence, experience, and audit time pressure on fraud detection utilizing the mediation of professional skepticism. The data for the study came from a poll of 173 auditors from the Ministry of Education and Culture's Inspectorate General in Indonesia. Partial Least Squares analysis was employed in this investigation (PLS). Competence, independence, and audit time constraint have very little effect on the capacity to detect fraud, according to the findings. Meanwhile, the auditor's knowledge and professional skepticism aided in the detection of fraud. Auditors' competence, independence, and experience influenced professional skepticism positively, while audit time pressure influenced professional skepticism negatively. The findings of this study suggested that using professional skepticism to detect fraud could increase fraud detection.

Khaksar, Salehi, and DashtBayaz (2021) investigated the correlation between auditor qualities and fraud detection in Tehran Stock Exchange listed businesses. The research hypothesis was tested using a multiple regression model. The hypothesis was subsequently analyzed using multiple regression models based on



panel data and the random-effects model on a sample of 187 businesses registered on the Tehran Stock Exchange (1,309 observations) from 2012 to 2018. The findings indicated a positive and significant correlation between audit firm size, auditor rotation, industry specialty, audit market focus, auditor independence, audit report lag, and financial statement renewal with fraud detection. The findings demonstrated a correlation between fraud detection and the length of an auditor's tenure and narcissism of the auditor, audit fees.

The impact of professional skepticism and independence on fraud detection was studied by Nusa (2021). The study used a descriptive and verification method with a quantitative approach as the research method. A sample of 38 respondents was chosen from a population of all the external auditors of the Public Accounting Firm in Bandung, and data was collected by distributing questionnaires. SEM-Partial Least Square (PLS) data analysis was used to examine the data and findings revealed that Professional skepticism and independence have a positive substantial effect on fraud detection.

Based on the above reviews, we propose that there will be a positive and significant relationship between PS and fraud detection by trained auditors in Edo state.

3. METHODOLOGY

This section describes the methodology employed for the purpose of this study. Hence, we describe the research design, population and sampling method, source of data, model specification and measurement of the variables with regards to the study. This study, employed questionnaire as the survey method. The study relates to the gathering of views, opinions, and perspectives of respondents on the relationship between level of professional skepticism and fraud detection by trained auditors, hence this research strategy was chosen.

The study's target population was all of Edo State's registered and practicing auditors. The list of accountants that perform audit services on the ICAN platform in Edo State served as the criterion for selection. As of August 31, 2021, there were 30 practicing auditors on this list.

The overall number of respondents was 67, however the number of verified submissions was 65, hence the actual number used for the study was determined using Taro Yamane's formula:

$$n = N / (1 + N(e)^2)$$

Where;

n is the Sample Size

N is the Population

1 & 2 is the Constant

e is the Error margin (usually 5%)

Then, N = 65

$$n = 65 / [1 + 65(0.05)^2]$$

$$\text{i.e } n = 55.91 = 56$$

Purposive sampling was utilized in this analysis because the researcher considered it would provide a decent representation of the targeted population, and the researcher chose ICAN members as auditors because she believed they were a good representation of all auditors in Edo State.

This research will be based on primary data collected through a survey. Self-administered and online surveys were used to collect data since they reach more people and allow for faster responses (Muijs, 2004; Sekaran & Bougie, 2016). Because there were restrictions in meeting potential respondents to deliver self-



administered questionnaires, the online questionnaire was used in this study to collect more replies from them. The online questionnaire was created using an online survey service, and the link was distributed to the intended respondents by email and Whatsapp.

Method of Data Analysis

Statistical Package for the Social Sciences (SPSS) was used to analyze the data (SPSS). As a result, this study uses descriptive statistics to show the demographic profile of target respondents by creating frequency and percentage tables, as well as measures of central tendency and variation, such as mean and standard deviation, to describe the variables. Finally, a normality test was used to see if the data to be analyzed follows a normal distribution. The skewness and kurtosis measures the extent of the strength of a linear relationship between two variables (Hair, Celsi, Money, Samouel & Page, 2016), and Multiple Linear Regression Analysis was used to analyze the nexus between professional skepticism and experience with fraud detection by trained auditors (Hair, Celsi, Money, Samouel & Page, 2016).

Model Specification

In view of the foregoing, this study employed a multiple regression econometric model. In this study fraud detection was measured using fraud training. Thus, the multivariate model below;

$$FTRAIN = \beta_0 + \beta_1SFK_i + \beta_2SOJ_i + \beta_3INU_i + \beta_4SEC_i + \varepsilon \dots \dots (Eqtn i)$$

Where:

FTRAIN = Fraud Training

SFK= Search for Knowledge

SOJ= Suspension of judgment

INU= Interpersonal understanding

SEC= Self-confidence

ε = error term

$\beta_1, \beta_2, \beta_3, \beta_4$ = coefficients

β_0 = Intercept

A Prior expectation = $\beta_1 - \beta_4, >0$

Measurement of Variables

There are two sections to the questionnaire. Section A: Demographic Profile, which also contained questions to derive information for the training and fraud detection variables, and Section B: Professional Skepticism, which contained statements that, using the 6-point scale, will reveal whether and how many of the characteristics of professional skepticism the auditor demonstrates.

Section A is for demographic information, whereas Section B is for professional skepticism. The profile demographic of respondents was quantified using a nominal and ordinal scale. The nominal scale is ideal for weighing items that cannot be organized in any particular sequence. Gender, academic credentials, professional qualifications, current position level, years of experience as an auditor, state, and geographic region are all factors in the demographic profile. When data can be ranked in a logical order, an ordinal scale is utilized. It is applicable to a wide range of respondents' ages, educational levels, and the number of audit partners in your organization, among other factors.

Fraud training was analyzed in terms of three variables, followed by others. A scale of 1 to 0 was used to evaluate the responses received; 1 means 'yes,' indicating that the respondent chose that option. In this study, a total of 21 questions were used to assess the four (4) features of professional skepticism: search for knowledge (SFK 1-6), suspension of judgment (SOJ 1-5), interpersonal understanding (INU 1-5), and self-



confidence (SEC 1-5). All constructs are measured using the interval scaling technique on a 6-point scale (1=Strongly Disagree, 2=Disagree, 3=Slightly Disagree, 4=Slightly Agreed, 5=Agree, 6=Strongly Agree).

Table 1: operationalization of variables

S/N	Variables	Description	Definition/Measurement	Used by
1	FTRAIN	Fraud Training	Training an auditor has received in relation to detecting fraud.	Authors measurement
2	SFK	Search for knowledge	It refers to a sense of driving curiosity in seeking knowledge for knowledge's sake and not simply for verifying a conclusion	Hurtt (2010)
3	SOJ	Suspension of judgment	An attitude whereby the auditors withhold their judgments until the audit evidence sufficiently obtained to base a conclusion	Hurtt (2010)
4	INU	Interpersonal understanding	It deals with understanding the evidence provider's motivation and integrity	Hurtt (2010)
5	SEC	Self confidence	It relates to the feelings of self-worth and belief in one's own abilities	Hurtt (2010)

Source: Researchers compilation, 2021

4. DATA ANALYSIS AND RESULTS

This section explains the statistical analysis that will be used to analyze the study empirically. To begin, we use descriptive statistics to examine the data set's series properties and characteristics. The correlation between professional skepticism and fraud detection by trained auditors was thus estimated.

Descriptive Statistics

Before any formal estimation can be made, it is necessary to conduct a summary statistics analysis. The normality of the data set to be used in this analysis would need to be tested. To see if the data set forms a normal distribution curve, descriptive statistics are used. The standard deviations, mean, minimum, and maximum values, as well as Jarque Berra statistics, provide a comprehensive summary of the data set's normalcy. The following is the descriptive statistics:

Table 2 Descriptive Statistics

Variables	Mean	Std. Dev	Maximum	Minimum	Skewness	Kurtosis
FTRAIN	0.769	.4246	1.0	.0	-1.308	-.298
SFK	4.963	.6168	6.0	2.8	-.616	1.104
SOJ	4.994	.5220	6.0	3.8	-.270	-.025
INU	3.892	.8024	5.4	2.0	-.048	-.621
SEC	4.720	.6372	5.8	3.0	-.597	.518

Source: Authors Computation (2022)

The dataset to be utilized for estimation is described in the table above. FTRAIN had a mean of 0.769, indicating that, on the average, respondents had fraud detection by trained auditors (i.e. 7 out of every 10). The standard deviation is determined to be small, indicating that the series and its mean are not far off. The respondents' knowledge seeking attitude (SFK) is likewise quite high, with only so how high variation amongst respondents, according to the findings. Other indicators like SOJ, INU, and SEC all show high



means, indicating that respondents exhibited a high level of professional skepticism during the study period. Their standard deviations are likewise relatively high, especially, INU indicating that the respondents' responses were dissimilar.

The Kurtosis shows that the variables (FTRAIN, SQJ, INU) are platykurtic with values lower than the mean. The implication of this is that the distribution of these series has a flatted curve. However, the variable (SFK and SEC) were found to be leptokurtic evidencing a peaked curve in the distribution. This implies that the series has values higher than the series mean. The skewness show that majority of the variables has a long left tail (negatively skewed). This implies that variables have values lower than their means.

Based, on the diagnostic test so far, the correlation analysis conducted showed that the independent variables are not highly correlated. This implies that, there are no multicollonearity amongst the variables. Hence, the need to conduct the regression analysis. Empirical analysis was used in this part to determine the relationship between the dependent and independent variables.

Table 3: Regression Analysis

Dependent Variable: FTRAIN				
Method: Binary Logit (Newton-Raphson / Marquardt steps)				
Variable	Beta Coefficient	Z-statistic	Marginal effects	P.value
INU	-0.11	-0.28	-0.01	0.77
SEC	0.34	0.62	-0.05	0.53
SFK	-1.24	-2.02	-0.19	0.04
SOJ	-0.81	-1.17	-0.13	0.23
C	10.40	2.10	1.66	0.03
Diagnostics				
McFadden R-squared	0.08			
LR statistic	12.84			
Prob(LR statistic)	0.00			

Source: Authors computation (2022)

The relationship between professional skepticism and fraud detection by trained auditors is presented in table 3. The McFadden R-Sqrd indicates that the model explains 8% change of the dependent variables. The McFadden R-Sqrd values for logistic regression are typically smaller than what is seen for linear regression models. The LR statistics suggests that the model overall is significant as indicated by its large statistics and small p-value.

On interpretation of the independent variables, one will be wrong to interpret the co-efficient of a logistic regression as obtainable in a classical OLS regression. The reason for this is that the logistic regression does not take the variables to be linear and it computes only the probability (likelihood) of x on y and not the marginal effects. Therefore, we can only interpret the sign and significance as obtainable in a classical OLS regression. However, the marginal effects shows the change in probability when the predictor or independent variable increases by one unit. For continuous variables this represents the instantaneous change given that the 'unit' may be very small. Additionally, marginal effects are of use while interpreting the models results. The individual relationships are discussed below;

Search for Knowledge (SFK) and Fraud Detection by Trained Auditors (FTRAIN)



The findings shows that the coefficient of SFK is negative and significant at the 5% level ($0.04 < 0.05$). This indicates that an increase in SFK reduces the probability of FTRAIN of the respondents. By implication a unit change in SFK will cause a marginal effect of -0.19 on FTRAIN. Therefore, auditors seeking for additional expertise will have lower FTRAIN. This outcome, however, contradicts the study's a priori expectations. This could be because the auditors' search for information is not in line with the training they have received.

Suspension of Judgment (SOJ) and Fraud Detection by Trained Auditors (FTRAIN)

Findings reveal that SOJ has an odd ratio of -0.81 which indicates that SOJ reduces the likelihood of FTRAIN of respondents. Further findings showed that a unit change in SOJ will lead to a change in FTRAIN by -0.13 *ceteris paribus*. By implication SOJ reinforces the destabilization in FTRAIN by the strength of its coefficient. However, this relationship was found to be insignificant at any given level ($0.23 > 0.05$). More suspended judgment will lead to a reduction in fraud detection training as indicated by the result. This may be because in the auditor's quest to make good decisions, they get lost in their search for knowledge and evidence, so they never actually make a decision.

Interpersonal Understanding (INU) and Fraud Detection by Trained Auditors (FTRAIN)

The findings showed that INU has an odd ratio of -0.11 thus indicating that INU reduces the likelihood of FTRAIN among respondents. On the mean marginal effects, findings showed that changes in INU will cause a -0.01 changes in FTRAIN. However, the relationship is observed to be insignificant at any given level ($0.77 > 0.05$). Therefore, INU reinforces the destabilization in FTRAIN.

Self Confidence (SEC) and Fraud Detection by Trained Auditors (FTRN)

Findings showed that SEC has an odd ratio of 0.34 evidencing that SEC reinforces the likelihood of FTRAIN among respondents. By implication a unit change in SEC will cause a -0.05 changes in FTRAIN *ceteris paribus*. However, this relationship is also found to be insignificant at any statistical level ($0.53 > 0.05$). Higher self-confidence is expected to increase fraud detection training experience. This result is in lieu with *a priori* expectations.

Discussion of Findings

The study's working hypotheses are examined in this section using the estimated models' results. The hypotheses are tested by examining the coefficients estimated in the given equations for Tables 2 and 3, with an emphasis on their significance.

Hypothesis One: *There is no significant relationship between auditor's search for knowledge and fraud detection by trained auditors in Edo State.*

The result shows that auditors search for knowledge is negatively correlated with fraud detection by trained auditors but significant. Thus, this study rejects the null hypothesis and accepts the alternate that there is a significant relationship between search for knowledge and fraud detection by trained auditors. This result is in agreement with Sarah, Cheot, Chin, Lee, and Tong (2018) where they discovered a positive correlation between discussed variables.

Hypothesis Two: *There is no significant relationship between auditor's suspension of judgment and fraud detection by trained auditors in Edo State.*

From the result, it is found that the suspension of judgment failed the significance test. Therefore, this study is unable to reject the null hypothesis and thus concludes that suspension of judgment has no significant impact on fraud detection by trained auditors in Edo state. Using the same professional skepticism



measurement, Sarah, Cheot, Chin, Lee, and Tong (2018) discovered negative correlation with said variables.

Hypothesis Three: *There is no significant relationship between of auditor's interpersonal understanding and fraud detection by trained auditors in Edo State.*

Results revealed that auditor's interpersonal understanding is negatively correlated with fraud detection. This relationship is not significant at all levels and we therefore accept the null hypothesis and thus conclude that auditor's interpersonal understanding has no significant impact on fraud detection by trained auditors in Edo state. Like previous empirical findings, the outcome of this hypothesis is in agreement with Sarah, Cheot, Chin, Lee, and Tong (2018) where they also found a negative relationship between interpersonal understanding and fraud detection.

Hypothesis Four: *There is no significant relationship between auditor's self-confidence and fraud detection by trained auditors in Edo State.*

The coefficient of self-confidence was found to be positive and insignificant. Therefore, the null hypothesis is rejected as such; we accept that there is a significant relationship between auditor's self-confidence and fraud detection by trained auditors. This finding is also in agreement with Sarah, Cheot, Chin, Lee, and Tong (2018)

The general finding of the study indicated that there was no significant relationship between professional skepticism and fraud detection by trained auditors in Edo state. More specifically, the findings showed that; search for knowledge, suspension of judgment and interpersonal understanding, all have negative significant relationship with fraud detection by trained auditors, while, self-confidence was positively related to fraud detection by trained auditors but not significant.

5. CONCLUSION AND RECOMMENDATIONS

The lack of research into the relationship between professional skepticism and fraud detection by trained auditors was the reason for this study. This research has looked at the characteristics of professional skepticism and fraud detection by trained auditors, while considering fraud training. Based on the data collected, the results of the study even though, against the a priori expectation, the findings are that there is no significant relationship between professional skepticism and fraud detection as measured by fraud detection by trained auditors in Edo state, this was arrived at because the result showed that all the tested variables were not significant at the 1% or 5% level rate. Hence, we conclude that, auditors in Edo state do not exhibit professional skepticism characteristics in conducting audit engagements.

Based on the results of the study's analysis, the following points are necessary for adequate recommendation:

Auditor's search for knowledge should actually be about searching for knowledge that will result in an increase in fraud detection training and not just digging the rabbit hole.

Auditors should ensure there is adequate and sufficient evidence in the cause of their audit. This is achievable if and only if, they suspend judgment and dig deep by way of searching for knowledge to grasp a better understanding of their investigation cum search, because if one waits to get more knowledge or evidences before making a decision, then this will obviously produce a quality audit report and whenever, fraud is reported, it will be backed with sufficient and appropriate evidence and will lead to a positive effect in fraud detection.

Auditors should possess a higher sense of interpersonal understanding, because it will lead to greater fraud detection. The result of this study showed a negative relationship of interpersonal relationship and fraud



detection. To a conservative, it is good but in today's world, the auditor will get more insider information if he can relate well with the staff of his client.

This study has shown that self-confidence is an essential characteristics Auditors should possess to increase fraud detection.

Based on the preceding points and the study's conclusion, the researchers recommend that ICAN should research and update their curriculum so that it exposes their members to the need of possessing and applying professional skepticism characteristics in conducting an audit engagement for quality audit reports.

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APPENDIX

THE QUESTIONNAIRE

Section A: Demographic Profile



Please fill the following information and tick (✓) in the appropriate box.

QA 1: Gender: Male Female

QA 2: Academic Qualifications (you may choose more than one)

Diploma

Bachelor Degree

Masters

PhD

Others (specify) _____

QA 3: Professional Qualification(s) you hold (Please choose all that apply):

ICAN

ANAN

ACCA

CIMA

CPA

ICAEW

Others (specify) _____

QA 4: Present Position Level:

Junior Auditor

Senior Auditor

Audit Manager

Audit Partner

Others (specify) _____

QA 5: Category of your audit firm (current organization)

Non-Big Four

Big Four

QA 6: Number of Audit Partners in your organization

Less than 3 Partners

4-6 Partners

7-10 Partners

More than 10 partners

QA 7: Years employed in present position: _____ Years

QA 8: Years employed as Auditor: _____ Years

QA 9: Have you encountered any fraud cases during your years as an Auditor?

Yes () No ()

QA 10: If yes, please specify number of times: _____ Times

QA 11: What types of fraud have you detected?

QA 12: Have you attended any training or programs on any of the following?

Auditor Independence

Skepticism

Fraud Detection



□ Others (specify) _____

Section B: Professional Skepticism

This section is seeking your opinion regarding the characteristics of professional skepticism. Please circle one number per line with each statement using 6 point scale (ranging from 1. Strongly Disagree; 2. Disagree; 3. Slightly Disagree; 4. Slightly Agreed; 5. Agree; and 6. Strongly Agree) response framework.

No	Questions	Strongly Disagree	Disagree	Slightly Disagree	Slightly Agree	Agree	Strongly Agree
SFK1	I think that learning is exciting.	1	2	3	4	5	6
SFK2	I am driven to explore and discover new information	1	2	3	4	5	6
SFK3	Discovering new information is fun.	1	2	3	4	5	6
SFK4	I like searching for knowledge.	1	2	3	4	5	6
SFK5	The prospect of learning enthuses me	1	2	3	4	5	6
SFK6	I seek to know if what I read or hear is true.	1	2	3	4	5	6
SOJ1	I take my time to get sufficient information before making final decisions.	1	2	3	4	5	6
SOJ2	I don't like to decide until I've looked at all of the readily available information.	1	2	3	4	5	6
SOJ3	I dislike having to make decisions quickly.	1	2	3	4	5	6
SOJ4	I like to ensure that I've considered most available information before making a decision.	1	2	3	4	5	6
SOJ5	I wait to decide on issues until I can get more information.	1	2	3	4	5	6
INU1	I like to understand the reason for other people's behavior.	1	2	3	4	5	6
INU2	I am interested in what causes people to behave the way that they do	1	2	3	4	5	6
INU3	The actions people take and the reasons for those actions are fascinating.	1	2	3	4	5	6
INU4	I seldom consider why people behave in a certain way.	1	2	3	4	5	6
INU5	Other people's behavior doesn't interest me.	1	2	3	4	5	6

SEC1	I have confidence in myself	1	2	3	4	5	6
SEC2	I often do not feel sure of my judgement.	1	2	3	4	5	6
SEC3	I am always self-assured in delivering my task.	1	2	3	4	5	6
SEC4	I am confident of my abilities.	1	2	3	4	5	6
SEC5	I feel good about myself.	1	2	3	4	5	6

