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Norziaton Ismail Khan, Anis Asfarina Zulkifli, Nur Adura Ahmad Noruddin

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Causal Factors of Forensic Investigators Professional Traits to Expedite The Investigation Process

Norziaton Ismail Khan

Faculty of Accountancy, Universiti Teknologi ARA, Cawangan Selangor, Kampus Puncak Alam,
Selangor, Malaysia

Email: norzi153@uitm.edu.my

Anis Asfarina Zulkifli

RHB, Risk Department, Malaysia

Email:eynazik@yahoo.com

Nur Adura Ahmad Noruddin

Faculty of Accountancy, Universiti Teknologi MARA, Cawangan Selangor, Kampus Puncak
Alam, Selangor, Malaysia

Email: nurad185@uitm.edu.my

Abstract

Financial crimes have become dominant in the contemporary business environment. It is one of the most serious crimes endangering a country's national security and public safety. It is directly associated with legal, social, human rights, political and development issues. This research identifies the causal factors of the professional traits of forensic investigators in investigation process expeditions based on Malaysian evidence. Data for this study is collected through a questionnaire survey. A sample was driven from two enforcement agencies in Malaysia: National Audit Department (NAD) and the Malaysian Anti-Corruption Commission (MACC). A total of 83 questionnaires were distributed, collected and usable. Statistical techniques such as descriptive statistics, correlation, and regression analysis were used to analyze the data. Three hypotheses were developed, and the findings reveal a significant relationship between investigative technique and knowledge of forensic investigators and investigation process expedition. In contrast, the skills of forensic investigators show an insignificant relationship with the investigation process expedition. Issues on process expeditions are significant as the disruption in the process expedition will delay the case solving. Hence, this research provides insights into the forensic investigations process which would be useful for the Malaysian government to incite interest in forensic accounting for monitoring and investigation of suspected financial crime cases.

Keywords: Expedition, Forensic Accounting Investigation, Investigation Techniques, Professional Traits, Knowledge, Forensic Investigator

Introduction

Accounting practices of international financial institutions have been moved forward as a result of a series of events involving financial crimes (Romanus, 2014). Monetary abuses and misrepresentation are wonders throughout the world. Activities involving financial crime include misrepresentation, misappropriation, plundering, illegal tax avoidance, negligence outside of trade and oil bunkering. According to the Association of Certified Fraud Examiners (ACFE), there are many forms of fraud, better known as occupational fraud, and it is classified into three types: bribe and corruption, misappropriation of assets and fraudulent financial reporting (ACFE, 2022). Money-related misdeeds are inspired by monetary needs caused by eagerness, betting, bonds, business investments, poor speculation or attempts to maintain a lavish way of life (Mukoro, 2013). Detecting fraud and white-collar crime has been part of the conventional accounting function. Internal and external auditors are supposed to uncover fraud through the audit process. However, auditors only check for compliance with the company's book towards generally accepted accounting principles, auditing standards and company policies. Thus, a new group of investigators is needed to detect fraudulent transactions, known as forensic investigators. Forensic investigators work in two primary areas, investigative accounting, and litigation services. Forensic investigators investigate the operation of an organization and prepare information that may be used in a criminal or civil court case.

Forensic investigators are trained to uncover fraudulent practices which resulted from litigation activities. They utilize a wide understanding of business and management, financial reporting systems, accounting and auditing standards, evidence gathering, investigative techniques, and litigation processes (Bhasin, 2017). They are more proactive toward risk reduction roles by performing extended audit procedures, acting as advisors to the audit committee and uncovering financial fraudulent activity. A proficient forensic investigator is trained to look beyond numbers and deal with the business realities of the situation. They play an important role in analysing, interpreting, and presenting complex financial and business-related issues. They are also familiar with legal concepts and procedures (Bhasin, 2017). Hence, forensic investigators are in growing need in confronting major financial crime problems (Bhasin, 2013). The lack of forensic investigators' knowledge and skills has led to a situation in which government and corporate entities trick law enforcement to their advantage in financial crimes (Bhasin, 2017). Malaysia has its fair share of financial crime too. The issue arises from the fact that a forensic investigator is still new to most businesses as well as to Malaysia's public awareness. According to KPMG (2021), most companies agreed that fraud is a major problem in Malaysia and that the negative effect of bribery on the public and the economy financial fraud is inevitable (Urien, 2019).

There are several activities usually being carried out by forensic investigators which are investigating and analysing financial evidence, the evolvement of computerized applications in analysing and presentation of financial evidence and communicating their findings in the form of a report with exhibits and collections of the report (Bhasin, 2017). These professional capabilities will assist them in legal proceedings, such as testifying in courts as an expert witness in preparing visual aids to support the trial evidence. However, the lack of knowledge, skills, and the use of forensic investigation techniques in the battle against money-related corruption could also be a contributing factor (Ocansey, 2017) to delaying the process of investigation. There is also a lack of regular research undertaken by

accountants in this field as the essence of the job is usually not meant to uncover anything that has been carefully hidden in today's complicated business operations (ACCA, 2018). This is a job that requires professional knowledge and skills. A forensic investigator is an investigator, an expert, and a witness who has been rolled into one in various cases. According to ACCA Global, the more appropriate word is "forensic expert" as they investigate misrepresentation and corruption and have what it takes to mitigate the risk of fraud within organizations (ACCA, 2018).

In conclusion, a broad knowledge of forensic investigators is a key to success for entry-level forensic investigators (Anyaduba, 2013). This is to assist in the investigation procedure and expedite the process. A big save in time and cost can be earned when the case investigated can be solved successfully within the dateline if they have the investigative technique, skills, and knowledge. Thus, any fraudulent cases involving financial crime can be solved by immediate action effectively. The country can be benefited from this with the existence of forensic investigators as fraudulent activities involving companies' books can be uncovered and traced magnificently. Concerning the above, it is crucial for this research to be conducted since it will provide an understanding of forensic investigators' professional traits that enable the investigation process.

The remainder of this paper is structured as follows. The following section briefly explains the literature review and hypotheses development. The third section describes the research design. The results of the study are reported in the fourth section, and the conclusions of the study are presented in the final section.

Literature Review and Hypotheses Development

The Behavioural theory seeks to explain human behaviour by analysing the backgrounds and consequences present in the individual's environment and the associations acquired through previous experience (Watson, 1992). This is a theory of learning based on the idea that all behaviours are acquired through conditioning. Conditioning occurs through interaction with the environment. Behaviourists believe that responses to environmental stimuli shape actions. Also, it is believed that any person can potentially be trained to perform any task, regardless of genetic background, personality traits, and internal thoughts (within the limits of their physical capabilities). It only requires the right conditioning which involves a complex of great skills, incompetent investigative techniques and core knowledge of a particular individual (Watson, 1992).

Behaviourism refers to a psychological approach that promotes research methods that are empirical and unbiased (Pepper, 2012). The theory focuses only on measurable stimulus-response behaviours and notes that all behaviours are acquired through contact with the environment. This study explains that every individual can become a forensic investigator if they have a skill set of investigative techniques and core knowledge. It can be benefited through complete training and experience gained. Learning through interaction with environment states in this behavioural theory relates to the experience gained by the individual by interacting with another party. In addition, the behavioural theory proposes a reconceptualization, the development of a new paradigm that assumes restricted rationality, recognizes the importance of human capital of agents and enables the loss, risk and uncertainty aversion, time reduction, inequity aversion and trade-off between intrinsic and

extrinsic motivation to be excluded from the rational choice model (Pepper, 2012). An individual who is a forensic investigator can be assumed as a model that can be reconceptualized and developed to enhance and become superior in their specialist field. Thus, it will improve and expedite the investigation process. The theory's underlying assumptions can gauge the results of the forensic investigator's professional traits. All professional traits derived from the theory lead to a positive outcome on the forensic investigation expedition.

Skills of forensic investigator and investigation process expedition

The forensic investigator should have a conspicuous ability to help expose misleading information. In this way, creative reasoning skills can benefit the forensic investigator immensely (Ramaswamy, 2005). These skills will help them to understand the explanations for the perpetrator's practices, and legal and moral issues, and provide assurances and evidence to individuals with little or no accounting knowledge (Ramaswamy, 2005). Forensic investigators' abilities in verbal communication are exceptionally critical (Wells, 2007). It will trigger the forensic investigator's achievement in speeding the investigation process. It is certainly consistent with Malaysia's underlying goal of reducing fraud activities. Before the establishment is authorized by law, personal communication skills are included as a favourable position or required forensic investigator skills (Wells, 2007) as it will change them to be an additional alarm and accurate in the expediting investigation process.

The American Institute of Certified Public Accountants (AICPA) recommended that forensic accounting techniques and procedures should be gradually combined in the detection of financial reporting, as forensic investigators and auditors have distinctive training, skills, and mentalities (AICPA, 2004). Forensic investigators must have exceptional expertise in dealing with the issue of economic and financial crimes. It follows logically from these clarifications of forensic investigator techniques and skills that having these uncommon and explicit skills is important in effectively assisting the forensic investigator in speeding up the investigation process. Bhasin (2013) found that there is a significant and correlative effect of skills required towards the effectiveness of forensic investigators in the investigation process expedition. Additionally, Mohamad Hashim et al (2021) highlighted that the skills of forensic investigators have a positive impact on money laundering activities. DiGabrille (2008) makes it clear that a forensic investigator's important skills perceived by both scholastics and experts, will ideally live up to business wishes as well. Employers who include legal advisors are the ultimate users of forensic investigator services and agree that forensic investigator skills should be a requirement. Forensic investigators need to have a solid composition of oral and written skills in this capacity. Undoubtedly, in today's business world, there is a distinct requirement for forensic investigators, yet not every person has the numerous attributes and features that involve high-calibre forensic investigators.

AICPA (2019) stated that the investigation process of the forensic investigator may include the application of the expertise set in the investigation and any relevant accounting issues. It also requires special skills in critical thinking, data dissection, great writing skills and much more. In addition, past research has been able to provide a comprehensive overview of the credibility of the investigation owned by the forensic investigator in the expedition of the investigation process. The findings regarding the investigative capabilities of the forensic investigator will allow the decision to benefit from the investigative capabilities of the forensic

investigator. It demonstrates the role that miscommunication in the forensic investigation can play in miscarriages of justice (Hackman, 2020). Previous research indicated that it is fundamental to have investigation skills; a thorough skill of inspecting, risk assessment, control, and fraud detection (Bhasin, 2013). Subsequently, forensic investigators must be suspicious of the people they supervise. He also imparted that knowledge and experience in the field of cash and management techniques, as well as advanced technology and computer skills, including the ability to understand and apply different information development and accounting frameworks, are comparatively key features of any forensic investigator.

According to Crumbley (2001), the forensic investigator should have good information skills learned, this is due to the different number of documents required during the investigation process. Appropriate documentation filtering can allow them to identify success more precisely. The need to track their work and write interpersonal skills is therefore important as this will allow them to provide an elegantly written document to assist the jury in litigation. Essentially, the investigation process can be expedited with the relevant skills learned by forensic investigators. Bhasin (2016) states that in detecting financial crime activity, a forensic investigator is required to possess extraordinary skills and credibility. They should gain capacity in computer and network system knowledge in that capacity. These skills will help the forensic investigator conduct an e-banking and computerized accounting systems investigation. He also pointed out that the expertise of psychology is equally important in understanding the motivations behind criminal conduct and in setting up counteractive action programs for misrepresentation Bhasin (2016). Therefore, a connection between investigation credibility on interviewing or interrogation and investigation process expedition does exist. Based on the above arguments, the following hypothesis is developed:

H1: There is a significant positive relationship between the skills of a forensic investigator and the investigation process expedition.

The Investigative Technique of Forensic Investigator and Investigation Process Expedition

The forensic investigation focuses on identifying financial crimes and financial fraud through the forensic investigator's investigative technique and skills. It needs rigorous legal procedures to prosecute this type of criminal offence. Computer forensics and knowledge of data mining are vital to the uncovering of technological fraud in this technological world (Haruna et al., 2020). A forensic investigator's work goes beyond finding out the truth. It also helps prosecutors, with knowledge of criminal justice and law enforcement. All these discussions were confirmed by Ocansey (2017) who stated that there are ongoing validations that fraud prevention and the uncovering of deceptive accounting practices are in demand by being information technology literate. Therefore, the demand for forensic investigators is increasing.

Crumbley et al (2006) added that forensic investigators need to document their work, so they need to have the ability to write a well-written report to assist the jury in litigation. Sanchez and Trewin (2004) added that forensic investigators can function as expert witnesses in providing support for court testimony by presenting complex facts and evidence to understand judges. For the performance of the forensic investigator, verbal communication skills are therefore essential. Grazoli (2006) also believe that forensic investigator should have the following qualities to enable them to perform their duties effectively; be a good

interviewer to obtain relevant information; be able to review and identify relevant documents; be able to reconstruct financial transactions utilizing information obtained from third parties; know the legal consequences of the evidence obtained; know how to preserve the chain of custody over records while gathering and maintaining accounting evidence; be able to observe behaviour, especially during interviews; have the ability to use computer forensic tools that could be both software and hardware for the collection and analysis of evidence. Ability to inspect documents for authenticity, alterations, forgery or counterfeiting, and ability to design fraud scenarios, thinking like the fraudster to determine occasions when internal control may be circumvented or where control is not enforced and therefore the employee may take advantage of it.

In addition, Howard and Sheetz (2006) listed the minimum requirement for a forensic investigator is to include: the ability to review a large volume of documentation ranging from common accounting records and management information systems to memos, correspondence and other less obvious financial data. Also, a sound understanding of the peculiarity of different business methods, a sense of urgency and commitment is needed to ensure a prompt response when required, and adherence to a strict timetable even when there is a need for more hours of work to meet targeted time. Moreover, the ability to communicate complex theoretical ideas in a way that is easily understood by the layman. This is also important in supporting facts and figures, when necessary, without giving an impression of superiority and, most importantly, an ability to appear objective and professional without taking part in a court's inherent partisan process. Hence, it can be said that the investigative technique of forensic investigators can expedite the investigation process. Based on the arguments, the following hypothesis is developed:

H2: There is a significant positive relationship between the investigative technique of forensic investigators and the investigation process expedition.

Knowledge of Forensic Investigator and Investigation Process Expedition

Financial knowledge is essential to the detection of financial crimes by a forensic investigator. The two key categories of valuable skills for the forensic investigator are in-depth analysis of financial statements and the ability to conduct the investigation fundamentally. According to Bhasin (2013), these skills assist forensic investigators in the discovery of anomalous examples in bookkeeping data, understanding of misrepresentation plans, including misappropriations of assets, money laundering, bribery and corruption, risk assessment control structure, achieving management, comprehensive knowledge of the financial statements and the ability to analyse them objectively. With the expansion of financial knowledge, it will assist forensic investigators in uncovering and perceiving abnormal patterns in accounting information, an exhaustive understanding of fraud schemes, including but not limited to misappropriations of assets, tax evasion, corruption, and the ability to understand corporate internal control systems (Bhasin, 2013). It thus shows that the knowledge of a forensic investigator is important and positively interacts with financial crime detection and prevention (Olaniyan et al., 2021).

According to Bhasin (2013), with the presence of financial knowledge, the forensic investigator can convey a comprehensive understanding of fraud schemes, not limited to misappropriations of property, illegal tax evasion, bribery, and abuse, and the ability to

understand corporate internal control systems. On the other hand, previous literature has justified the fact that sound legal knowledge of rules and procedures affects the detection of financial crimes (Steven et al., 2011). According to Wells (2007), an accountant is an individual who wishes to become an expert in fraud involving with work of law at a law enforcement agency. This will eventually develop an understanding of litigation and experience of practice in the legal field. Furthermore, the experience of several years of working on complex cases of fraud in law enforcement offers invaluable knowledge. This has been agreed by Bhasin (2013) that a basic and in-depth understanding of the legal system is very important for forensic investigators as it will help them to be used in court on conviction. The legal knowledge capacity of each forensic investigator is therefore vital to accelerate the investigation process. In addition, what seemed to be most important was how they used their knowledge to think holistically, a higher cognitive ability that seemed critical to expediting the investigation process and gathering information about what happened as well as finding out who did what (Chung et al., 2022).

Forensic accounting investigation was expressed by Bologna and Linqvist (1987) as an emerging discipline. It includes financial expertise, a sound knowledge of business background and reality, and the legal system is the most important coverage. Judgment and understanding of the legal system are what will convict a court ruling. According to Steven et al. (2011), legal knowledge is made up of two main components: litigation services that recognize the role of a forensic investigator as an expert consultant and investigative services that may require testimony from the courtroom. It implies that the forensic investigator should be skilled as well as knowledgeable in the internal control system, law, and other litigation (Steven et al., 2011). There is certainly an important relationship between legal knowledge and investigation process expedition. The following hypothesis is built based on the arguments:

H3: There is a significant positive relationship between knowledge of forensic investigators and investigation process expedition.

Research Method

Data Collection

This research uses a survey questionnaire. This study approached the forensic investigators of the National Audit Department (NAD) and the Malaysian Anti-Corruption Commission (MACC) in Malaysia. The questionnaire survey was distributed by online survey via a Google form. A total of 83 survey questionnaires were distributed, collected and usable. The respondents in this study remained anonymous and were not given any financial incentives to encourage voluntary participation in completing the questionnaire. In this study, the survey instrument includes questionnaires that provide a different component section consisting of Sections A, B, C, D and E. Section A will cover the demographic section. Section B covers the dependent variable which is the investigation process expedition. Sections C, D and E cover the independent variables that focus on forensic investigators' skills, techniques and knowledge respectively. The survey contains 26 questions in total and the respondents are required to rate their responses based on a five-point Likert scale: 1= strongly disagree, 2= disagree, 3= Neutral, 4 Agree, 5=Strongly Agree. The questionnaires used in this study were adapted and have been tested and confirmed by previous researchers in a large-scale study

(Ocansey, 2017). However, the questions were modified and verified by the experts from the National Audit Department to suit the current study.

Results and Discussion

Demographic Analysis

This section provides descriptive analyses of the demographic characteristics of the respondents consisting of the frequency and the percentage of the nominal questions. Table 1 shows the frequency of respondents based on their gender. The total respondents for this study are 83 forensic investigators. It indicates that 37 or 44.6% of the respondents are male whilst 46 or 55.4% of the respondents are female.

Table 1
Frequency of the Respondents' Gender

	Frequency	Per cent
Male	37	44.6
Female	46	55.4
Total	83	100.0

Table 2 explains the education level of the respondents. The respondents are categorized into 4 groups of their education level which include Diploma, Bachelor's Degree, Master's Degree, and Doctorate. About 49.4% of the respondents hold a master's degree followed by the respondents with a bachelor's degree of 28.9%. Eleven (11) respondents are Doctorate holders representing 13.3% of the total respondents whilst 7 respondents are Diploma holders representing only 8.4% of the total respondents.

Table 2
Frequency of the Respondents' Education Level

	Frequency	Per cent
Diploma	7	8.4
Bachelor's degree	24	28.9
Master's degree	41	49.4
Doctorate	11	13.3
Total	83	100.0

Table 3 depicts the frequency of the respondents' years of working experience. Out of 83 respondents, 36.1% have a working experience of more than 10 years, 33.7% have a working experience of 6-10 years whilst 28.9% have a working experience of 1-5 years.

Table 3
Frequency of Working Experience by the Respondents

	Frequency	Per cent
1-5 years	24	28.9
6-10 years	28	33.7
More than 10 years	30	36.1
Total	83	100.0

Descriptive Statistics

Table 4 shows the descriptive statistics of the dependent variable namely, the investigation process expedition based on the results of the questionnaire. The highest mean score goes to question number 1, "An investigator needs to understand the subject matters: by studying the case thoroughly: the background and available pieces of evidence of the offender." where the mean score response to the question is 4.80 i.e., greater than 3.00. This finding implies that on average, the respondents agreed with the statement that the investigator needs to have a good understanding of the subject matter in handling cases which eventually will expedite the investigation process. The average standard deviation (SD) of the response is 0.462. This indicates that the respondents' perceptions were close to or similar to one another. The lowest mean score goes to question number 6, "Political influence has an impact on the process and reporting of findings." where the mean score response of the question is 4.35 i.e., greater than 3.00. This finding implies that on average, the respondents slightly agreed with the influence of political matters in expediting the investigation process. The average standard deviation (SD) of the response is 1.098 which is higher than 1. This indicates that the respondents' perceptions were a bit far or differed from one another.

Table 4

The Investigation Process Expedition.

Item	Mean	Std. Deviation
(1) An investigator needs to understand the subject matter: by studying the case thoroughly: the background and available pieces of evidence of the offender.	4.80	0.462
(2) An investigator needs to complete procedures within the time frame given.	4.53	0.817
(3) An investigator needs to request an extension of findings most of the time.	4.35	0.930
(4) An investigator needs to handle several cases at one time.	4.35	1.041
(5) An investigator needs to investigate regardless of high-profile or low-profile individuals.	4.67	0.646
(6) Political influence has an impact on the process and reporting of findings.	4.35	1.098
(7) Commitment and involvement from other enforcement agencies can speed up the reporting process.	4.70	0.599
(8) Successful audit trails can speed up the reporting process.	4.72	0.570
(9) The ability to get complete documentation in handling cases can speed up the reporting process.	4.78	0.542
(10) Advance information technology systems can speed up the reporting process.	4.72	0.591

Table 5 shows the descriptive statistics of the first independent variable which is the skills of a forensic investigator. Based on the result of the questionnaire the highest mean score goes to question number 1, "Critical thinking: the ability to explain between opinion and fact." Where the mean score response to the question is 4.76 i.e., greater than 3.00. This finding implies that on average, the respondents agreed with the statements on the ability to explain between opinion and facts by having critical thinking skills. The average standard deviation

(SD) of the response is 0.554 which is lower than 1.00. This indicates that the respondents' perceptions were close to or similar to one another. The lowest mean score goes to question number 5, "Unstructured problem solving: the ability to deal and establish statement/opinion on each case independently." where the mean score response of the question is 4.53 i.e., greater than 3.00. This finding implies that on average, the respondents slightly agreed with the statements that unstructured problem-solving will help the ability of the forensic investigator to deal with and establish statements/opinions on each case independently. The average standard deviation (SD) of the response is 0.738 which is lower than 1.00. This indicates that the respondents' perceptions were close to or similar to one another.

Table 5
Skills of Forensic Investigator

Item	Mean	Std. Deviation
(1) Critical thinking: the ability to explain between opinion and fact.	4.76	0.554
(2) Communication: the ability to effectively communicate in both writing via reports and speech.	4.69	0.603
(3) Analytical Proficiency: the ability to prepare complete documentation.	4.76	0.508
(4) Deductive analysis: the ability to detect red flags during the audit findings/investigation.	4.65	0.633
(5) Investigative flexibility: the ability to move away from extended audit procedures and able to conduct a thorough examination.	4.53	0.738
(6) Unstructured problem solving: the ability to deal with and establish statements/opinions on each case independently.	4.61	0.659

Table 6 shows the descriptive statistics of the second independent variable namely, the investigative techniques of a forensic investigator. The highest mean score goes to question number 1, "Interviewing and Interrogation: An investigator needs to understand the subject's intention, effective inquiry, techniques of ethical and legal aspect in obtaining information" where the mean score for responses to this question are 4.80 i.e., greater than 3.00. This finding implies that on average, the respondents agreed with the statements on the investigative technique where interviewing and interrogation techniques will help in understanding the subject matter and thus expedite the investigation process. The average standard deviation (SD) of the response for question 1 is 0.488 which is lower than 1.00. This indicates that the respondents' perceptions were close to or similar to one another. The lowest mean score goes to question number 2, "Using Computer-Based Software Tools: An investigator needs to be information technology (IT) literate" where the mean score response of the question is 4.59 i.e., greater than 3.00. This finding implies that on average, the respondents slightly agreed with the statements on the importance of computer-based software usage and being IT literate. The average standard deviation (SD) of the response is 0.716 which is slightly lower than 1.00. This indicates that the respondents' perceptions were close to or similar to one another.

Table 6

Investigative Techniques of Forensic Investigator

Item	Mean	Std. Deviation
(1) Interviewing and Interrogation: An investigator needs to understand the subject's intention, effective inquiry, and techniques of ethical and legal aspects in obtaining information.	4.80	0.488
(2) Using Computer-Based Software Tools: An investigator needs to be information technology (IT) literate.	4.59	0.716
(3) Offender Profiling: An investigator should know the technique to identify the offender and also able to link together several individuals/organisations/events.	4.71	0.595
(4) Surveillance: An investigator needs to have a follow-up and a continuous observation of someone or something in obtaining information.	4.69	0.697
(5) Observation and Documentation: An investigator needs to document in written or through observation notes and be able to interpret the findings.	4.77	0.477

Table 7 shows the descriptive statistics of the third independent variable which is the knowledge of forensic investigators. Based on the result of the questionnaire, the highest mean score goes to question number 3, "Anti-Money Laundering Act 2001: Act enacted dealing with money laundering and anti-terrorism financing." where the mean score response of the question is 4.77 i.e., greater than 3.00. This finding implies that on average, the respondents agreed with the statements that knowing the Anti-Money Laundering Act 2001 will eventually help expedite the investigation process. The average standard deviation (SD) of the response is 0.611 which is lower than 1.00. This indicates that the respondents' perceptions were close to or similar to one another. The lowest mean score goes to question number 4, "Financial Accounting and Auditing Knowledge: the ability to understand basic Accounting Principles and International Auditing Standards (IAS)." where the mean score response of the question is 4.64 i.e., greater than 3.00. This finding implies that on average, the respondents agreed with the statements on the requirement to know basic Accounting Principles and International Auditing Standards in investigating cases. The average standard deviation (SD) of the response is 0.725 which is lower than 1.00. This indicates that the respondents' perceptions were close to or similar to one another.

Table 7

Knowledge of Forensic Investigator

Item	Mean	Std. Deviation
(1) Malaysian Anti-Corruption Commission Act 2009: Act was enacted to provide for the establishment of MACC to make better provisions for the prevention of corruption.	4.75	0.490
(2) Whistle-blower Protection Act 2010: Act was enacted to combat corruption and other wrongdoings, and to protect individuals who whistle blow to the relevant enforcement agencies.	4.71	0.530
(3) Anti-Money Laundering Act 2001: Act enacted dealing with money laundering and anti-terrorism financing.	4.77	0.611
(4) Financial Accounting and Auditing Knowledge: the ability to understand basic Accounting Principles and International Auditing Standards (IAS).	4.64	0.725
(5) Specific Legal Knowledge: the ability to understand basic legal processes and legal issues.	4.67	0.543

Pearson's Correlation Analysis

Table 8 shows the correlation between this study's independent and dependent variables. The result of 0.643 a moderate positive correlation between the skills of a forensic investigator and the investigation process expedition. The value of r^2 will be $(0.643)^2 = 0.413$. The coefficient of determination value of 41.3% tells the variability in skills of the forensic investigator is shared in the investigation process expedition. A p -value of 0.793 more than 0.001 shows an insignificant relationship between the skills of the forensic investigator and the investigation process expedition. The correlation result of 0.746 shows a strong positive correlation between the investigative techniques of a forensic investigator and the investigation process expedition. The value of r^2 will be $(0.746)^2 = 0.556$. The coefficient of determination value of 55.6% tells the variability in investigative techniques of forensic investigators is shared in the investigation process expedition. A p -value of 0.000 less than 0.001 shows a significant relationship between the investigative techniques of a forensic investigator and the investigation process expedition. The correlation result of 0.702 shows a strong positive correlation between the knowledge of forensic investigators and the investigation process expedition. The value of r^2 will be $(0.702)^2 = 0.492$. The coefficient of determination value of 49.2% tells the variability in the knowledge of forensic investigators is shared in the investigation process expedition. A p -value of 0.007 greater than 0.005 shows a very slightly missed significant relationship between the knowledge of forensic investigators and the investigation process expedition.

Table 8

Pearson's Correlation Analysis

Variables	IPE	SK	IT	KN	EX
IPE	1				
SK	0.643**	1			
IT	0.746**	0.761**	1		
KN	0.702**	0.752**	0.734**	1	
EX	-0.179	-0.121	-0.190	-0.0204	1

** . Correlation is significant at the 0.01 level (2-tailed).

Note IPE (Investigation Process Expedition), SK (Skills of Forensic Investigator), IT (Investigative technique of Forensic Investigator), KN (Knowledge of Forensic Investigator), EX (Experience of Forensic Investigator).

Multiple Regression Analysis

Table 9 shows the coefficients (both, standardized and unstandardized) of the multiple regression analysis. The beta value represents the strength of the relationship between the investigation process expedition and the skills of a forensic investigator, the investigative techniques of a forensic investigator, and the knowledge of the forensic investigator. It shows the effect of independent variables on the dependent variable (Field, 2009). It also shows the tolerance and variance inflation factor (VIF) of the collinearity Statistics for the individual independent variables. A VIF shows no multicollinearity issues when it has a VIF of less than 10 (Pallant, 2013). Therefore, there are no multicollinearity issues as all individual VIFs of all the independent variables are way below 10 in this study.

The independent variable with a level of significance (p -value) value of less than 5% makes a significant contribution to the predicted value of the dependent variable (Brooks, 2014). Based on Table 9, the investigative technique of forensic investigator has a p -value of 0.000, with a significant level of $p < 0.01$. It indicates a significant positive relationship between the investigative techniques of a forensic investigator and the investigation process expedition. The standardised coefficient has a value of 0.483 which indicates that every unit increase in the investigative techniques of the forensic investigator will reflect a 48.3% unit increase in the investigation process expedition. Hence, there is a significant positive relationship between the investigative techniques of a forensic investigator and the investigation process expedition. This finding supports the research hypothesis H_2 which tested the relationship between the investigative techniques of a forensic investigator and the investigation process expedition. Hence, the hypothesis (H_2) is supported. The result of this study is consistent with Ocansey (2017) that there is a significant and correlative effect of the investigative technique on the investigation process expedition. Crumbley et al (2006) added that forensic investigators need to have a good investigative technique to document their work and hence need writing skills to enable them to give a well-written report to assist in the litigation process. Also, Sanchez and Trewin (2004) added that forensic investigators might serve as expert witnesses in giving testimonies for litigation support by communicating complicated facts and evidence for judges to comprehend. Verbal communication skills are crucial to the success of a forensic investigator.

Additionally, the knowledge of forensic investigators has a p -value of 0.000 and is significant at a level of $p < 0.01$. Hence, it indicates a positive significant relationship between the

knowledge of forensic investigators and the investigation process expedition. The standardised coefficient has a value of 0.318 which indicates that every unit increase in the knowledge of forensic investigators will reflect a 31.8% unit increase in the investigation process expedition. The *t*-value of 2.721 is more than 2 indicating a strong relationship between the independent and dependent variables. Therefore, there is a significant positive relationship between the knowledge of forensic investigators and the investigation process expedition. This finding supports the research hypothesis H_3 and it is supported.

Table 9

Multiple Regression Analysis

Variables	Standardized Coefficients		Sig. (<i>p</i> -value)	Collinearity Statistics	
	Beta	<i>t</i>		Tolerance	VIF
(Constant)		1.144	0.256		
SK	0.034	0.282	0.779	0.338	2.962
IT	0.483	4.080	0.000***	0.357	2.798
KN	0.318	2.721	0.000***	0.367	2.728
EX	-0.018	-0.249	0.804	0.948	1.055

* $p < 0.10$; ** $p < 0.05$; *** $p < 0.01$

Note: SK (Skills of Forensic Investigator), IT (Investigative technique of Forensic Investigator), KN (Knowledge of Forensic investigator), EX (Experience of Forensic Investigator)

The results of this study are consistent with Bologna and Linqvist (1987) that there is a significant and correlative effect of knowledge on the investigation process expedition. It expressed that forensic investigation is an emerging discipline. It encompasses financial expertise, a sound knowledge of business background and reality, and the most important coverage is on the legal system. According to Steven et al (2011), it consists of two major components: litigation services that recognize the role of a forensic investigator as an expert consultant and investigative services that may require possible courtroom testimony. It implies that the forensic investigator should not only be skilful but also knowledgeable in the internal control system, the law and other litigation processes (Steven et al., 2011). Undoubtedly, there is a significant relationship between legal knowledge and investigation process expedition. The results of this study are in line with the underlying assumptions of behavioural theory. As the theory states that any person can potentially be trained to perform any task, regardless of genetic background, personality traits, and internal thoughts (within the limits of their physical capabilities). However, it only requires the right conditioning which involves a complex of great skills, incompetent investigative techniques, and core knowledge of a particular individual to perform a task. Hence, it can be concluded that forensic investigative techniques and the knowledge of a forensic investigator can expedite the investigation process.

However, the skills of a forensic investigator have a *p*-value of 0.779 and it is insignificant. Hence, it indicates no relationship between the skills of a forensic investigator and the investigation process expedition. This finding does not support research hypothesis H_1 . Concerning control variables in this study, the experience of the forensic investigator has a

standardised coefficient of -0.018 which indicates that every unit increase in the experience will reflect a 1.8% unit increase in the investigation process expedition. The t -value of -0.249 is less than 2, indicating a weak relationship between the control and dependent variables (Hair et al., 1998). Therefore, there is no significant relationship between the experience of the forensic investigator and the investigation process expedition.

Conclusions

Enhancing the investigation process expedition will give a good implication in resolving fraud cases in a short period. In this regard, the enforcement agencies are recommended to hire a skilful and knowledgeable investigator to potentially uncover fraudulent activity in a shorter time and hence expedite the investigation process so that fraud cases can be resolved promptly. Quality of professional traits would help the investigator become more abreast and competent in handling the investigations. The investigators must be well-updated in terms of the process, operational matters, and report submission. The investigation technique and knowledge are two factors that contribute to the investigation process expedition. Hence this study aims to investigate the following objectives and an explanation is provided as follows.

Based on the first research objectives, this study examines the significant relationship between the skills of forensic investigators and investigation process expedition. Skills seem to be disputable issues among the traits as it is very subjective, and the result revealed there is no relationship between the skills of forensic investigators and the investigation process expedition. The second research objective is to study the significant relationship between the investigative techniques of forensic investigators and investigation process expedition. Interview and interrogation are two major techniques used to elicit responses from the accused. In this technological world, computer forensics and data mining techniques are crucial for investigators to be expertise in uncovering technological fraud addition, forensic investigators need to well document their work as they also need to have good writing and communication skills to enable them to give a well-written report to the jury in litigation. Based on the findings, investigative techniques are positively associated with the investigation process expedition at the value of $p < 0.01$ significance level.

The third research objective is to study the relationship between the knowledge of forensic investigators and investigation process expedition. Forensic investigators are expected to be specialists in any accounting and legal field. In this profession, it is very imperative to have a thorough knowledge of the accounting system and at least a basic understanding of the legal system. In addition, good knowledge of the company's corporate governance policies, and laws that regulate this policy and command civil and criminal law as well as the legal system and court procedures will assist the investigators to uncover fraudulent financial reporting. Concerning the findings of this study, the knowledge of forensic investigators has a significant relationship and is positively related to the investigation process expedition at the value of $p < 0.01$ significance level.

The significance of this study is beneficial to the academician as it will contribute to the literature by adding to the current literature on the professional traits of a forensic investigator. In addition, it will set a benchmark for the Malaysian Anti-Corruption Commission in the selection of forensic investigators. Not just that, it will also be a benchmark

for the National Audit Department in choosing the right forensic auditor to investigate red flags. Furthermore, the findings can also assist the enforcement agencies involved to examine the current professional traits of their forensic investigators. Thus, the current professional traits of the investigators can be enhanced.

This study is subject to several limitations. Firstly, the population is relatively wide and unreachable, hence it creates an obstacle in reaching the whole population of forensic investigators within these two enforcement agencies. Secondly, this study only considers three independent variables with two control variables. There might be other independent variables which may influence the investigation process expedition that is not mentioned in this study. The study's limitations generate several suggestions, where it only focused on two enforcement agencies which are the National Audit Department and the Malaysian Anti-Corruption Commission. This would give some ideas to the academicians to explore further other enforcement agencies as well as private institutions. Therefore, this study is not restricted to being used by these two enforcement agencies, but also can be used as a benchmark by private organizations in referring to these professional traits for forensic investigators. In addition, a bigger sample may give a better comparison between the forensic investigator in enforcement agencies. Therefore, future research is encouraged to include a bigger population of forensic investigators.

References

- American Institute of Certified Public Accountants (AICPA). (2004). Professional ethics executive committee's omnibus proposal of professional ethics division interpretations and rulings. Retrieved from:
https://www.academia.edu/18779466/American_Institute_of_Certified_Public_Accountants_AICPA_Professional_Ethics_Executive_Committee_s_PEEC_Omnibus_Proposal_of_Professional_Ethics_Division_Interpretations_and_Rulings
- American Institute of Certified Public Accountants (AICPA). (2019). Standards for forensic accounting service providers. Retrieved from:
<https://www.aicpa.org/news/article/aicpa-issues-new-professional-standards-for-forensic-accounting-service>
- Association of Certified Accountants (ACCA). (2018). Retrieved from
<https://www.accaglobal.com/sg/en/technical-activities/technical-resources-search/2018.html>
- Anyaduba, M. A. (2013). Forensic accounting and financial fraud in Nigeria: An empirical approach. *International Journal of Business and Social Science*, 4 (7), 281-289.
- Association of Certified Fraud Examiners (ACFE). (2022). Report to the nations on occupational fraud and abuse, Association of Certified Fraud Examiners. Retrieved from:
https://www.acfe.com/uploadedFiles/ACFE_Website/Content/rtnn/2012-report-to-nations.pdf.
- Association of Certified Fraud Examiners (ACFE). (2022). Introduction to fraud examination. Retrieved from: <https://legacy.acfe.com/report-to-the-nations/2022/>
- Bhasin, M. L. (2013). Corporate Governance and Forensic Accountant: An exploratory study. *Journal of Accounting – Business & Management*, 20, 55-83.
- Bhasin, M. L. (2016). Contribution of a forensic accountant to corporate governance: An exploratory study on Asian Countries. *International Business Management*, 6(1), 35-40

- Bhasin, M. L. (2017). Integrating corporate governance and forensic accounting: A study of an Asian country. *International Journal of Management Sciences and Business Research*, 6 (1), 37-39.
- Bologna, G. J., & Lindquist, R. J. (1987). *Fraud auditing and forensic accounting: New tools and techniques*, Hoboken, New Jersey: Wiley.
- Chung, K. L., Ng, M., & Ding, I. L. (2022). Investigative interviews with suspects and witnesses: A survey of perceptions and interview practices among Malaysian police. *J Police Crim Psych* 37, 248–257. <https://doi.org/10.1007/s11896-020-09418-7>
- Brooks, C. (2014). *Introductory econometrics for finance (3rd Edition)*. Cambridge University Press.
- Crumbley, D. L. (2001). What is Forensic Accounting? Forensic Accounting: Older than You Think. *Journal of Forensic Accounting*, 11 (2), 181-202.
- Crumbley. (2006). Forensic accountants appearing in the literature. *Journal of Forensic Accounting*, 7(4), 75-79.
- DiGabriele, J. A. (2008). An empirical investigation of the relevant skills of forensic accountants. *Journal of Education for Business*, 83 (6), 331-338.
- Field, A. (2009). *Discovering statistics using SPSS, Fourth Edition*. Sage Publications.
- Grazoli, S., Janal, K., and Johnson, P. E. (2006) A cognitive approach to fraud detection. *Journal of Forensic Accounting*, 7 (2), 65-88.
- Hair, J., Anderson, R., Tatham, R., and Black, W. (1998) *Multivariate data analysis*. 5th Edition, Prentice Hall, New Jersey.
- Hackman, L. (2020). Communication, forensic science, and the law. *WIREs Forensic Science published by Wiley Periodicals LLC*.
- Haruna, R. A., Oyedokun, G. E., and Mainoma, A. M. (2020). Forensic accounting techniques, accounting numbers and fraud prevention in the listed insurance companies in Nigeria. *Journal of Forensic Accounting & Fraud Investigation*, 5(2), 1-39.
- Howard, S., and Sheetz, M. (2006): *Forensic accounting and fraud investigation for non-experts*, New Jersey: *John Wiley and Sons Inc*, 32-37.
- KPMG. (2021). Transparency Report Malaysia. Retrieved from: <https://home.kpmg/my/en/home/insights/2022/04/transparency-report-2021.html>
- KPMG. 2014. *Global Anti-Money Laundering Survey*.
- Hashim, M. F. H., Zawawi, M. S. N. H., Jusoh, F., Rashid, N. (2021). Forensic accounting skills and the effective identification in money laundering activities – Transaction monitoring perspective. *Journal of Contemporary Issues in Business and Government*, 27(2), 59-65.
- Mukoro, D. Y. (2013). The role of forensic accounting in fraud detection and national security. *Journal of Management Research*, 1(5), 5-12.
- Ocansey, E. O. (2017). Forensic Accounting and the combating of economic and financial crimes in Ghana. *European Scientific Journal*, 13(31), 379-385.
- Olaniyan, N. O., Ekundayo, A. T., Oluwadare, O. E., & Omolade Bamisaye, T. (2021). Forensic accounting as an instrument for fraud detection and prevention in the public sector: Moderating on ministries, departments, and agencies in Nigeria. *Acta Scientiarum Polonorum. Oeconomia*, 20(1), 49–59.
- Pallant, J. (2013). *SPSS Survival Manual, Fifth Edition*. New York.
- Pepper, A. (2012). Behavioural Agency Theory: New foundations for theorizing about executive compensation. *The London School of Economics and Political Science*, 6-11.
- Ramaswamy, V. (2005). Corporate governance and the forensic accountant. *The CPA Journal*, 75(3), 68-70.

- Romanus, O. O. (2014). The relevance of forensic accounting in curbing financial crimes and corruption in developing countries such as Nigeria: An empirical analysis. *Asian Journal of Business and Management*, 2(5), 499-502.
- Sanchez, M. H., and Trewin, J. (2004). A forensic accountant as an expert witness in a criminal prosecution. *Journal of Forensic Accounting*, 5(1), 231-235.
- Steven, L., Skalak, T. W., Golden, M. M., Clayton, J. S. P. (2011). A guide to forensic accounting investigation. *Hoboken, NJ: John Wiley & Sons. Inc. Second Edition.*
- Urien, J. (2019). The impact of corruption on the socio-economic development of Nigeria, 6(1), 2-6.
- Watson, J. B. (1922). The analysis of mind. (Review of Russell, Bertrand (1921). *The Analysis of Mind*. London: George Allen & Unwin), 72, 97–102.
- Wells, J. T. (2007). *Corporate Fraud Handbook: Prevention and Detection, Second Edition.* Hoboken, NJ: *John Wiley & Sons.*