Towards Advancing Audit Quality in the UK: A Forensic Accounting Skillsets agenda

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DECLARATION

I hereby declare that:

1. I have not been enrolled for another award of the University whilst undertaking my research degree. I was an enrolled student for the following award:

Name of award: Postgraduate Certificate (PgC) Teaching in Higher Education
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2. None of the material contained in the thesis has been used in any other submission for an academic award.

3. I certify that this thesis is my own work. The use of all published or other sources of material consulted have been properly and fully acknowledged.

4. The work undertaken towards the thesis has been conducted in accordance with the SHU Principles of Integrity in Research and the SHU Research Ethics Policy, and ethics approval has been granted for all research studies in the thesis.

5. The word count of the thesis is 74,494.

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ABSTRACT

The persistent failings of financial statement audits, highlighted by numerous high-profile fraud scandals, have raised significant concerns about the credibility and relevance of the auditing profession. This thesis investigates the integration of forensic accounting skillsets into UK statutory audits and auditors' education to bridge the competency gap in fraud detection. Drawing on Comfort Theory and the Agency Diamond model, the study explores the perceptions of key stakeholders, including forensic accountants, external auditors, educators, and professional body specialists. This study adopts a neo-empiricist theoretical stance, contending that knowledge can be objectively generated through systematic empirical evidence and rigorous interpretive approaches to understand the complexity of the participants' perceptions and develop theory. Through semi-structured interviews and a general inductive analytical approach, the research identifies the four pillars of forensic accounting skillsets: questioning skills, conscientious skills, intellectual reasoning skills, and psychological observation skills. The study highlights the interrelatedness of these skillset pillars and identifies that a mindset to detect fraud is expedient to how auditors can employ the forensic accounting skillsets to improve audit quality. The findings suggest that incorporating these skillsets, along with a fraud detection mindset, into auditors' education and continuous professional development can significantly improve their capability to detect and report financial misrepresentations, thereby enhancing the overall quality of audits. The study proposes a comprehensive educational and training programme that incorporates the forensic accounting mindset-skillsets relationship (MSR) concept, ensuring auditors are equipped to meet the evolving challenges of financial statement audits. This research contributes to the ongoing discourse on audit quality and offers practical solutions to enhance the auditing profession's role in safeguarding financial integrity.

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LIST OF ABBREVIATIONS

ACCA	Association of Chartered Certified Accountants
ACFE	Association of Certified Fraud Examiners
CPA	Certified Public Accountants
ED	Educator
FA	Forensic Accountant
FRC	Financial Reporting Council
IAASB	International Auditing and Assurance Standard Board
ICAEW	Institute of Chartered Accountants of England and Wales
IFRS	International Financial Reporting Standard
ISA	International Standard on Auditing
KPMG	Klynveld Peat Marwick Goerdeler
MSR	Mindset-Skillsets Relationship
PB	Professional Body Specialists
PWC	PricewaterhouseCoopers
XA	External Auditors

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Awolowo I.F, Garrow N, Chan D, Oni A, Abidoye A (2025) Auditors' Evolving Responsibilities and the Rising Costs of Professional Negligence: A Comprehensive Examination. Journal of Forensic Accounting Profession 4(2):20-33

Abidoye, A., Awolowo, I.F. and Chan, D. (2024) 'Bridging the Gap: Integrating Forensic Accounting Skillsets for Enhanced Audit Quality in the Post-Pandemic Era', Journal of Forensic Accounting Profession, 3(2), pp. 63–81

Awolowo, I.F., Owolade, F., Abidoye, A., Dosumu, O. and Ajao, O. (2023) 'Towards widening participation in post-graduate research: The ASPIRE programme', People, Place and Policy Online, 18(1), pp. 48–58

Awolowo, I.F, Abidoye, A., Owolade, F., Seun, A. and Dosumu, O. (2023) 'Give me a hand, and I will thrive: How personalised mentorship is helping Black students progression', BAM Conference. BAM2023 Conference proceedings, September. University of Sussex: British Academy of Management

Awolowo, I.F, Abidoye, A., Ajao, S. and Dosumu, O. (2023) 'Impact of personalised mentorship on Black heritage students: A case study of ASPIRE', Advance HE Teaching and Learning Conference, July. Keele

Awolowo, I.F, Abidoye, A., Ajao, S. and Dosumu, O. (2023) 'Towards Fixing the Broken Pipeline: The ASPIRE Agenda', CABS Learning, Teaching & Student Experience, May. ICC, Wales

Awolowo, I.F, Abidoye, A. and Chan, D. (2022) 'Reshaping the credibility of audits for the new normal – a forensic accounting skillsets agenda', 2022 ANZAM Conference. Flourishing in our new normal. 35th ANZAM Conference, Gold Coast, Australia. Conference Proceedings, December. Gold Coast, Australia: ANZAM - Australian & New Zealand Academy Of Management, pp. 335–352

Chapter One: Introduction

1.1 Background and Context

The failings of financial statement audits, evidenced by high profile organisational fraud, continue to attract discussions and interventions from policy makers, professional regulators, and the academia. External auditors are charged with a mediatory role in expressing a professional opinion on corporate financial statements; a responsibility entrusted by shareholders and expected by the wider society. However, their failings in detecting and reporting organisational fraud have remained a subject of debate, leading to a declining perception of the credibility of the auditing profession (Chandler & Edwards, 1996; Izza, 2019). This credibility issue threatens the profession's relevance as an objective and trusted bridge between an organisation's owners and its leadership board.

Financial statement audits serve the interest of an organisation's shareholders and the other users of financial reports. It therefore represents a stewardship mechanism within the Agency Theory framework (Jensen & Meckling, 1976). Auditors attest to the accuracy of financial statements. They certify that the financial activities of an organisation are free from material misstatements that could lead to business failure. Expectedly, this attestation should provide shareholders and creditors with confidence in their investment and its potential for continued future returns. However, the string of prominent fraud scandals (e.g., WorldCom, Parmalat, Patisserie Valerie, Steinhoff, Tesco, Carillion, Wirecard) are indicative of the shortcomings of these audits. In hindsight, these audit failures suggest an inadequacy in the quality of audits today.

The Financial Reporting Council's (FRC) 2024 Annual Review of Audit Quality outlines its definition of a high-quality audit. It highlights that such an audit should, among other criteria:

- Offer a *"… high level of assurance …"* on the truth and fairness of financial statements.
- Be *"… supported by rigorous due process and audit evidence, … and involve robust exercise of judgement and professional scepticism".*

- *"Challenge management effectively and obtain sufficient audit evidence …"* to support its conclusions. (FRC, 2024, p. 14)

The most recent FRC audit quality inspection results indicate that thirty-one percent (31%) of audits in the United Kingdom (UK) are below quality expectations, an increase of four percent from 2023 (FRC, 2024). Since 2020, UK audit firms have incurred substantial fines for audit failures, totalling over £80 million. Klynveld Peat Marwick Goerdeler (KPMG) has received the highest number of penalties over this period, with fines above sixty million (£60m) in the past five years (Devaya, 2025). This figure includes the most recent fines for the failings in Carillion (£21m) and Rolls-Royce (£3.4m) audits. Examples of other substantial fines includes, Deloitte for Autonomy failed audits (£15m), PricewaterhouseCoopers (PwC) and Ernst and young (EY) was recently fined for London Capital and Finance (LC&F) failed audits (£9.3m); PwC, for Galliford Try audits (£5.5m).

Several of the issues identified in the above failed audits are recurring areas of concern (Hattersley, 2024). Issues include insufficient audit evidence, lack of challenge to client management assumptions in financial estimates and accounting policies, and inadequate scrutiny of going concern assumptions (FRC, 2024). Hyatt et al. (2024) and Rajgopal et al. (2021) highlighted several audit shortcomings from actual audits found to be inadequate by the United States (US) regulatory authorities. For example, the authors highlighted failure to obtain sufficient audit evidence, accepting inadequate evidence and accepting weak explanations from client management as some of the main issues undermining the quality of audits. The persistent recurrence of these issues indicates an inability on the part of auditors, audit firms, and audit regulatory authorities to address these concerns effectively. Maintaining the status quo in auditors' education and training inadvertently impedes the possibility of sustainable solutions to address the persistent audit failures.

1.2 Problem Statement

The issue of auditors' low propensity to detect fraud has been notable in the Association of Certified Fraud Examiners' (ACFE) *'A Report to the Nations'* over the past two decades.

ACFE's (2024) report reveals that external auditors detected only 3% of fraud cases. This perpetuates a dismally low average detection rate of 4% since 2010. Table 1.1 below presents the trend of external auditors' underperformance in fraud detection from 2002 to 2024.

Table 1.1: External auditors' (EA) contribution to fraud detection from 2002 to 2024

Reporting year	2002	2004	2006	2008	2010	2012	2014	2016	2018	2020	2022	2024
Number of fraud cases in ACFE report	663	508	1,134	959	1,843	1,388	1,483	2,410	2,690	2,504	2,110	1,921
Percentage detected by EA	12%	11%	12%	9%	5%	3%	3%	4%	4%	4%	4%	3%

Source: Author's compilation from ACFE Occupational Fraud reports

The persistent underperformance of external auditors reflects insufficient fraud education and training for auditors. Joseph Wells, ACFE's founder, aptly summarises the dilemma in stating that: "*Auditors are fighting a war without being taught how to recognise the enemy. Until that changes, expect more casualties …"* (Wells, 2005, p. 13). This suggests that auditors are unable to detect fraud or misrepresentations in financial statements because of a gap in their education. The static confines of auditors' education, focusing more on technical knowledge and accounting standards, constrains auditors' development of fundamental skillsets that distinguish forensic accountants in fraud detection. As a result, auditors remain ill-equipped to evaluate audit evidence and to recognise and challenge misrepresentations which could be indicative of fraud.

Awolowo (2019) revealed that auditors' education and professional development need to be expanded to include topics in forensic accounting to develop auditors' fraud detection competency. The author, in proposing the '*forensic accounting system'* highlighted that the accounting/auditing professional qualification examinations do not contain topics in fraud and forensic accounting. Specifically, the author highlighted that the Association of Chartered Certified Accountants (ACCA) curriculum contains very limited elements of fraud detection techniques in its audit and assurance examination paper. On the other

hand, the Association of International Accountants (AIA) and the Institute of Chartered Accountants of England and Wales (ICAEW) examination modules do not include any element of fraud or forensic accounting topics (Awolowo, 2019, p.163-165). This gap in auditors' professional qualification curricula underscores the persisting issues of failed audits and the overall quality of financial statement audits.

The Financial Reporting Council (FRC), in a recent audit quality report, revealed that thirty-one percent of financial statement audits in the United Kingdom (UK) are below quality level (FRC, 2024). Hyatt et al. (2024) highlighted that audit quality continues to be undermined because of several inadequacy in auditors' competency, including auditors accepting inadequate audit evidence or accepting weak explanations from client management. Additionally, the outcome of investigations into the Carillion scandal revealed that the auditors failed to respond to the warning signs of irregularities in performing the Carillion audits (FRC, 2024). Recognising warning signs of financial irregularities is a fundamental element in forensic accounting education. It is therefore not surprising that auditors continue to be limited in their capacity to identify and adequately respond to warning signs of financial irregularities or fraudulent practices.

Auditors' general disposition and excuse of not being responsible for detecting misrepresentations in financial statement, even when material, can be attributable to their current education and professional training. This rigid disposition can be a deterrent to auditors' readiness to embrace and fulfil their statutory obligations to assure shareholders of the absence of material misstatements in audited financial statements that can influence investors' decisions. A fraud detection mindset is central to how forensic accountants apply their skillsets to recognise and uncover fraudulent practices. Thus, without a mindset shift, it is likely that the recurring issues of audit failures and low-quality audits may remain unchanged. Consequently, integrating the forensic accounting mindset-skillsets relationship (MSR) concept into auditors' educational and professional development curricula can better position auditors to advance the quality of audits.

1.3 Rationale for the study

Over the years, there have been calls to improve auditors' education to better identify, evaluate, and question audit evidence to detect fraud. In the 2006 International Audits Network vision paper, the Chief Executive Officers of the top six audit firms submitted that the efforts of auditors in fraud detection can be improved with forensic audits (Hogan et al., 2008). Hogan et al. (2008) emphasised the need for further research on auditor training to improve their skills in fraud-related judgements. Trompeter et al. (2013) called for research into forensic accountants' judgement and how auditors can benefit from forensic accountants' expertise in fraud detection.

Other studies have investigated the benefits of forensic accounting expertise in improving auditors' fraud-related judgement. For example, Carpenter et al. (2011) alluded to the improvement in accounting students' fraud sensitivity and judgement when exposed to forensic accounting skillsets training; an improvement sustained over time. Jenkins et al. (2018) concluded that auditors rely on forensic experts' skillsets to augment their efforts in fraud-related brainstorming and testing in audits. These studies have focused on the US environment. This highlights a gap in knowledge in the UK context.

Awolowo's (2019) UK based research emphasised that upgrading auditors' education by integrating forensic accounting skillset contents can limit the recurrence of financial statement fraud. However, the study did not propose an educational programme to achieve the upgrade. Notwithstanding the highlighted studies, research into the fundamental forensic accounting skillsets to detect fraud and how they can be integrated into auditors' education and training in the UK is underdeveloped. Moreover, there appears to be no research specifically focused on developing an educational and continuous professional training programme for auditors in forensic accounting. Therefore, this study extends the work of Jenkins et al. (2018) and Awolowo (2019) by focusing on equipping auditors with the fundamental forensic accounting skillsets through a purpose-built educational and continuous training programme.

In its current state, financial statement audits appear incapable of delivering the desired comfort on the financial integrity of an organisation's activities to its shareholders and

other interest groups. In effect, the quality of audits in the UK continues to attract the attention of policy makers in a bid for a solution to the increasing audit failings.

Within the UK, there have been major deliberations, consultations, and reports geared towards resolving the issue of audit quality, governance, and audit ineffectiveness in curbing financial statement fraud. In his review report, Sir Donald Brydon advocates for the inclusion of forensic skillsets in auditors' education and professional training (Brydon, 2019). In recommending improvements for audit quality, the Institute of Chartered Accountants for England and Wales (ICAEW) identified the need for advanced skillsets for auditors to detect irregularities and abnormalities in financial statements (ICAEW Insights, 2021). Likewise, the recent Discussion Paper of the International Auditing and Assurance Standards Boards' (IAASB) presented an argument for using forensic experts in certain aspects of a corporate audit (IAASB, 2021).

These reports unanimously recognise forensic accounting skillsets as the strategic solution; to tackle audit failures and resuscitate the ailing reputation of the auditing profession. Moreover, integrating forensic accounting techniques into audit programmes can reduce auditors' reliance on management information, providing auditors and management with superior reliability akin to absolute assurance (Fletcher et al., 2021). As it is, audit failures erase the comfort expressed through an unqualified audit opinion. To restore this comfort, a step-change in how financial statement audits is conducted and the re-education of auditors is critical to the survival of auditing as a valid agency instrument.

1.4 Research Aim, Objectives, and Questions

1.4.1 Research Aim

The aim of this study is to explore how forensic accounting skillsets can be integrated into UK statutory audits and auditors' education. This is intended towards bridging the competency gap in their fraud detection abilities.

1.4.2 Research Objectives

To achieve the research aim, the following specific objectives will be addressed:

1. Determine the key forensic accounting skillsets relevant to enhancing auditors' education and training from key stakeholders.
2. Produce a programme for auditors' fraud detection competency, and
3. Develop a programme for continuous certification of auditors' forensic accounting skillsets. This will ensure that future complacency in audit quality does not impact the relevance of forensic accounting skillsets to fraud detection.

1.4.3 Research Questions

The study is focused on answering the questions:

1. What are the key forensic accounting skillsets needed to fill auditors' fraud detection competency gap?
2. How and at what stage(s) of auditors' education can these skillsets be introduced into auditors' undergraduate and continuous development programmes?

The aim, objectives, and research questions are grounded in the ambition to develop a holistic solution to improve audit quality. Achieving a holistic solution that is actionable in practice can reposition the auditing profession's relevance to the financial reporting system, ensuring stability in financial markets. Ultimately, the reputation of auditors, and the audit ecosystem, can be sustained for future generations.

1.5 Contested issues of governance, expectation gap, accounting practices

1.5.1 Governance and auditors' loyalty dilemma

Auditors' dual role as consulting and advisory service providers cum their attestation and assurance responsibility to shareholders hold a fundamental dilemma to the issue of governance and control with respect to audit quality (Tillman, 2009). Hence, the discourse on expectations from auditors becomes two-dimensional. Knechel (2022) articulates this two-dimensional view referring to auditing as either an industry (tending to commercial empowerment) or a profession (fulfilling a public service). This means that what is expected of auditors from an organisation's executives' perspective (commercial),

conflicts directly with their obligation to existing and potential investors regarding the organisation's financial transparency (Abdelhak et al., 2019).

In essence, it can be said that corporate executives are able to 'pull the strings' by swaying auditors' loyalty affinity from an economic or commercial empowerment standpoint. In practice, this pendulum of loyalty dilemma (i.e., towards executives or investors) can impair the objectivity and independence of auditors (Abdelhak et al., 2019). Ultimately, their sensitivity to errors or underlying context of financial assumptions tends to be compromised.

Nonetheless, auditors' engagement as trust mediators, intervening in the distrust and dysfunctional relationship between an organisation's management and its owners, cannot be relegated on account of corporate power and control dynamics. In fact, the corporate power and control dynamics can be seen as the foundation of information asymmetry propounded by Jensen and Meckling's (1976) agency theory (Soltani, 2014). In other words, the controlling power of corporate executives is not limited to their interactions with auditors (Tillman, 2009; Soltani, 2014).

For instance, in the 2002 Enron fraud scandal, the executives were noted to have exerted immense power over the US parliament, the financial institutions and financial analysts, the Security and Exchange Commission and the external auditors. Arguably, auditing and audit engagements should precede any other commercial interaction that may transpire between auditors and corporate executives in the interest of economic and financial market stability.

1.5.2 Expectation for fraud detection: auditors or corporate executives?

From auditors' perspective, the wider discourse on 'expectation gap' borders on the responsibility of corporate leadership to detect frauds rather than the auditors. Again, this presents another dilemma in that financial statement frauds are found to be perpetrated by the same leadership charged with governing the organisation (Soltani, 2014; Tillman, 2009). As Tillman (2009, p.378) puts it, "the financial interests of executives … conflicted with those of shareholders". Hence, such expectation (of corporate leaders responsible

for fraud detection) may be futile and tends to contradict the premise of information asymmetry or agency theory altogether.

From historical records dating back to the 16th century, fraud detection was central to auditors' role; however, the recognition of this responsibility has been elusive, over time, in emerging regulatory standards (Chong, 2013). As such, the absence of explicit clarity on auditors' responsibility to detect frauds has been contested as contributing to audit failures (Ruhnke & Schmidt, 2014). Further, despite public expectation of auditors' responsibility to detect fraud in financial statements, auditors lacked the readiness and competence to carry out the mandate (Chong, 2013). This standpoint can be reasoned from the ambiguity of International Standard on Auditing - ISA 240, regarding auditors' obligation in financial statement audits. Here, the IAASB clearly puts the onus for fraud detection on the corporate leaders.

Nevertheless, as part of the ongoing UK Government intervention, some recommendations from the Brydon report (2019) appear to address the ambiguity of auditors' role in uncovering and reporting financial statement fraud. Particularly, Sir Brydon recommended that ISA 240 be reformed to explicitly include auditors' mandate to detect and report frauds in financial statements (Brydon, 2019). With this clarity, the contestation of 'expectation gap' can be resolved. Ultimately, the more pertinent issue of auditors' competence in uncovering fraud can take centre stage in restoring the credibility of audits.

1.5.3 Accounting practice of materiality and its effect on audit quality

Materiality is a fundamental concept in accounting theory and considered "the benchmark of financial statement accuracy" (Doxey et al., 2020). The International Accounting Standards Board (IASB) defines an information as material "if omitting, misstating or obscuring it could … influence the decisions … primary users of general purpose financial statements make … "(IFRS, 2018). In other words, materiality informs the basis of determining the completeness and compliance of financial reports. It also dictates the need for post-balance sheet adjustment, including restatements in the event of omissions or unintended or intentional misstatements (Doxey et al., 2020).

Interestingly, the relevant auditing standard (ISA 320) does not specifically define materiality. Instead, it provides a guide for auditors' understanding of key elements that inform the context of establishing materiality in the planning and conducting of an audit (see FRC, 2022). The dissonance in the accounting and auditing standards opens grounds for relative interpretation of how financial report preparers (client management) and auditors adopt materiality levels and overall materiality.

In practice, materiality level can be subjectively understood; defined arbitrarily, depending on the organisation's business sector, size, applicable accounting policies, and the underlying context of the financial transaction (Edgley et al., 2015; Eilifsen & Messier, 2015). This implies that what is considered material in financial reporting can be discretionarily assessed and determined, or the basis of assumption rationalised by corporate executives or the auditors. To this end, auditors are faced with the onus to adjudge the appropriate materiality threshold to be applied to the financial statements, considering key financial statement users.

The subjectivity of materiality levels poses a threat to audit quality as misstatements that fall under the materiality radar may remain undetected. Where the non-detection is repeated over time, the cumulative omission or misrepresentation of such 'immaterial' transactions can result in fraud-led organisational failures. Consequently, the materiality threshold provides a ground for failed audits. Notwithstanding this possibility, auditors' competence in fraud detection skillsets can present stakeholders with sustainable comfort in auditors' capability to uncover material and presumed immaterial financial statement fraud.

1.6 Theoretical Framework

This study applies Kolcaba and Kolcaba's (1991) Comfort Theory to make sense of participants' views on how forensic accounting skillsets can be integrated into UK statutory audits and auditors' education. Comfort, in the nursing context, is a key reflection of the experience that patients and their families both seek and expect from healthcare practitioners (Boudiab & Kolcaba, 2015). Accordingly, it is what nurses and healthcare

teams strive to deliver to all patients and their families (Boudiab & Kolcaba, 2015). Comfort theory characterises three dimensions of comfort: (1) state, (2) relief, and (3) renewal (Kolcaba & Kolcaba, 1991). *Comfort as a state* reflects the demonstration of ease or satisfaction; *comfort as a relief* reflects a shift from an uncomfortable position; *comfort as renewal* represents the capacity to repeat, refresh and strengthen a performance criterion (Kolcaba & Kolcaba, 1991).

Audit failures reveal auditors' shortcomings in effectively identifying and reporting discrepancies in financial statements to shareholders (Detzen & Gold, 2021). These failures can be said to erode shareholders' comfort in auditors' professional capacity to uphold their agency responsibilities in financial statement reporting. This study argues that auditors can only disseminate comfort when they are equipped to detect fraudulent financial statement practices through tailored educational and professional training programmes in forensic accounting.

Comfort theory presents a comprehensive lens to understand how forensic accounting skillsets can be integrated into UK statutory audits and auditors' education. Understanding the perceptions of auditors, educators, forensic accountants, and professional body specialists (i.e. regulators) through the lens of comfort theory facilitated the theoretical development achieved in the study. The forensic accounting MSR concept and the educational and continuous professional training programme provides a holistic solution that can be adopted at all levels of auditors' academic and professional development.

Fletcher et al.'s (2021) Agency Diamond model revealed the key stakeholders with agency relationship for the credibility of financial statement reporting: shareholders, directors, auditors, and regulators. Auditors are entrusted with the responsibility to assure shareholders of the financial condition of their investment interest. The auditing regulatory and professional bodies (e.g., FRC, ICAEW) play a key role in standard setting, quality review, and driving professional examination curriculum. This implies that the regulators have a part to play in ensuring auditors uphold their professional responsibilities in fraud detection and remain relevant to financial reporting credibility. As such, auditors and their regulatory bodies tend to be directly impacted by failings in financial statement audits.

These participants are identified as key interest groups, based on Fletcher et al.'s (2021) Agency Diamond model, relevant to achieve the study's aim.

1.7 Contribution of the study

The significance of this study lies in its potential to contribute to the existing body knowledge in the field of forensic accounting, financial statement fraud detection, and audit quality. By exploring the integration of forensic accounting skillsets and mindset into auditors' education and continuous training, this research provides valuable insights that can inform both academic and practical professional applications. The findings of this study are expected to advance theoretical frameworks within the discipline area and improve audit practices. Additionally, the findings are expected to strengthen the understanding of the connection between forensic accounting mindset and skillsets to detect fraud and inform regulatory considerations concerning audit quality and auditors' education.

This study makes valuable contribution to how forensic accounting skillsets are understood. Prior studies on forensic accounting skillsets, such as DiGabriele (2008), Hegazy et al. (2017), and Lal Bhasin (2013) merely highlighted prominent forensic accounting skillsets based on rankings. This study provides a novel perspective by identifying the interconnection of individual skills around a central purpose. This led to the formation of the four forensic accounting skillset pillars – Questioning, Conscientious, Intellectual reasoning, and Psychological Observation skillsets. Each skillset pillar comprises of several distinct skillsets. In addition, this study recognised the uniqueness of each forensic accounting skillset, highlighting their complementing and non-substitutable nature. This led to the researcher's development of the forensic accounting interrelationship map. The interrelationship of the skillsets can help educators, audit firms and professional training providers in curriculum planning and simplifying their approach to auditors' skills development to improve detection of fraudulent misrepresentations.

This study makes visible the significance of a fraud detection mindset to how forensic accounting skillsets are applied in detecting fraud. The findings established that auditors

require a mindset shift, in addition to possessing the forensic accounting skillsets, to improve the quality of audits. This led to the creation of the forensic accounting mindset-skillsets relationship (MSR) rhombus. There has been no known study to have conceptualised the essentiality of a fraud detection mindset to the application of forensic accounting skillsets to detect fraud or misrepresentations in financial statements. The forensic accounting MSR concept is a valuable tool in communicating the significance of upskilling auditors to enhance the quality of audits. Consequently, the MSR concept contributes to audit practice, auditing education, professional development programmes, and academic literature. It holds significance to how auditors and the profession's practitioners can relate to the 2021 ISA (UK) 240 clarification on auditors' responsibility to detect material misstatements.

This study addresses a competency gap in auditors' education by developing an indicative educational programme to incorporate the forensic accounting skillset pillars and a mindset to detect fraud into auditors' education and continuous professional development training. No studies have been identified that outline a specific programme for incorporating forensic accounting mindset and skillsets into auditors' education and professional development training. The forensic accounting educational and continuous development programme will equip auditors with the forensic accounting MSR concept, improving their capability in gathering audit evidence. It will also improve auditors' competence in interpreting the underlying significance of audit client managements' financial assumptions.

The educational and continuous training programme can be integrated progressively into auditors' academic curricula, the professional qualification examination studies, and apprenticeship training. It can also be integrated into audit firms' professional development training courses starting at the graduate trainee level. This ensures that all entrants into the profession are equipped with the forensic accounting MSR education irrespective of their pathway into the profession. This contribution is valuable to academic institutions, audit firms, and the profession's institutional bodies.

The study contributes to the growing adoption of Comfort Theory (Kolcaba & Kolcaba, 1991) as a domain theory in auditing and forensic accounting fields. Carrington and

Catasús (2007) first introduced this theory in the auditing domain as the audit comfort framework. This study extends knowledge on the theoretical currency of comfort theory in auditing and forensic accounting research fields. It contributes a holistic approach to addressing the issue of auditors' dwindling performance in uncovering fraudulent misrepresentations in financial statement auditors. Consequently, auditors, educators, professional trainers, and regulators can adopt the forensic accounting MSR comfort orbit to agency diamond actors in academic and professional anti-fraud trainings and audit quality improvement practices.

The study holds significant contributions to the sparse knowledge on the integration of forensic accounting mindset and skillsets to auditors' educational and continuous professional trainings. Prior studies have focused on forensic accounting skillsets or mindset as single constructs. Additionally, there is no known study that has explored this integration in the UK context. The contributions hold far-reaching implications for auditing education, audit practice, regulatory bodies, and other stakeholders in the audit ecosystem.

1.8 Structure of the Thesis

The thesis is organised into seven chapters. Chapter Two reviews relevant literature on audit quality determinants with a focus on audit failures as an indicator of low-quality audits. The chapter also examines forensic accounting skillsets and discusses the need for auditors' education and training in this area. The study's anchor on Comfort Theory (Kolcaba & Kolcaba, 1991) and Agency Diamond model (Fletcher et al., 2021) as underlying framework will be presented. Chapter Three outlines the study's methodological foundation. Here, the justification for adopting a neo-empiricist theoretical position is detailed, explaining its role in guiding the overall qualitative research design.

Chapter Four presents the research findings, detailing the processes of data preparation, analysis, and the emergence of themes from the collected data. A comprehensive discussion of the generated themes is then presented in Chapter Five. First, Chapter Five examines the themes on the forensic accounting skillsets and the development of the

forensic accounting mindset-skillsets relationship (MSR) rhombus concept. Second, the chapter discusses the theme, Modalities for integrating the forensic accounting MSR agenda in auditors' education and continuous training programmes. Next, the theme, Techniques to incorporate the forensic accounting MSR agenda in auditors' education and continuous development training is discussed. Then, the chapter discusses the final theme, Contents for the forensic accounting MSR agenda.

Chapter Six presents the study's conceptual creations and forensic accounting curriculum programme for auditors' educational and continuous professional training. The final chapter presents the conclusions from the study, the implications, and contributions of the study. This chapter also discusses the limitations of the research and offers recommendations for future studies.

Chapter Two: Literature Review

This chapter presents a deep dive into several existing studies on audit quality, forensic accounting skillsets and auditors' need for education and training to improve their performance in detecting financial statement misrepresentations. The chapter begins with an extensive justification of comfort theory, and the supporting model, agency diamond, as the underlying framework for the study. The next four sections, 2.2 to 2.5, examine audit quality and establish the context of what audit quality is for this study. The representativeness of commonly adopted proxies and determinants for audit quality will be examined. Then, the position of audit failure, which is considered most suitable for the scope of this study, will be presented. This will be followed by a brief discussion on individual auditors and their connection to the audit quality discourse. The following two sections, 2.6 and 2.7, discuss forensic accounting skillsets identified in prior studies, and establish auditors' need for these skillsets to uncover fraudulent practices effectively. Section 2.8 presents the case for integrating forensic accounting skillsets in auditors' education and training. The chapter closes with a summary of the key discussions evaluated.

2.1 Theoretical Framework

To make sense of the research problem and address the research objectives, this study leans primarily on Kolcaba and Kolcaba's (1991) comfort theory as its domain framework. Comfort theory underlies the objective sense-making of the forensic accounting skillsets requirement for auditors, and how these can be incorporated into their education and training. First, a contextual introduction to comfort theory will be presented. Next, to establish a justification for the adoption of comfort theory, a brief review of some of the prevailing theories in existing studies within the topic area will be examined. Then, an interplay of comfort theory with the agency diamond model will be explained.

2.1.1 Contextualising Comfort Theory as an underlying domain framework

Theoretically, Boudiab and Kolcaba (2015) describe comfort as a superior indication of the experience patients and their families desire and require of health care practitioners.

In turn, it is what nurses and health care members seek to provide to all patients and their families (Boudiab & Kolcaba, 2015)

Comfort as a theory was first introduced as a concept in nursing research by Kolcaba and Kolcaba (1991). The authors established three aspects of comfort in nursing as (1) state sense of comfort, (2) relief sense of comfort and (3) renewal sense of comfort. Taking from the authors' attribution table (see Kolcaba & Kolcaba, 1991, p. 1308); the state sense can be characterised as satisfying *"behavioural evidence criteria for ease, contentment, and peace"* (p.1308, Table 3-14). The relief sense can be attributed to a shift in condition from an uncomfortable position (i.e., eliminating discomfort). The renewal sense is satisfied when a performance criterion is rekindled, strengthened, or regenerated.

External auditors act as mediators of trust in their role as independent assessors of an organisations' financial integrity. This means that shareholders and other users of financial statements trust the opinion of auditors in making decisions regarding audited organisations (Hoos et al., 2018). Pentland (1993) claimed that the 'ritual' of audit processes is focused on producing comfort at each stage of an audit exercise. Comfort, therefore, becomes the 'conscience' of an audit outcome, which triggers the auditors' opinion on the financial statement and is ultimately transferred to shareholders and the public (Pentland, 1993). Nevertheless, this study argues that the audit rituals can only produce comfort if the auditors are adequately equipped with the appropriate tools in fraud detection, to apply the rituals effectively. In essence, financial statement audits, with the right skillsets of forensic accounting, and a fraud detection mindset, should be an effective means of comfort to all stakeholders.

The link between comfort and financial statement audits seems to have been introduced in Pentland's (1993) experiment. However, Carrington and Catasús (2007) appear to be the first to adopt comfort theory as an underlying theoretical framework in auditing research field. Carrington and Catasús (2007) applied Comfort Theory in examining the process of auditing and auditors' perception of how comfort is produced. The authors established the audit comfort framework, from Kolcaba and Kolcaba's (1991) theory of comfort, as a theory of audit practice. The audit comfort framework therefore

operationalises the theory's practicality, modelling how comfort influences audit decisions and quality. Carrington and Catasús (2007) suggest that an audit is deemed successful when *"comfort on many levels"* (p. 37) is achieved. This means that any comfort attained from a successful audit should be shared, inclusively, by the organisation, its auditors, shareholders, regulatory bodies, and the financial market (Carrington & Catasús, 2007).

Conversely, these stakeholders collectively share the discomfort of an audit failure. The continued audit failings and outcry from policy makers and the public suggest a clear shortcoming in auditors' ability to discover and report irregularities to shareholders (Detzen & Gold, 2021). In other words, failed financial statement audits erode the comfort previously attained by shareholders from an auditors' professional assurance. Therefore, to eliminate this discomfort, the skillsets of auditors must be enhanced to adequately address the shortcomings in their performance in fraud detection.

This is a fundamental change to the norm for auditors and the auditing process. In effect, comfort as a state, relief and renewal (Carrington & Catasús, 2007) can be achieved with the integration of forensic accounting skillsets and mindset in auditors' educational and training programmes. This may provide a possibility of absolute assurance on an organisations' financial integrity. Hence, underpinning this study on the comfort theory establishes the intent to change the narrative on auditors' competence in fraud detection. Consequently, shareholders and the wider society can reinstate their trust in auditors' capacity to deliver on their agency responsibility.

While Pentland (1993) described auditors' consideration throughout an audit process as seeking comfort, Guénin-Paracini et al. (2014) claimed that fear and anxiety precede auditors' attainment of comfort in an audit outcome. Further, Repenning et al. (2022) understood comfort from the perspective of a "short-lived" (p.242) emotional disposition to the audit outcome. However, Kolcaba and Kolcaba (1991) submit that producing comfort should go beyond the discourse of emotions or transient feelings, stemming from the resolution of a discomfort, fear, or anxiety. Aligning with Kolcaba and Kolcaba's (1991) position, Carrington and Catasús' (2007) comfort theory framework suggest that comfort is non-static or "binary", and should be viewed based on its construct, definition, and

characterisation (p.36-37). To this end, the three elements of comfort defined by Kolcaba and Kolcaba (1991) and adapted to auditing by Carrington and Catasús (2007) are examined in more details and in relation to this study.

2.1.1.1 The relief element of comfort

Relief relates to the actions that alleviate discomfort (Kolcaba & Kolcaba, 1991). Comfort, in this sense, is seen as an active element intervening to eliminate any uncertainty in auditors' capacity to detect fraud during an audit process. This study argues that the element of relief is attainable by resolving the competency gap in auditors' fraud detection education with the specialised skillsets of forensic accounting. In effect, auditors' competency in discovering irregularities can provide a holistic relief to the key stakeholders and the market economy. Holistic relief, in this sense, would be both immediate, upon completing and in reporting the audit, and retrospectively, in the absence of audit failures. Therefore, this holistic relief distinguishes comfort from Repenning et al.'s (2022) *"quick to appear and to subside"* (p. 243) perspective of emotions.

The relieving comfort of forensic accountants' fraud detection competency appears to be revealed in Jenkins et al.'s (2018) study of external auditors and forensic experts in the United States (US). Here, the authors found that involving forensic expertise in brainstorming, interviewing, procedure testing, and analysing data when searching for fraud, results in a sense of relief (p.1788). In other words, auditors rely on the specialised skillsets of forensic experts to fill their competency gap when conducting financial statement audits (Jenkins et al., 2018).

Notwithstanding, Jenkins et al. (2018) recognised auditors' underlying awareness of their incompetence in detecting fraud, which could jeopardise an audit outcome without the involvement of forensic expertise. Unlike the authors, the intent of this study is not to "augment" (p. 1786) the skills of auditors with the support of forensic experts on audits. Instead, it is about re-educating auditors by integrating relevant fraud detection skillsets and mindset into their formal and professional education. Consequently, having the competency to uncover financial anomalies directly should eliminate the *"perceived failure*

by the audit team" (Jenkins et al., 2018, p. 1787); thereby empowering auditors to live up to the expectation of their profession.

2.1.1.2 The state element of comfort

The state of comfort relates to the conditions that produce or construct the need for comfort (Kolcaba & Kolcaba, 1991). The state of comfort therefore considers all the likely effects of the comfort attained; like ease, contentment, and peace highlighted by Kolcaba and Kolcaba (1991). In the context of this study, the state of comfort can be applied to the collective implications of auditors' opinions on the key stakeholders (represented in the agency diamond model, section 2.8.3.) in an audit engagement. By considering all conditions, the state element of comfort depicts a consciousness of a required diligence obligated by auditors' mandate in fraud detection as indicated in ISA (UK) 240.

Implied in the Brydon report, this mandate, to assure truth and fairness and the absence of material misstatements including those due to fraud, should be at the fore of auditors' responsibility in any audit assignment (Brydon, 2019). In essence, acknowledging all possible conditions, armed with the relief of competence, can drive auditors' disclosure or reporting of financial inconsistencies to the shareholders. Thus, auditors can fulfil their agentive responsibility by transferring the comfort of a disclosure (qualified or unqualified) to the key interest groups.

According to Carrington and Catasús (2007), attaining the state of comfort entails auditors deliberating about right or wrong judgement calls. However, this study suggests that auditors can leverage on forensic accounting skillsets to eliminate individual predispositions that can result in contestable discretionary judgement. For instance, in a recent audit, KPMG refused to sign-off Adler's, a German company, 2021 audited accounts in Germany. According to the Financial Times, the refusal came as a result of KPMG's use of forensic experts to investigate financial misrepresentations in the client's activities (Storbeck, 2022). By withholding their attestation, KPMG effectively fulfilled their agentive responsibility, thereby transferring a state of comfort to Adlers' shareholders and the public.

It is important to note that the state element of comfort in the above KPMG case, is not on the actions of the fraud organisation. Rather, as defined by DeAngelo (1981), it is on the commitment of the auditors to discover and report an organisation's fraudulent activities to its shareholders and the wider society. Interestingly, KPMG had audited the client organisation, Adler, in previous years without detecting or reporting any misrepresentation. Notably, KPMG's engagement of forensic experts to fill their (auditors) competency gap in detecting Adler's fraud affirms Jenkins et al.'s (2018) findings on forensic experts' "cognitive authority" (p.1788) as ascribed by auditors. Notwithstanding, by having the forensic accounting skillsets and developing a fraud detection mindset, auditors can be equipped to directly uncover such misrepresentations.

Whereas Carrington and Catasús (2007) argue that the state element of comfort is about auditors finding grounds to give an unqualified opinion, an alternative perspective is also possible. Auditors, in recognising all conditions, should be comfortable enough to give a qualified (negative) opinion. With the right skillsets, comfort is no longer a matter of a popular position, but a resolute or informed position to report breaches or misstatements. Consequently, the "peace of mind" (Kolcaba & Kolcaba, 1991, p. 1306) communicated to shareholders through the auditors' decision can secure their relevance as valued agency partners.

2.1.1.3 The renewal element of comfort

The renewal element of comfort involves empowering, strengthening, supporting, and influencing improvements (see Kolcaba & Kolcaba, 1991; Tutton & Seers, 2003; Williams & Irurita, 2006). To Tutton and Seers (2003, p.692), *"comfort … incorporates growth and development …"*. Adapting to this study, renewal entails a refreshing or updating of auditors' competency, and an awareness of prevailing conditions that can affect the comfort previously transferred to the stakeholders (Carrington & Catasús, 2007).

This means that the renewal element of comfort appears to uphold Chandler & Edwards' (1996) claim that auditing should be relevant to address current trends and challenges. In essence, comfort as renewal holds auditors accountable in deploying their education in fraud detecting skills. Jenkins et al. (2018) revealed that engaging forensic experts in

audits results in a more responsive approach to audit matters. They refer to forensic experts' contribution as *"… an effective means of achieving a higher level of comfort …"* (p.1787) in their professional judgement.

With the evidence from Jenkins et al. (2018), this study argues that a higher level of comfort can equally be attained, and renewed, if auditors acquire and develop forensic accounting skillsets and a fraud detection mindset through a re-education and upskilling programme. By incorporating forensic accounting skillsets and mindset development into auditors' education and training, auditors can be readily equipped to improve their performance in detecting misrepresentations. With comfort being renewable, auditors, their regulators and professional bodies, can be committed to the non-repeat of audit failures that lead to public trust erosion.

2.1.2 Other theories in audit quality, forensic accounting, and financial statement fraud domain

Existing studies in the audit quality, forensic accounting, and financial statement domain have adopted various theories to underpin their research goals. One of the prevailing domain theoretical frameworks in audit quality or financial statement fraud research field is Jensen and Meckling's (1976) agency theory (for instance, see Awolowo, 2019; Ghafran & O'Sullivan, 2017; Richardson et al., 2022). Awolowo (2019) adopted Jensen and Meckling's (1976) agency theory and Cressey's (1950) fraud triangle model to make sense of the need for auditors to evolve from the traditional accounting system to a forensic accounting system. However, the agency theory and fraud triangle model are not appropriate for understanding the considerations for a holistic solution that this study seeks to achieve.

Awolowo (2019) extended the agency theory by developing the agency triangle model, proposing that auditors be the third end of the agency relationship. This model place auditors as mediators in the agency problem between shareholders and directors. It emphasises the assurance and investigative roles auditors are statutorily required to play as a duty to shareholders; a duty of trust that should extend comfort to the financial market. Awolowo's (2019) agency triangle model appears to be successful in making

sense of the role of auditors in financial statement audits and in relating to his proposition of a forensic accounting system. However, the model is not appropriate as a domain theory to provide sufficient interpretive depth regarding the fundamental forensic accounting skillsets, the criticality of a fraud detection mindset, and the comprehensive educational and training programme for auditors.

Several other underlying theories are adopted in studies in the auditing, audit quality, auditors' skills, forensic accounting, and financial statement fraud detection research areas. For instance, institutional theory (see Corten et al., 2018; Dwyer et al., 2024; Richard Baker et al., 2014), stakeholder theory (e.g., Brooks et al., 2022; Law, 2011), and information processing theory (see Rowe, 2019). Also, human capital theory (e.g., Samagaio et al., 2024), socio-economic theories of conventions (see Brivot et al., 2018), or experiential learning theory and signature pedagogies theory (see Alshurafat et al., 2020).

Despite the variety of theoretical frameworks utilised in current literature and commonly observed within the discipline, comfort theory, originating in nursing research, appears to be gaining recognition as an underlying theoretical tool to address auditing related research problems. For instance, besides Carrington and Catasús (2007) and Jenkins et al. (2018), Commerford et al. (2016) and Sarens et al. (2009) also adopted comfort theory as the underlying framework for their studies. Commerford et al. (2016) revealed the discomforting effect of real earnings management issues on auditors and identified how auditors attempt to ease the discomfort. Sarens et al. (2009) established that the involvement of internal auditors in organisations' control processes, and their assurance on the validity of the control measures, provide comfort to audit committees. These studies therefore established comfort theory as a relevant domain theory in auditing, audit quality, and forensic accounting discipline areas.

Additionally, the aforementioned studies that utilised comfort theory employed qualitative research designs to achieve their study objectives. This implies that the notion of comfort can be constructed and understood from the perceptions of the subjects investigated. Consistent with this notion, this study leans on the comfort theory lens to make sense of the collected data and achieve the overarching aim of the study.

In sum, like in nursing, auditing can be considered as an intervention resulting in comfort to auditors (see Carrington & Catasús, 2007; Jenkins et al., 2018; Pentland, 1993; Sarens et al., 2009). Beyond auditors, the comfort should extend to the shareholders who entrusted them with agentive responsibility, and the directors of the client organisations. Also, the regulatory bodies, who monitor their performance and hold auditors accountable for deviations, and the profession's institutional bodies, are impacted by this comfort. These actors can therefore be seen as inter-connected in the audit quality discourse and are directly impacted by any failure in financial statement audits (Brydon, 2019; Fletcher et al., 2021).

2.1.3 The agency diamond model – implications of fraud to the main beneficiaries of comfort in the forensic accounting skillsets and mindset agenda

Fletcher et al.'s, (2021) agency diamond model is considered appropriate as a supporting model to define the key stakeholders with responsibilities towards improving audit quality. These primary stakeholders are auditors, regulators, directors, and shareholders. The agency diamond model is used to illustrate the main beneficiaries of the state, relief, and renewal elements of comfort. Comfort to these beneficiaries can be derived from the integration of fundamental forensic accounting skillsets and mindset in auditors' education and continuous development trainings. With the integration agenda, auditors can be appropriately equipped to detect misrepresentations, including those indicative of fraud, in financial statement audits.

The UK Business, Energy and Industrial Strategy's (BEIS) recent consultation paper recognised professional regulators as key stakeholders in the move for reforms in statutory audits (see BEIS, 2021). This inclusion extends Jensen and Meckling's (1976) agency theory actors (i.e., shareholders, directors) and Awolowo's (2019) agency triangle (adding auditors to agency theory), to form Fletcher et al.'s (2021) agency diamond model. When financial statement fraud goes undetected, the aftermath of a fraud scandal has far-reaching implications for the fraud organisation and its' shareholders, the directors, as well as the auditors and their regulatory bodies. A brief evaluation of the implications of fraud or accounting scandals to the key stakeholders (shareholders, directors, auditors, and regulators) is covered in this section.

Firstly, the fraud organisation suffers earnings and reputational loss (Farber, 2005), which tends to impact their credit ratings or access to debt financing (Detzen & Gold, 2021). This results in an erosion of market value (Lai et al., 2019) which can lead to the organisation's eventual collapse (Rezaee, 2004). Where such fraudulent organisations survive the market and reputational loss, Farber (2005) suggests that the organisation pays a high price to rebuild its market prominence. The author further suggests that the fraud organisation may struggle to reinforce governance and restore public trust in its financial reporting.

In addition, the ripple effect on the fraudulent organisation's supply chain may be more damaging. The Carillion collapse, resulting in the delayed completion of Birmingham and Liverpool hospitals is an example of the lingering effect of an accounting scandal or fraud aftermath on the wider society (Syal, 2020). Ultimately, surviving the scandal does not guarantee an earnings and reputational redemption. As such, equipping auditors with the forensic accounting skillsets and mindset to detect fraud would result in comfort to shareholders and the wider society. This means that shareholders can confidently rely on the professional judgement of auditors on financial statements, realising a state, relief, and renewal sense of comfort.

Secondly, the directors of such fraud organisations are not exempt from the reputational loss resulting from a fraud scandal. An accounting or a fraud scandal can indicate individual directors' poor governance capabilities and a betrayal of shareholders' trust. This usually prompts the board to replace the 'weakest links' as early as possible as a form of damage control (Farber, 2005; Marcel & Cowen, 2014). However, the damage control is not limited to replacing the exposed board members.

In examining the implications of fraud to boardroom dynamics, Marcel and Cowen (2014) assert that directors with higher reputational capital tend to leave a fraud organisation to safeguard their boardroom legitimacy. Fredriksson et al. (2020) investigated directors in Finland's propensity to select auditors with perceived capacity to protect their reputational capital. They found that where directors have a higher reputational capital at stake, the

quality of audits increases (Fredriksson et al., 2020). In effect, directors, whether culpable or by association, are impacted by the aftermath of an organisation's fraud scandal.

Thirdly, auditors, besides the liability of huge fines, are known to suffer reputational loss, a decline in their client base, and lowered audit fees as an incentive to retain clients (Chan & Song, 2021; Coffee, 2019). Interestingly, reputation is the auditing profession's selling point (Ball, 2009; Rezaee, 2004). In fact, Bergner et al. (2020) refer to an auditor's reputation as *"… a primary signal of quality …"* (p.292). Thus, audit failures tend to be a violation of auditors' professional and reputational standing. This implies that auditors damage their individual and firm reputation when accounting scandals, undetected during audits, are exposed (Brivot et al., 2018). As such, it is not surprising that the repercussions of a fallen reputation triggered a series of *"… powerful market mechanism …*" (p. 291) that led to the eventual collapse of Arthur Andersen (Ball, 2009).

In addition, the liable audit firm's remaining clients are also severally affected by virtue of association. The earnings report of these retained clients may be subjected to lower market performance due to an implied suspicion of similar undetected misrepresentations in their financial results (Lai & Gul, 2021; Chaney & Philipich, 2002). The retained clients may likely opt to benefit from the lower audit fees offered as retention incentive by the liable audit firm. Nevertheless, to protect their own reputation and market value, these retained clients are faced with the decision to change audit firms (Bergner et al., 2020).

Cahan et al. (2021) refer to this situation as *"the residual risk"* of auditors' inability *"to attract and retain clients"* (p.753) in the aftermath of a failed audit. As such, there is a further impact on the market standing of the implicated audit firm. This shows that audit failures and the incidental reputational loss result in loss of revenue for audit firms (Bergner et al., 2020; DeAngelo, 1981). With lower revenue and possibly reduced clientele, a liable firm is still faced with the cost of restoring its reputation and market standing after a failed audit scandal (Bergner et al., 2020). Either way, an implicated auditor, their firm, and the remaining clients of liable audit firms are not exempt from the fallout of an audit failure.

Interestingly, Hale and Truelson (2023) revealed a different perspective in their case study on the reputational effects of KPMG's inspection cheating scandal on their acquisition of clients following the unethical conduct. The authors found that indeed KPMG suffered reputational loss through lower client onboarding when compared with other top tier audit firms. However, compared to non-top tier audit firms, KPMG appears to have onboarded more new clients (Hale & Truelson, 2023). The authors' findings provide a distinct argument on the implications of auditors' reputational damage to their ability to attract and retain clients following a scandal. If auditors are willing to acquire new clients with higher risks or existing financial statement concerns to preserve their revenue stream or market share (Hale & Truelson, 2023), the risk of audit failures persists.

That said, Lai and Gul (2021) examined whether Deloitte Hong Kong lowered its audit fees to clients following an alleged fraud scandal which the firm failed to detect in a client audit. They found that the liable audit firm's (Deloitte) reputational damage resulted in lower audit fees from its remaining clients for an extended period after the scandal. The authors suggest that the tendency for audit fee reduction is more pronounced when the liable auditor is not a leading firm.

The studies by Hale and Truelson (2023), and Lai and Gul (2021), reveal the implications of failed audits to auditors. Auditors are at the forefront of reputational loss with consequences to their earning potential and market standing. Moreover, failed audits speak directly to auditors' competence in identifying misrepresentations and the underlying context of clients' assumptions on financial estimates. Hence, achieving a state of comfort, the relief of comfort, and renewing the comfort are paramount to auditors' continued relevance to the financial markets and indeed the socio-economic stability of a nation. This makes auditors the first line recipient of comfort (Jenkins, et al., 2018) when they are rightly educated and continuously trained, equipped with the forensic accounting skillsets and mindset, to detect misrepresentations.

Lastly, the auditing profession's regulators are also impacted by audit quality issues and audit failures. The audit profession and auditing processes are hinged on the Standards and Practices defined by the Regulatory bodies or Standard Setters (e.g., the Financial Reporting Council, FRC, in the case of the UK). This means that where audits fail, the

actions or inactions of the regulatory bodies also come under scrutiny from a nation's government (due to the economic implications of corporate collapse), investors, and the wider society (Alberti, 2021).

The FRC's 2021 audit quality inspection report revealed that twenty-nine percent of UK audits are below quality expectations (FRC, 2021). According to the 2024 report, thirty-one percent of audits conducted in the UK are below quality expectations (FRC, 2024). This result underscores the UK government's concern about the effectiveness of audits in detecting and reporting financial misstatements, and the capacity of the regulators to refocus the profession (Fletcher et al., 2021). Also, Alberti (2021) and Fletcher et al. (2021) allude to the need for the FRC, or its replacement, to deliver measures that can restore comfort in the auditing profession, which it regulates. This reflects a regulatory body's significance in steering the profession's conduct and accountability.

In effect, audit regulators are equally exposed to reputational decline in failing to effectively regulate the profession, thereby contributing to the spate of fraud and accounting scandals (Dunne et al., 2021). This could lead to pressures on the regulatory bodies to proffer solutions to the dwindling trust in auditors, to ensure their continued relevance to the financial markets (Chan & Song, 2021). Auditing is a highly regulated profession. It means that the involvement of the profession's regulators, including the institutional bodies, is expedient to achieve any change in the status quo education, training, and field practices. Hence, by having both auditors and their regulatory body as key stakeholders in the audit failure discourse, their focus and actions on improving audit quality can be better aligned (Fletcher et al., 2021).

The above imply that audit failures have repercussions for the 'victim' organisation, its board, the auditors and its existing clients, the audit regulatory bodies and the shareholders. As such, the need for comfort in financial statement audits goes beyond improving audit quality for just the auditing profession. Collectively, these stakeholders have something to gain (i.e., can be comfortable) when audits go right. To this end, the agenda of auditors' fraud detection competency should be viewed as inclusively beneficial to all the stakeholders modelled in Fletcher et al.'s (2021) agency diamond.

Persisting audit failures put key stakeholders' reputations at risk. The reputational impact on these stakeholders highlights the complexity of their relationships and roles, as shown in the agency diamond model. In reality, multi-party interest groups often face challenges in reaching solutions that satisfy all parties (Nicol, 2018). This underscores the need for key actors to unite around a shared objective. The on-going UK interventions on improving statutory audit quality offer a common ground to align stakeholders' interests towards a sustainable solution to improve audit quality.

Among the stakeholders discussed in this section, auditors are the ones entrusted with the mandate to represent the interests of shareholders. They are obligated to exercise their independent professional judgement on financial statements, as trust intermediaries between shareholders and those charged with governance (i.e., directors). This makes auditors the first recipients, or beneficiaries, of comfort emanating from a well-founded professional judgement; through the inclusion of forensic accounting skillsets-mindset in their educational and professional developmental programmes. Therefore, it is important to understand from auditors what forensic accounting skillsets are essential to enhance their capability in detecting misrepresentations, whether errors or fraud. Equally, auditors' opinions are vital to discovering how the forensic accounting skillsets can be integrated into their education and developmental trainings.

Similarly, the regulatory bodies governing the audit industry (for instance, FRC in the UK) are instrumental in shaping auditors' operational practices. In addition, the regulatory bodies, along with the profession's institutes (e.g., ICAEW in the UK), play a key role in determining auditors' educational, professional, and training requirements. As such, the perceptions of this group of stakeholders, together with auditors, are pertinent to the forensic accounting mindset-skillsets agenda to improve the quality of audits.

The overall driver of the recent UK consultations and discussions on audit quality is to ensure that auditors can confidently assure and communicate the comfort that financial statements are free of fraud or erroneous misrepresentations. The focus is then on shareholders, in the first instance, being comfortable with auditors' judgement regarding the integrity of financial reports. This comfort can thus be shared with directors,

regulators, the financial market, and the wider society. Then again, where there are accounting irregularities, auditors can be comfortable in arriving at their professional judgement and disclosing the breach in the interest of shareholders and the market economy.

Thus, equipping auditors with a forensic accounting mindset and skillsets could significantly improve the audit process, thereby advancing the quality of audits. This is regardless of whether the audit outcome is a qualified or an unqualified audit opinion. In effect, understanding the extensive cost of audit failures heightens the need for forensic accounting skillsets as a means of comfort to these stakeholders and the public. Ultimately, auditors, shareholders and other stakeholders can benefit from the relief, state, and renewal elements of comfort that the upskilling in forensic accounting mindset-skillsets affords. Therefore, interplaying the agency diamond model with comfort theory provides a solid underlying framework to explore forensic accounting skillsets as a holistic connection to comfort for all the stakeholders. This proposition is illustrated in Figure 2.1 below, representing the agency diamond actors' need for comfort.

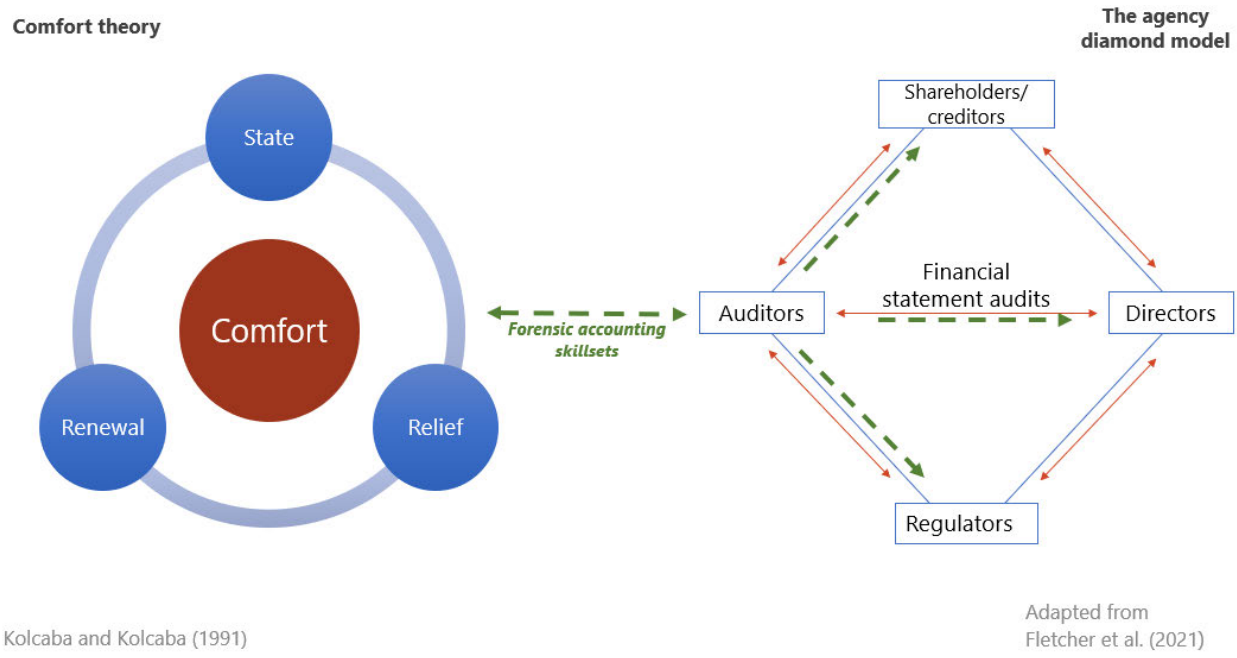


Figure 2.1: Theory of Comfort to key stakeholders in the Agency Diamond
Adapted from Kolcaba and Kolcaba (1991) and Fletcher et al. (2021)

A significant benefit of applying comfort theory in this study lies in the mutuality of the resulting outcome to the recipients. For instance, Boudiab and Kolcaba (2015) suggested that the concept of comfort was initially focused on nursing outcomes from patients' perspective. However, it has over the years evolved to include comfort for nurses themselves, carers, patients' families and others within the nursing ecosystem (Boudiab & Kolcaba, 2015). To this end, Boudiab and Kolcaba (2015, p.278) referred to the theory of comfort as serving an *"important and complex mission …" enabling "a holistic approach … to underpin best practises."*

Again, the authors expressed that comfort theory provides an uncomplicated and rounded form of *"… identifying needs, creating interventions for those needs, and evaluating the effects of the interventions …"* (p. 270). These descriptions by Boudiab and Kolcaba (2015) objectify the aim and objectives of this study. That is, firstly identifying the forensic accounting skillsets needed to enhance auditors' fraud detection competency. Then creating an educational and professional training programme that can be adopted at undergraduate study, audit firm graduate, apprenticeship and continuous training, and professional qualification levels.

Since the educational and developmental training programme consists of indicative contents, there is opportunity to evaluate and adopt fit-for-purpose contents in future. Evaluating the contents would ensure the upskilling agenda meets the development in the forensic accounting environment and remains relevant to the ever-evolving landscape of financial statement fraud. Consequently, comfort theory offers the opportunity to develop a holistic, sustainable solution that would result in comfort, not just for auditors, but for shareholders, regulators, and directors (i.e., the agency diamond actors). Additionally, this comfort extends to other stakeholders within and beyond the auditing ecosystem. Therefore, comfort theory is the most suitable for developing the forensic accounting mindset-skillsets relationship concept, and the educational and continuous professional training programme for auditors.

2.2 Audit Quality

Audit quality can be defined and understood from varying elements, depending on the interest group or authority, and their underlying perspective. Auditing and accounting regulators have attempted to describe audit quality by consolidating the various aspects and concerns on what 'it should be' into working frameworks. The International Auditing and Assurance Standards Board (IAASB) states that "… *audit … relies on competent individuals … to make appropriate judgements … supported by facts and circumstances of the engagement …"* (IAASB, 2014, p. 36). To IAASB, quality in audits means that auditors obtain 'sufficient appropriate evidence' to arrive at a reliable opinion on a financial statement driven by professional values and 'sufficient' skills (IAASB, 2014). This implies that the onus for quality in audits lies with the auditors.

Prominent features from IAASB's description of audit quality are the values and skills expected of auditors. The values are seen to be anchored on the International Ethics Standards Board for Accountants' (IESBA) fundamental principles of the profession, which includes objectivity and professional competence (IESBA, 2018). However, there is no clear definition of what 'sufficient' skills entail, or how to measure the 'sufficiency' of skills that auditors should hold. This means that 'sufficient' skill can be interpreted as being relative to the expectation of an audit assignment. Further, if auditors recognise their responsibility for quality, in line with the IAASB framework, fraud detection becomes a significant component of any audit assignment. Thus, having the appropriate skillsets to enhance their fraud detection competency becomes a fundamental requirement to attaining 'sufficient' skills to deliver a high quality audit.

The United Kingdom (UK) Financial Reporting Council (FRC) takes a different approach to understanding audit quality in its 2008 Audit Quality Framework. Taking a lighter touch to the expectations and responsibility for audit quality, the FRC focused on five (5) structures that influence audit quality and how they can be harnessed: (1) the audit firm culture; (2) the audit team's individual skills and qualities; (3) audit process effectiveness; (4) reliable and useful audit reporting; and (5) extrinsic factors affecting quality beyond auditors' sphere of control (FRC, 2008).

Like the United States' IAASB framework, the element of skills feature as a significant factor for audit quality in the FRC's framework. Here, audit teams are expected to be 'sufficiently' trained in "audit, accounting and industry specialist issues" (FRC, 2008, p. 4). Again, what is considered as sufficient training remains open and with no clear consideration for the need for specialised training in fraud detection skills. Notably, from the FRC's framework for audit quality, there is no precise definition for audit quality. This reconfirms the widely accepted notion that audit quality can be interpreted and understood from differing perspectives (Holm & Zaman, 2012).

Holm and Zaman (2012) analysed issues impacting audit quality as identified from the responses to the discussion paper ('Promoting Audit Quality') that the FRC did not consider. The authors argue that the five structures (stated earlier) recognised by the FRC do not represent the totality of the underlying concerns contributing to audit quality issues. Hence, they consider the framework inadequate with regard to tackling the core concerns of audit quality. Specific to audit team skills, Holm and Zaman (2012) noted that the framework does not consider the implications of inadequate skills to the audit failings exposed in fraud scandals. In this regard, the authors highlighted recommendations from the US Panel of Audit Effectiveness for *"forensic-type procedures on every audit to enhance the prospects of detecting … fraud"* (Holm & Zaman, 2012, p. 52).

From academia, audit quality is widely described as an evaluation by investors and market interest groups, of the likelihood that auditors will combinedly *"(a) discover a breach in the client's accounting system, and (b) report the breach"* (DeAngelo, 1981, p. 186). By this definition, DeAngelo (1981) can be said to have outlined the underlying responsibility of auditors in any audit engagement. The author appears to suggest that auditors are expected to be competent enough to identify misrepresentations (erroneous or intentional). Concurrently, they are expected to be objective and independent enough to report any misrepresentation in a client's financial report. In combining objectivity and competency, DeAngelo (1981) therefore emphasise IAASB's foremost consideration for professional values and commensurate skills as the bedrock for audit quality to thrive.

Besides DeAngelo's (1981) definition, other scholars have suggested definitions for audit quality. Gaynor et al. (2016, p. 5) define a high quality audit as *"… one that provides a*

higher level of assurance that the auditor obtained sufficient appropriate evidence that the financial statements faithfully represent the firm's underlying economics …". DeFond & Zhang (2014) state that a high quality audit indicates a *"greater assurance that the financial statements faithfully reflect the firm's underlying economics, conditioned on its financial reporting system and innate characteristics"* (p. 276). They define audit quality as the *"quality of the auditor's opinion (i.e., assurance) and not the opinion itself."* (p. 281). This implies that auditors' opinion on an organisation's financial state reflects their (auditors') comfort regarding the correctness, completeness and compliance of the organisation's financial activities and records.

In effect, auditors' unqualified opinion should communicate a vote of confidence (or comfort) to shareholders and other financial statement users that 'all is well' with the organisation. Conversely, when the opinion is qualified, the effectiveness of auditors should by no means be diminished. Expressing a qualified opinion should be seen as an auditor's obligated responsibility. This also represents a form of comfort to shareholders and other users of financial statements; in that the agency role of auditors as trust mediators is fully actualised. In essence, providing accurate assurance, whether qualified or unqualified, should communicate comfort to all stakeholders in the interest of a nation's economic stability. When timely, this can forestall an organisation's failure or outright collapse thereby enhancing audit quality.

2.3 Audit quality determinants and proxies

In over three decades of research, there has been no consensus in how to measure or determine audit quality (DeFond & Zhang, 2014). This highlights an agreement among scholars that the quality of an audit is not readily observable (DeAngelo, 1981; Detzen & Gold, 2021). Various determinants of audit quality have been researched without a consensus position over the years (Knechel et al., 2013; Detzen & Gold, 2021). Several authors have classified these determinants and adopted them as proxy measures of audit quality (see Aobdia, 2019).

For instance, DeAngelo (1981) characterised audit quality based on the size of the audit firm. Other scholars have studied auditor tenure (e.g., Vanstraelen & Knechel, 2007) and audit fees (e.g., Ghafran & O'Sullivan, 2017; Knechel et al., 2013) as observable proxies. In addition, Knechel et al. (2013) examined other determinants such as compliance with the Generally Accepted Auditing Standards (GAAS), auditors' remuneration, tenure, or risk assessment. However, irrespective of the proxies, the fundamental issue of undetected fraud in financial statements remains unresolved.

DeFond and Zhang (2014) suggested proxies based on defined characteristics to measure audit quality. Such characteristics are either assessed as inputs that can affect the audit process or outcomes that are revealed of the audit. The following subsections examine some of the inputs and outcome proxies prevalent in the literature.

2.3.1 Input proxies for audit quality

Input proxies for audit quality are usually indicative of clients' basis (outward) of assessing an audit firm for engagement selection purposes (DeFond & Zhang, 2014). From a client's point of view, these proxies define the auditor's 'selling point' or 'market-assessed attributes'. This implies that input proxies tend to be determined based on prominent factors inherent in an audit firm's status attributes. For instance, clients can assume audit quality based on the ranking of the audit firm within the industry (i.e., its size).

By their size, the audit firm giants: Deloitte, PricewaterhouseCoopers (PWC), Ernst and Young (EY) and KPMG are perceived to have the capacity for higher quality audits (DeFond & Zhang, 2014). These audit firm giants controlled 74% of the global audit market in 2020 (Gyorkos, 2021); 88% of the United States (US) Security and Exchange Commission (SEC) large multinational filers (Ryan, 2022); and all FTSE 100 companies in the UK (FRC, 2021). As at 2022, the audit firm giants controlled 98% of the FTSE 350 audit market (FRC, 2023). While empirical evidence supports a positive relationship between audit firm ranking (size) and audit quality (e.g., Francis et al., 2013) there are still differing viewpoints regarding the suitability of size as a determinant of audit quality (Cassell et al., 2013; Salehi et al., 2019).

The viewpoints can vary depending on the region, based on the regulatory control mechanism established by the governing authorities. In the US, large firms tend to be more prudent with their audit opinions because of the risk of litigation enforceable post-Enron by the 2002 Sarbanes Oxley (SOX) Act, and damage to reputation when failures are exposed (Berglund et al., 2018). To the contrary, the regulatory environment in the UK tends to be more rule and process-driven, and sparse in the area of litigation and accountability measures (Beattie et al., 2013). However, regulatory enforcement in the UK is at a turning point with reform proposals under consideration by the Department of Business, Energy and Industrial Strategy, BEIS (Fletcher et al., 2021; Brook, 2023).

Abdollahi et al. (2020) investigated the effect of audit quality on the value of financial information on Tehran's stock market decisions. The authors adopted audit firm size, and the audit reports issued as determinants of quality. Abdollahi et al. (2020) found that the stock market attributed higher objectivity and accuracy to financial reports of organisations audited by leading audit firms. Hence, investors appear to place more value on these organisations' financial information, thereby influencing their investment decisions.

Alareeni (2019) conducted a meta-analysis to determine the connections between prominent audit firm characteristics in existing literature and audit quality. The findings reveal that large-size audit firms tend to be connected to higher quality audits. However, the connection can be weakened or negative depending on the moderating effect of context, such as going concern opinion, discretionary accruals, region (US or non-US), or economies investigated.

Chen et al. (2023) investigated the association of audit quality and audit firm size among UK private organisations. Revealing a differing outcome from Abdollahi et al. (2020), Chen et al. (2023) suggest that top-tier audit firms are more receptive to private organisations' need and quality consideration than lower-tiered firms. The authors found that top-tier audit firms (the 'Big four') may be more accepting of earnings management in private organisations. Financial reporting requirements and regulatory scrutiny are not as stringent with private organisations as with public interest organisations. Hence, the top-tier firms appear to accommodate their private clients' tax management requirements

over earnings accuracy. This shows the relativity of the definition of audit quality and how audit firm size can be misconstrued as a determinant of audit quality.

The suitability of audit firm size as a determinant of audit quality is debatable, considering the widely publicised failings in some UK audits were by the leading (top-tier) audit firms. Examples of recent publicised failed audits by the leading audit firms include Patisserie Valerie (audited by Grant Thornton), BHS (audited by PWC), Carillion and Rolls Royce (audited by KPMG), SIG PLC (audited by Deloitte), and Thomas Cook and Wirecard (audited by EY). Fuerman and Kraten (2009) asserted that audit firm giants should not be presumed to be of superior quality in audits based on their size or market ranking. Moreover, the reality of exposed shortcomings in the audit of corporations like Carillion and Rolls-Royce, discredit the ascription of superior audit quality by audit firm size.

Another proxy in the input category is auditors' client business area expertise. Some scholars adopt auditor tenure as a representative or indicative measure to determine auditors' depth of knowledge and expertise in their clients' business areas (e.g., Bratten et al., 2019; Gul et al., 2009). Auditor tenure, in this case, refers to the length of sustained engagement with a client (Wilson et al., 2018). Similar to investigations on audit firm ranking (i.e., size), there are mixed results on the efficacy of tenure as a determinant of audit quality. Predominantly, findings demonstrate that longer term engagements do not impair auditors' propensity to uncover fraud or compromise their objectivity in the audit process (Patterson et al., 2019).

Cheynel and Zhou (2024) examined the effects of auditor tenure on audit quality in the US. The authors contend against the need for auditor rotation to improve audit quality. They argue that due to the costly nature of audit production, longer-termed audit engagements can offset audit cost to firms, which may lead to lower audit fees over time. Further, Cheynel and Zhou (2024) suggest that there are efficiency gains in long-term auditor tenure through extensive client business and industry knowledge. Therefore, to the authors, retaining audit firms on long-term engagements can indicate clients' intention to avoid misstatements, thereby increasing audit quality.

Reid and Carcello (2017) established that the US capital market responds negatively when companies with long-standing auditors move to change their current auditors. The

market may construe such a move by as a red flag, or an indication of a potential conflict within the auditor-client relationship. Auditors are critical in bridging the trust gap between shareholders and company directors. As such, auditor-client relationship tends to be maintained consistently, barring any conflicts (Reid & Carcello, 2017). Any change in auditor engagement can indicate underlying agency conflicts, potentially revealing concerns on an organisation's financial reporting integrity. A recent example is the case of Adler, a Germany company, where KPMG refused to sign-off their 2021 financial statement, and resigned as their external auditor (Storbeck, 2022).

Notwithstanding the evidence that long-term auditor tenure improves audit quality (see Cheynel & Zhou, 2024; Patterson et al., 2019), Knechel and Vanstraelen (2007) could not substantiate a connection between auditor tenure and the quality of audits. The authors examined Belgian private companies and found insufficient evidence to suggest that auditors' tenure can enhance or diminish audit quality. However, actual fraud scandals suggest a contrary effect of auditor tenure compared to the evidence from academic studies. For instance, KPMG was Rolls-Royce's auditors for twenty-six years during which period they failed to report the client's financial malpractices (Ridley & Jones, 2017). KPMG audited Carillion for nineteen years without a going concern opinion (Jolly, 2022). Similarly, EY audited Wirecard for about ten years, issuing a 'clean bill of health' report until the scandal broke in 2020 (Storbeck, 2021). Together, these examples highlight the practical shortcomings of auditor tenure as a suitable determinant of audit quality.

Other studies have investigated auditor tenure from the standpoint of auditors' objectivity and its effect on audit quality (see Bamber & Iyer, 2007; Dart & Chandler, 2013; Knechel & Vanstraelen, 2007; Svanberg & Öhman, 2015). For instance, Svanberg and Öhman (2015) examined the impact of auditors' relational closeness with their clients on their judgement of client information and accounting assumptions. The authors conclude that having a relational attachment to a client influences all auditors' (the leading firms and others) objectivity and results in compromised quality in audits.

Likewise, Boone et al. (2008) found that auditors' fraternising with their clients undermines their objectivity and decision independence over time. This implies that extending client-

professional relations to social interactions tend to inspire a ‘buddy culture’ that can lead to auditors compromising their sensitivity, objectivity, and judgement independence (Boone et al., 2008; DeFond et al., 2024). Therefore, auditor tenure can become detrimental to audit quality. From this standpoint, the trail of fraud scandals highlighted above tends to reveal an adverse connection between long auditor tenure and the eventual quality of audits.

Audit fees are another prominent proxy for audit quality with outward or external characteristics. To DeFond and Zhang (2014), audit fees express the effort auditors deploy to audit assignments, thereby representing an observable proxy for audit quality. In this case, greater effort is presumed to equate to higher quality, thereby justifying higher fees (Kim et al., 2024; Markelevich & Rosner, 2013). Prior studies have examined this proxy by employing diverse determinants as indicative criteria for the audit fees charged to a client organisation. For example, Ghafran and O'Sullivan (2017) examined the accounting related expertise of UK audit committee members to determine its influence on auditors’ fees. They found that audit committees in smaller public interest enterprises (FTSE 250 companies) with non-accounting related financial expertise significantly impact audit fees. Ghafran and O'Sullivan (2017) suggest that the association of higher fees to audit committee members’ non-accounting related expertise may indicate a compensation for their gap in accounting knowledge. Thus, higher fees become a means of ensuring a higher-quality audit is achieved.

Other evidence from existing studies suggests a divergence of results on the effect of audit committee expertise on audit fees (Ghafran & O'Sullivan, 2017). Several studies established a positive connection between audit committee accounting expertise and audit fees (see Carcello et al., 2002; Ghafran & O'Sullivan, 2017; Hansen et al., 2021). Yet, several others suggest no connection between audit committee accounting expertise and audit fees (e.g., Goddard & Masters, 2000; Goodwin-Stewart & Kent, 2006; Zaman et al., 2011). The divergence, like audit firm size and client business sector specialisation, becomes problematic when audits fail.

This is because audit fee structure can undermine the assumed quality of the audit process and the accuracy of auditors’ professional opinion. Moreover, DeFond and Zhang

(2014) assert that audit fees can represent a combination of factors other than an indication of high quality audit. They argue that high fees can mean a premium for higher risk or the audit firm's efficiency initiatives being transferred to the client. A presumption of higher audit quality without unpacking all possible contributing factors may result in misleading conclusions.

Prior studies highlighted in this section provide evidence for these outward characteristic proxies (audit firm size, industry expertise, auditor tenure, and fees) as appropriate indicators of audit quality. However, their merit becomes questionable when undetected fraud becomes a scandal (DeFond & Zhang, 2014). Consequently, input proxies tend to be characterised by status and external assessment of quality instead of looking inward to the outcome of auditors' judgement expressed in audit opinions (DeFond & Zhang, 2014).

2.3.2 Output proxies for audit quality

Outcome proxies express the undesirable state of audit quality by the explicit evidence of financial report restatements, audit opinions, or outright fraud scandals (DeFond & Zhang, 2014). This means that outcome proxies focus on actual measures proven by misguided audit opinions, or public-wide exposure of corporation collapses, erupting from undetected fraud. An organisation can restate its financial report in the event that a material misstatement is discovered after the financial report is published. In some cases, misstatements resulting in financial statement restatements can be due to unintended accounting entry mistakes (i.e., errors).

On the other hand, when the anomalies appear deliberate, they are intended to mask or misrepresent the true nature of a financial activity. In recognising the binary nature of financial statement anomalies, Gaynor et al. (2016) argue that the quality of an organisation's financial report can ultimately impact audit quality. By this, a low quality financial report, which goes undetected by auditors, materialises as low quality audit when a corporation collapses. Further, Gaynor et al. (2016) submit that the determinants and indicators of audit quality and financial reporting quality are similar and assumed the same. This suggests that what is considered a low quality audit might be a manifestation

of a low quality financial report, stemming from an organisation's internal management control issues.

Knechel et al. (2020) adopted an economic service perspective to evaluate financial statement audit process and the issue of audit quality. The authors suggest that client's participation in the financial reporting process contributes to the quality of an audit. Hence, audit quality is deemed to be jointly created by the clients and their auditors. Knechel et al.'s (2020) perspective appear to align with Gaynor et al. (2016). Auditors depend on the information provided by their clients to assess the accuracy and faithful representation of the financial position and financial performance of an organisation. Therefore, the quality of service rendered by auditors can be assessed as a combination of the client management's financial reporting process and the auditors' professional competence.

While an organisation's internal management control issues might present itself in low quality financial reports, auditors remain responsible to report on the organisation's economic wellbeing to its shareholders. This means that Knechel et al.'s (2020) economic service perspective should not override auditors' objectivity in arriving at their professional judgement. The onus rests on auditors to attest to the true state of an organisation's financial position. This onus is driven by the principles of the auditing profession, thereby characterising auditors' relevance as independent assurance providers to shareholders, other financial backers, and the capital market.

When restatements are due to unintended errors, the continued existence of an organisation tend to remain unthreatened. Hence, a going concern or qualified opinion is not required. Conversely, a going concern opinion is triggered when anomalies are questionable or deliberate and the breach is discovered. In some cases, the audit firm's refusal to sign-off on the affected financial report may constitute an opinion and a signal to shareholders and other financial report users. A recent example of such refusal can be seen in the case of Adler, a German real estate company.

Here, KPMG withheld the sign-off of Adler's 2021 group account because access to information, to substantiate some related party transactions, was denied by the client during an alleged fraud investigation (Storbeck et al., 2022). By their action, KPMG can be said to have fulfilled their agency responsibility (Awolowo, 2019), protecting the

interests of Adler's shareholders and financial backers. In the event the allegation is proved, a restatement of the relevant years' financial accounts may become necessary to accurately disclose the true state of Adlers' financial position.

Aside from unintended or deliberate anomalies, restatements can also occur when a change to accounting standards can distort year-on-year comparability of the books of account. For instance, the 2016 change to the International Standard for Leases (IFRS 16) resulted in a revision to the books of account and financial reporting of traded companies from the 2019 financial year (IFRS, 2019). In this case, restatements are in response to regulatory compliance and tend to reinforce the organisation's financial reporting quality. Therefore, restatements may not necessarily imply fraud. Notwithstanding, Aobdia (2019), Christensen et al. (2016), and Rajgopal et al. (2021) suggest that restatements are the most accessible indicator of a poor quality audit. Consequently, for restatements to be applied as a measure for audit quality, the defining context of the restatement must have been established to avoid misleading conclusions (DeFond & Zhang, 2014; Gaynor et al., 2016; Plumlee & Yohn, 2010).

Another outcome proxy for audit quality is regulatory sanctions. Markelevich and Rosner (2013) adopted the US Securities and Exchange Commission (SEC) sanctions on fraud organisations as a precise indicator of audit quality. With fraud as the context of their study, sanctions or fines represent tangible evidence of fraud by the audited organisations (Carcello & Nagy, 2004). Yet, sanctions or fines might be viewed as far-end occurrences with guided representation in the wider discourse on audit quality (DeFond & Zhang, 2014). Nevertheless, the adequacy and validity of sanctions or fines as evidence of fraud (Dechow et al., 2011; Donelson et al., 2021) and failed audit quality remain unambiguous. This suggests that the appropriateness of a proxy can depend on the context of the study and the researcher's perspective.

For instance, in examining the causes of financial statement fraud in Malaysian companies, Ghafoor et al. (2018) employed regulatory sanctions as a proxy for fraud. Since regulatory sanctions or fines are publicly verifiable, they can be considered a concrete and unbiased means of identifying poor quality audits that result in fraud. Other studies have used the enforcement actions registered by securities commissions to

examine common features of manipulation and undetected breaches in fraud organisations. For example, in Dechow et al. (2011), using SEC enforcement action data was considered appropriate in that they represent confirmed admissions of irregularities on the part of the fraud organisation through restatements or stock market indicators.

While most prior studies have employed public enforcement actions as determinants of fraud, Donelson et al. (2021) argue that public and private enforcement actions are jointly better proxies for fraud research. Evidently, regulatory enforced fines are established proofs of wrongdoing even when investigations do not proceed to lawsuits. Furthermore, auditors' misleading assurance on the financial state of a fraudulent organisation undermines the essence of audit quality. Auditors, in accepting and paying the fines, appear to acknowledge their sub-optimal performance in the audit exercise which resulted in undetected fraud.

What quality audit is or how it can be determined differs depending on the audience: scholarly propositions, regulators, clients, or the auditors themselves (Brivot et al., 2018). Regardless of the determinants or quality proxy, existing and potential investors, lenders, and creditors should be able to rely on an auditor's professional opinion about the financial state of an organisation. Brivot et al. (2018) suggest that most auditors are unable to define what audit quality is so, attention is turned towards what it is not. This can be confusing in that it becomes challenging to fix what cannot be unanimously defined. In other words, there should be a consensus on the overriding purpose for audit quality. This purpose is introduced by Brivot et al. (2018) as enhancing *"… the trustworthiness of audited financial statements…"* (p. 68).

When fraud scandals undermine the 'trustworthiness' of audited financial reports, the audit outcome overshadows the adequacy of other proxies or determinants used in measuring audit quality. Irrespective of the proxies employed, the fundamental issue of undetected fraud in financial statements remains unresolved. Hence, an unambiguous indicator can be found in the undesirable outcome of a fraud scandal, which represents actual evidence of a failed audit. Therefore, audit failures serve as the most appropriate proxy for audit quality to achieve the purpose of this study.

2.4 Audit failure as a proxy for audit quality

The quality of an audit tends to become apparent in hindsight in the event of a restatement to financial reports (Christensen et al., 2016), or a fraud-led corporation collapse (Sulaiman, 2017). This means that the effect of undetected misstatements become apparent after an organisational failure is exposed (Rezaee, 2004). In other words, audit quality has an inverse relationship with audit failures (Francis, 2004). Consequently, audit failures reveal low quality audits retrospectively.

Audit failures represent apparent indicators of low audit quality. Whereas input characteristics (discussed in section 2.3.1) can precede an audit engagement, failed audits are the aftermath or outcome of an audit exercise (DeFond & Zhang, 2014). Hence, aftermaths expose the state of audit quality in that they are evidence of the audit shortcomings in real terms. To this end, Fuerman and Kraten (2009, p. 151) refer to audit failure as *"… a dependent construct that serves as a measurement of poor audit quality".*

Audit failures are revealed retrospectively when the effect of undetected or unreported anomalies in financial reports results in fraud scandals (Christensen et al., 2016; Rezaee, 2004). As such, when failures emerge, a low quality audit is exposed (Chen et al., 2024; Francis, 2004). The retrospective characteristics of failed audits has been argued as a limitation to its viability as a plausible determinant of audit quality for proactive capital market considerations (DeFond & Zhang, 2014). This implies that a post-fact knowledge of low quality audit does not add value to investors or financial backers' decision making. Similarly, some studies suggest that fraud scandals are extreme or rare occurrences in the wider context of audits and low quality attribution (see Francis, 2004). However, the perceived rarity of accounting scandals does not compensate for the cost or impact of the audit failings to the stakeholders (Foley, 2024).

As such, the wider context of audits tends to be insignificant when audits fail and there is a growing distrust of auditors' agency role towards shareholders and the public. Yet, in the empirical review of studies on US audit quality, Francis (2004) claims that a below 1% annual rate of failed audits in the US demonstrates an acceptable standard of audit quality. This acceptance of audit failings can downgrade auditors' role as intermediaries in the agency discourse. By this, auditors' relevance to economic stability becomes

debatable when their professional opinion does not reflect the reality of an organisation's financial worthiness. In essence, the rarity of corporate fraud scandals does not compensate for the intensity and severity of a collapse on the fraud organisation, its shareholders, creditors, and the ripple effect on a nation's economy.

For the wider context of audits, Pentland (1993) alludes to auditors' comfort in the follow-through of the audit process. This suggests that auditors are vastly confident in their audit procedures and practices which are guided by laid down standards and principles. In light of this, Rezaee and Crumbley (2007) establish that:

> "… *Many audit failures are not because of a failure to apply necessary audit procedures or because of misapplication of audit procedures. The failures are not caused by deficiencies in the performance of audits – they are caused by errors in interpreting the significance of the underlying issues* ..." (p. 46)

As such, the underlying cause of audit failures should be examined beyond the observable indicators of quality (for instance, firm size, fees, or tenure) or the motions of audit procedures. To this end, the auditors' competency to interpret financial, textual, and verbal information accurately becomes a crucial factor to improving audit quality.

Rowe's (2019) experiment presents a tenable cause for audit failures. The author investigated the extent to which supporting documents aid auditors' acceptance of client management's basis of estimation for financial entries. They argue that auditors tend to gather evidence only to the extent sufficient to support their opinion on client management assumptions regarding estimates. To the auditors, providing more documentary information reduces their comfort and sense of defensibility about their opinion. This suggests that auditors are not necessarily more confident about their verification when more evidence on a client's basis of estimation is available or provided to them during an audit. In other words, auditors appear to be more comfortable with less information from the client on accruals (Rowe, 2019).

Similarly, Austin et al. (2020) experimented to evaluate auditors' consideration of evidence confirming or conflicting with client managements' basis for estimations. From their study, auditors appear to adopt a preliminary conclusion that align with client's

reasoning, ignoring any documentation with contrary information. Austin et al. (2020) argue that auditors with an open disposition can better evaluate and accommodate alternative reasonings from all available information. When auditors exhibit a preconceived acceptance of client's rationale, they jeopardise the objectivity of the entire audit exercise. By this, auditors are exposed to "errors in interpreting" complimenting and contradicting evidence, thereby tending towards an audit failing.

Hyatt et al. (2024), in classifying actions limiting audit quality, outlined several audit shortcomings that can negatively impact audit quality and can lead to failed audits. For instance, *"accepting weak client explanations"*, *"accepting doubtful audit evidence"*, "*overreliance on client work" "failure to pursue a questionable item", "neglecting critical evaluation of a significant client transaction",* or *"rejecting awkward-looking items from sample"* (Hyatt et al., 2024, p. 291). Several existing studies suggest that budgeted audit time significantly contribute to issues of audit quality (Broberg et al., 2017; Buchanan & Piercey, 2021; Coram et al., 2003). Notwithstanding, actions limiting audit quality could also indicate a lack of competence in identifying and querying questionable information.

Similarly, Rajgopal et al. (2021) investigated the predictive nature of audit quality determinants in relation to actual failed audit performance selected from charges filed against auditors in the US. From the six commonly cited audit shortcomings found in the SEC and private class action lawsuit cases, auditors' *"… failure to gather sufficient competent audit evidence" and "… to exercise due professional care …"* (Rajgopal et al, 2021, p. 561) ranked highest. The most common audit shortcomings identified by Rajgopal et al. (2021) seem to support Hyatt et al. (2024). These shortcomings serve as evidence from actual audits found inadequate by regulatory authorities. As such, they are indications of poor quality performance, potentially leading to audit failures.

The plausible causes of audit failures in Rowe (2019) and Austin et al. (2020) appear to corroborate Rezaee and Crumbley's (2007) assertion on why audits fail. A deficiency in auditors' competency to question, evaluate, and interpret underlying context in all documents is a key factor in their inclination to accept management's assumptions unchallenged. Where such background context is left unexplored, the tendency for a misguided or preconceived opinion is imminent. By this, auditors neglect their mandate

to represent the interests of shareholders in conducting their role as trusted intermediaries between the organisation and its owners. Ultimately, this can result in undetected fraud which eventually leads to a failed audit.

Competency as an indicator of audit quality has been researched more from the angle of client sector expertise and the capacity of the audit firm (DeFond & Zhang, 2014). Other studies examined auditors' competency in relation to social interactions with their clients' business ecosystem with implications to auditors' independence and audit quality (DeFond et al., 2024; Guan et al., 2016; He et al., 2017). DeFond et al. (2024) suggest that auditors can leverage their social capital within their client's business network to assess their client's financial reporting integrity. This argument tends to attribute auditors' competency to identify irregularities to their social capital connections, rather than on acquiring and applying relevant skillsets to improve their performance in audits. Yet, the likely impact of social connections' inherent influences on auditors' objectivity and independence in uncovering misstatements, which may result in audit failures, cannot be overlooked (Aven et al., 2021).

Competency with regards to auditors possessing the appropriate skillsets in uncovering irregularities seem to be underrepresented in academic studies. Arguably, competency in fraud detection should be considered a foremost means to improving audit quality in the interest of client organisations, shareholders and financial backers, regulators, and the auditors themselves. Consequently, with the growing outcry on failed audits, and the recent consultations and proposed interventions by the UK policy makers, this study focuses on auditors' competency to uncover misrepresentations. This study argues that with forensic accounting skillsets and mindset, auditors can achieve competency in interpreting information and in discovering fraud, thereby improving the quality of financial statement audits.

2.5 Audit quality features in individual auditors

Individual auditors work in teams on any audit engagement. So, attributing quality on an audit engagement is a projection of the individual audit team members' competency, as a collective representation of the firms' technical and experiential expertise (Christensen

et al., 2016). Investigating the perceptions of auditors and investors on definitions of audit quality, Christensen et al. (2016) found that investors prioritise adequate training and competency of auditors in defining audit quality. On the other hand, auditors tend to place higher emphasis on compliance with auditing Standards, ahead of individual auditors' competency, in defining audit quality (Christensen et al., 2016). This signifies that both auditors and investors recognise the pivotal relevance of every auditor's training and competency in skills, including forensic related skills, to achieve higher-quality audits.
Although the majority of research has concentrated on evaluating audit quality at the firm level, more studies are now investigating individual auditors' contribution to audit quality (Gul et al., 2013). Examining archived data on sanctioned organisations in China, Gul et al. (2013) analysed individual auditors' demographic attributes, including education, on audit engagements with the sanctioned organisations. The authors found that, depending on the partner auditor's educational background, qualification attained, professional exposure and political connections, their considerations and judgement calls can influence audit quality positively or otherwise.

From a non-partner auditor perspective, Brown et al. (2016) examined the state of auditing in practice, based on quality indicators proposed by the Public Company Accounting Oversight Board (PCAOB). Specific to competence, the study reveals that auditors' confidence in gathering evidence, their ability to identify misrepresentations and interview clients, influence the quality and outcome of audits. Further, Brown et al. (2016) opined that auditors' training tends to be tailored to client specific industry context. While tailored training can promote client-industry specialisation, it may also limit individual auditors' awareness of likely related knowledge and skillsets that can enhance their competency in financial statement audits.

Li et al. (2017) investigated the connection between an individual auditor's failed audit event and the likelihood that other audits, by the same auditor, will manifest similar low quality. The authors disentangle audit failure from a firm perspective to individual auditors' competence and performance, as evidenced by their sign-off on the failed audits in China. From their findings, an auditor involved in a failed audit tends to manifest the same traits of low quality in subsequent audits with the same client or other client organisations.

Notwithstanding the serial manifestation of low quality auditors, supporting auditors on the same audit engagement are not contaminated by failed auditors' traits (Li et al., 2017). Li et al. (2017) did not address individual auditor competency in relation to possessing the appropriate skillsets to identify misrepresentations.

Stice et al. (2022) evaluated individual auditor (below partner level) performance evaluation, salary and other human resource employee data as criteria for assessing individual quality. The authors revealed that audit managers tend to initiate restatement propositions to clients than audit seniors while audit seniors appear to consider going concern outcomes. Feng (2020) examined individual auditors' gender, client size, and engagement tenure as a basis for assessing audit quality in US not-for-profit enterprises. Feng (2020) asserts that female auditors are more likely to qualify audit reports and report weaknesses in internal control.

The criteria adopted by Stice et al. (2022) and Feng (2020) may be relevant to assess individual auditor's dynamic tendencies and how these could impact audit quality. However, the findings do not appear to shed light on individual auditors' professional competence to both uncover misrepresentations or interpret the underlying importance of client information. Moreover, the overall outcome of an audit is a collective effect of all employees involved in providing audit assurance (Stice et al., 2022). Hence, while this study has aimed to identify skillsets relevant to individual auditors' success in detecting misrepresentations, it considers a holistic perspective to equipping auditors with the appropriate competency level and skillsets to detect fraud. Auditors' individual competency is essential to achieving higher-quality audits (IAASB, 2014). Khaksar et al. (2021, p. 1) attest to this position in stating that *"audit quality derives from auditors' quality of judgement"*. Hence, to improve individual auditors' professional judgement quality, there is need for specialised skillsets beyond the conventional auditing expertise.

2.6 Forensic accounting skillsets and financial statement fraud detection

Forensic accounting skillsets can contribute to auditors' performance in financial statement audits. Thus, equipping auditors with the right skillset to detect fraud would enhance their competency in fulfilling their agentive investigative role (Awolowo, 2019),

thereby improving audit quality. However, exploring existing studies on financial statement fraud, Hogan et al. (2008) identified that the use of forensic accounting *"fraud investigative tools and techniques"* (p.247) in statutory audits has been under-researched. The under-representation of research in forensic accounting skills is even more pronounced in regions outside the US (Ozili, 2023) Therefore, this study fills the gap in response to their call for further research in the topic area by exploring the perceptions of UK forensic accountants, external auditors, educators in tertiary institutions and professional body specialists.

2.6.1 Forensic accounting expertise in financial statement fraud detection

Forensic accounting expertise is used for some aspects of audit programmes in the US (Jenkins et al., 2018). Jenkins et al. (2018) investigated audit firms' involvement of forensic accounting experts in the statutory audit process in the US. They suggest that forensic accounting experts significantly contribute towards auditors' attaining a higher degree of comfort in the designing and review of findings on fraud testing, and fraud-related brainstorming sessions. The authors established that involving forensic accounting experts in financial statement audits results in early detection of financial irregularities and inadequate control systems. Early detection of financial inaccuracies or misstatements is fundamental to taking proactive steps to curtail the possibility of fraud in an organisation.

Asare and Wright (2018) explored auditors' perception about the contributions of forensic specialists to audit effectiveness in the field. They found that consulting with forensic specialists on the field adds a different perspective, improving risk assessments on fraud schemes and the identification of unusual indicators. In addition, Asare and Wright (2018) posited that early consultation with forensic specialists in an audit engagement enhances collaboration and auditors' risk sensitivity. This aligns with Jenkins et al. (2018), highlighting forensic accountants' unique skillsets and 'cognitive authority' in fraud detection beyond auditors' technical capabilities and level of awareness.

Similarly, Chui et al.'s (2022) experiment examined the efficacy of auditors employing a forensic perspective over a traditional audit viewpoint in identifying and addressing fraud risks. They found that approaching audits from a forensic expert's standpoint on fraud

detection can influence how auditors evaluate financial information obtained from client organisations. As such, auditors can better assess the representativeness of audit evidence gathered, thereby improving the accuracy of their professional judgement (Chui et al., 2022). Although the authors did not focus on forensic accountants' skillsets, they appear to acknowledge the unique connection between forensic accountants' perspectives and the use of their skillsets in practice. This implies that the practical application of forensic accountants' skillsets tends to be driven by their predisposed perspective or mindset in effectively identifying and detecting fraudulent activities.

Asare and Wright (2018) and Jenkins et al. (2018) advocate for the inclusion of forensic experts in audit engagement teams to improve auditors' chances of discovering fraud. On the other hand, Chui et al. (2022) assert that auditors can more effectively assess and respond to fraud risks by employing a forensic accounting perspective in audit planning and brainstorming sessions. However, these authors appear to overlook the possibility of auditors being trained to develop the unique perspective and skillsets that distinguish forensic accountants in fraud detection.

A possible explanation for the authors' choice of including forensic expertise in audits over upskilling auditors might be the issue of cost and time to deliver an audit engagement (Awolowo, 2019). While concerns of audit cost (including time budgeted) are outside the focus of this study, it is worth mentioning that the evidence is not unanimous (Boritz et al., 2020). Prior studies highlight the add-on cost of specialist involvement in audits to overall audit fees (e.g., Chui et al., 2022 and Zimmerman et al., 2023). Yet, several researchers assert that the value-add of having forensic experts involved in audits outweighs the cost and time impact to audit budgets (e.g., Asare & Wright, 2018; Awolowo, 2019).

Auditors are expected to holistically fulfil their attestation and investigative roles to shareholders (Awolowo, 2019). The arguments over the cost of forensic expertise in audits need to be considered against the backdrop of the 2022 revised Auditing Standard on auditors' responsibility in fraud detection, ISA (UK) 240. Moreover, if the education and training of auditors are enhanced to encompass forensic accounting skillsets, the assumed cost and time barriers to involving forensic expertise in audits would become

irrelevant (Awolowo, 2019). Leaning on Asare and Wright (2018), Chui et al. (2022), and Jenkins et al. (2018), this study argues that auditors need attributes and skillsets beyond their current education and training to improve their competency in detecting misrepresentations.

The evidence in this section establishes that engaging forensic expertise in audit processes can improve auditors' fraud detection capabilities. However, equipping auditors with the appropriate skillsets to detect misrepresentations can ensure a wider reach of fraud detection in that the skillsets development is incorporated into their education and training. As such, all auditors (present and future) could be afforded the opportunity to develop fraud detection capabilities as part of the profession's standard practice. This is not to suggest that auditors are to become forensic experts.

Auditors' approach to defining their audit processes is ingrained in their technical knowledge and the legal mandates governing financial statement audits. This means that the combination of auditors' technical knowledge and the regulatory framework of audits inform the established procedures they follow. Hence, auditors tend to employ their skills within the remit of their predisposed approach and audit procedure. Yet the persisting issues of audit deficiencies point to auditors' inadequacy in challenging the veracity of audit evidence or interpreting the underlying context of their clients' financial assumptions, among others (Hyatt et al., 2024).

By embedding forensic skills into auditors' curriculum, the necessity for external forensic consultation could be significantly reduced. This might streamline the audit process and signify a proactive approach to financial statement fraud detection, thereby minimising audit failures. Hence, equipping auditors with the skillsets to attain a level of forensic experts' cognitive authority in fraud detection can enhance their ability in areas where auditors are found to be mostly deficient (see Hyatt et al. 2024).

2.6.2 Forensic accounting skillsets for fraud detection

One of the mostly cited studies on forensic accounting skillsets is DiGabriele (2008). The researcher explored US based forensic accountants, accounting academics, and forensic accounting services clients, to assess their agreement on key forensic accounting

skillsets. They argued that the recurrent issue of audit failures requires the specialised skills of forensic accounting. DiGabriele (2008) revealed that deductive reasoning analysis, critical thinking, problem-solving, investigative flexibility, analytical and communication skills, are significant skillsets to forensic accountants in fraud detection. The author suggests the inclusion of forensic accounting skillsets in auditors' training to improve their likelihood of detecting fraud in financial statement audits.

Another comprehensive study focused on forensic accounting skillsets is Lal Bhasin (2013). Using questionnaires, the author surveyed accountants, accounting educators, and legal agency workers to identify forensic accountants' skills requirement in India, to establish the need for forensic accounting as a course in Indian universities. Lal Bhasin (2013) found a range of skillsets prioritised based on the level of agreement between the respondent groups. In addition, they revealed that written communication, critical thinking, and composure are prioritised skills for forensic accountants, closely followed by legal knowledge, oral communication, and deductive reasoning skills. The author suggested that investigative adaptability, analytical and problem solving skills are less important for forensic accountants.

Lal Bhasin's (2013) ranking of the skillsets based on the frequency of agreement between the respondent groups can be problematic in practice. In fact, Hegazy et al.'s (2017) exploration of forensic accounting practice and its essential skills requirement in the UK revealed a different ranking. In a mixed method study, the authors surveyed forensic accounting practitioners in audit, professional bodies, forensic and legal practice firms. Hegazy et al. (2017) found that written communication, financial information interpretation, and analytical skills are considered highly essential compared to oral communication, problem solving and investigative skills. The authors' findings suggest that critical thinking, deductive analysis, and interview skills are more desirable than essential in the UK environment.

The rankings of forensic accounting skills vary within academic studies and differ when compared to industry research, depending on the target respondents. For instance, the American Institute of Certified Public Accountants in 2009 commissioned a study to investigate forensic accountants' essential traits and skills. Surveying US academics,

attorneys and certified public accountants (CPA), the researchers, Davis et al. (2009), found that the three interest groups differ in their ranking of skills and traits essential to forensic accounting. Analytical skills is favoured as the most essential trait of forensic accountants. Unlike Hegazy et al. (2017), critical thinking and oral communication are considered two of the top five fundamental skillsets of forensic accountants. Interestingly, problem-solving skills appear to be underrated in Davis et al.'s (2009) study, which are consistent with Hegazy et al. (2017) and Lal Bhasin (2013). Yet DiGabriele (2008) considers problem-solving skills to be a significant skillset for forensic accountants to detect fraud.

The absence of alignment might be due to the context of the studies, the respondents targeted for the study and their exposure to the differentiating skillsets of forensic accountants. For example, forensic accountants were not part of Lal Bhasin's (2013) target population, while Hegazy et al. (2017) focused on forensic accountants. However, Hegazy et al. (2017) appear to have focused on the broader forensic accounting service offerings against skillsets specific to detecting fraud. Hence, the inconsistency can be said to indicate a disparity between educational focus and practical application, as perceived by different stakeholders.

This emphasises the inherent complexity and potential issues associated with evaluating and comparing different skillsets. The process of ranking the significance of skillsets can be nuanced and problematic, suggesting that it is not a straightforward task. Instead, it involves careful and insightful considerations that may not be immediately apparent. Hence, for a comprehensive agenda to improve auditors' fraud detection competency, this study bridges the gap within academia and in professional studies by including the perceptions of practising forensic accountants experienced in fraud detection. Table 2.1 below summarises the skillsets considered significant by the studies examined in this section.

Table 2.1: Key forensic accounting skillsets and attributes for fraud detection

DiGabriele (2008)	Davis et al. (2009)	Hegazy et al. (2017)	Lal Bhasin (2013)
Deductive analysis	Analytical and interpretive	Written communication	Written communication
Critical thinking	Interviewing	Interpretation	Oral communication
Unstructured problem solving	Detail-oriented	Analytical skills	Research
Investigative flexibility	Critical/strategic thinking	Oral communication	Investigative ability and intuitiveness
Analytical proficiency	Oral communication	Problem solving	Organise unstructured situations
Oral communication	Investigative ability and intuitiveness	Investigation	Structured and unstructured problem solving
Written communication	Written communication	Knowledge of rules of evidence and court procedure	Legal knowledge
Specific legal knowledge	Synthesising results and analysis	Presentation	Critical and strategic thinking
Composure	Think like a wrongdoer	Critical/strategic thinking	Think like a wrongdoer
	Problem solving	Interview	Psychological and sociological
		Deductive analysis	Synthesising results and analysis
		Think like a wrongdoer	

Source: Author's compilation from existing literature

2.7 Auditors' need for forensic accounting skillsets

Several studies have investigated auditors' areas of skills deficiency which hinder their effectiveness in identifying misrepresentations in financial statements. Hyatt et al. (2024) identified several audit deficiencies that can result in failed audits. For example, the authors identified that auditors can be readily accepting of clients' basis of accrual estimations or gather insufficient evidence to substantiate or challenge clients' assumptions. They also highlighted that auditors tend to overly rely on client work and

may not probe further on irregular transactions (Hyatt et al., 2024), among others. A summary of relevant audit deficiencies compiled by Hyatt et al. (2024) is presented in Table 2.2 below. These deficiencies offer a basis for assessing where auditors need forensic accounting skillsets to improve their competency to detect misrepresentations indicative of fraud.

Table 2.2: Areas of audit deficiency with potential to affect fraud detection

Audit deficiencies identified in literature
Accepting client's basis of accrual estimations
Accepting or disregarding questionable audit evidence
Consenting to client's accounting treatment
Disregarding an exceptional item in samples
Failure to critically evaluate material transactions
Failure to critically evaluate the context of material transactions
Failure to probe irregular transactions
Inadequate review of client documentation
Insufficient evidence to substantiate or challenge client's financial assumptions
Overly relying on client work
Overly trusting client entity
Unquestioningly accepting client's information

Source: Compiled from Hyatt et al. (2024, p.291)

Rose et al. (2020) experimented on senior auditors to examine their propensity to default to client-given explanations rather than to simulate probable scenarios in a fraud risk assessment session. They found that auditors are limited in their capacity to generate and evaluate multiple logical reasoning on plausible explanations when brainstorming. In other words, auditors' are likely more accepting of client management explanations on irregular transactions in financial reports. This reveals that auditors may not be inclined towards critical thinking, multiple reasoning and analytical competencies, thereby limiting

their capabilities in assessing fraud possibilities. Ultimately, the aftermath of such judgements become apparent in the event of a fraud scandal.

Austin et al. (2020) also alluded to auditors' tendency to accept their clients' explanations without deliberating on other plausible explanations or the reasonableness of client assumptions. The authors carried out an experiment to determine whether auditors consider or dismiss evidence that challenges their clients' estimation assumptions. Austin et al. (2020) discovered that auditors who consider both supporting and contradicting evidence are more proficient at interpreting the importance of challenging evidence. Thus, having a 'balanced' approach can enable auditors to make more accurate judgements, even when it contradicts their initial conclusions. This suggests that auditors need critical thinking and deductive reasoning skills. In addition, it implies that auditors require analytical and interpretive skills to determine the reasonableness of client assumptions effectively.

Similar to Rose et al. (2020), Austin et al. (2020) highlight auditors' need to be primed to generating multiple scenarios in evaluating client information. This supports Jenkins et al.'s (2018) argument that auditors depend on forensic specialists to holistically assess fraud risks and review the evaluation findings. Hence, auditors need to be upskilled to 'think like a wrongdoer'. Like forensic accountants, equipping auditors to 'think like a wrongdoer', probe, analyse, critically challenge preconceived viewpoints, and interpret contradictory information can greatly improve their capacity to detect misrepresentations. In turn, this can lead to greater comfort on the accuracy of auditors' professional opinion and improve the quality of audits.

Auditors tend to challenge client estimates in complex audit situations (Griffith et al., 2015). However, the complexity of an audit should not hinder auditors from fulfilling their duty to verify the accuracy, correctness, and completeness of financial information. Auditors have a duty of care to ensure that shareholders and other financial statement users are not misled by material misstatements that can misinform their market-related decisions.

Griffith et al. (2021) highlighted that auditors tend not to realise their need for analytical reasoning skills to improve their judgement process in complex audits. The authors

argued that auditors need technical knowledge, analytical reasoning skills, and “cognitive capacity” to be effective in complex audit situations (Griffith et al., 2021, p.2072). While analytical reasoning skills can enable auditors generate plausible explanations and identify inconsistencies and inappropriate accrual assumptions, cognitive capacity can enable auditors use the information to complete thorough analytical evaluations. Yet, O’Shea (2017) found that analytical thoroughness and detail attentiveness are more valued in forensic accounting than in a conventional audit environment. This suggests the need for auditors to possess analytical reasoning and thoroughness skills to improve their competency to detect misrepresentations.

Tsiligiris and Bowyer (2021) analysed research reports from accounting professional bodies to identify the skills and personal traits required of future accounting professionals in the field. The authors identified four categories of skills – ethical, digital, business, and soft skills. Specific to soft skills, Tsiligiris and Bowyer (2021) identified that future accountants must be equipped with communication, critical thinking, problem-solving and emotional intelligence skillsets to add value to strategic decision-making. The authors appear to refer to these skills requirements broadly across the accounting field, which includes auditors. Hence, this implies a gap in auditors’ current skills development.

Several studies suggest auditors’ need for critical thinking, communication, and problem-solving skills (see Table 2.1 above). However, the essentiality of emotional intelligence to minimise audit deficiencies that can result in failed audits is less frequently recognised (Brody et al., 2020; Samagaio et al., 2024; Yang et al., 2018; Yulianti et al., 2024; Zhao et al., 2022). Emotional intelligence can be described as a skillset that enables a person to assess, understand, acknowledge, express, and control one’s own emotions and those of others (Gaspar et al., 2022; Law et al., 2004).

Yang et al. (2018) conducted an experiment aimed at identifying the effect of emotional intelligence on auditors’ judgement. The authors discovered that auditors with high emotional intelligence tend to query exceptional or questionable transactions more thoroughly, regardless of the level of pressure encountered in an audit assignment. Therefore, with emotional intelligence, auditors may better perceive and more holistically evaluate the significance of clients’ financial assumptions. Interestingly, Gaspar et al.

(2022) advised caution regarding the effectiveness of emotional intelligence in uncovering deceptive practices. They argue that people with fraudulent or deceptive intentions also tend to exhibit high emotional intelligence. Gaspar et al.'s (2022) argument is not surprising, considering the complexity of high-profile corporate frauds (e.g., Enron, Wirecard, Patisserie Valerie and Carillion), and how long it took to detect the fraud.

In fact, Daoust and Malsch (2020) in an interviewed-based study, explored the influence that former auditors, now clients, have on an audit team. They revealed that clients, who are former auditors, can intentionally exert their social capital and cognitive authority to affect auditors' independence during an audit assignment. This appear to support Gaspar et al.'s (2022) position that clients with deceptive intentions tend to exhibit high emotional intelligence. Similarly, Carlisle et al. (2023) investigated the power dynamics in auditors' interaction with clients during the collection of audit evidence. They found that clients tend to dominate the audit evidence gathering process, to the point of exhibiting hostile behaviours towards auditors. This can lead to situations where auditors might feel compelled to accept less-convincing evidence or overlook certain discrepancies to either maintain good relationship or avoid stressful conversations with clients (Brewster et al., 2019). Recognising such power dynamics and the possible implications to an audit outcome would require auditors to cultivate skillsets in cognitive processing and a 'new way of thinking' (Mintchik et al., 2021).

The possibility of client management involved in fraudulent financial statement practices to display high emotional intelligence underscores the need for auditors to possess emotional intelligence skillsets. This awareness also underscores the importance of training auditors to recognise and manage the complexities of client dynamics, including client's information authority (Brewster et al., 2019), effectively. Thus, auditors can gain deeper insights into client management's underlying motivations and identify potential warning signs of fraudulent practices. In all, Tsiligiris and Bowyer (2021), Yang et al. (2018), Gaspar et al. (2022), Daoust and Malsch (2020), and Carlisle et al. (2023) appear to suggest that auditors need forensic accountants' psychological skillsets (Lal Bhasin, 2013). This can improve auditors' ability to comprehend and interpret numerical and textual information, as well as verbal communication and non-verbal cues during their

interactions with client organisations. Consequently, equipping auditors with forensic accounting skillsets can help auditors navigate unfavourable client behaviours that may mask fraudulent practices, thereby enhancing the overall quality of the audit process (Carlisle et al., 2023).

2.8 The case for auditors' education and training in forensic accounting skillsets

A few recent studies have made a case for auditors' education in fraud related topics (Mintchik et al., 2021) and forensic accounting skillsets (see Awolowo, 2019 and Mintchik et al., 2021), fraud techniques and sensitivity (Hamilton & Smith, 2021) and behavioural sensitivity and ethical awareness (Dellaportas & Hassall, 2013). For example, Awolowo (2019) explored the perceptions of auditors, forensic accountants, financial directors, and academics regarding the need for a fundamental change in audits to address financial statement fraud. Developing the 'forensic accounting system', the author argued that to achieve a turnaround, three major elements must be addressed: an overhaul of key professional standards, bridging the audit expectation gap and upgrading auditors' education with forensic accounting skillsets (Awolowo, 2019).

Several other studies have called for research on blending forensic accounting skills and mindset into auditors' education, professional training, and statutory audit programmes. Kramer et al. (2017) surveyed educators and industry practitioners in forensic accounting and auditing fields to assess their views on forensic accounting education. The authors revealed that forensic accounting needs to be integrated in accounting/auditors' educational curriculum at both undergraduate and graduate levels. Several topics in the forensic accounting field were identified for incorporation into the curriculum. For example, interviewing and probing skills were deemed essential for inclusion in the forensic accounting curriculum for accountants/auditors (Kramer et al., 2017). Other topics considered important include 'forensic psychology, profiling and the fraud mindset' and digital forensics (Kramer et al., 2017, p. 257) amongst others. Upgrading auditors' education (Awolowo, 2019) through the inclusion of these topics can enhance their approach to gathering and analysing client information during an audit.

Lee and Welker, in a 2019 experiment carried out on accounting students, examined interviewers ability to identify dishonesty in a questioning situation. The authors focused on non-verbal signals (level of ease, thinking, and willingness to divulge information) to identify interviewees' deceptiveness. Lee and Welker (2019) argued that auditors need proper training and education in interviewing and detecting falsehoods to enhance their disposition to identify misrepresentations. This could indicate that auditors need to develop a thinking disposition that challenges their conventional inclination to the audit processes and a 'checkbox' mentality.

Developing a thinking disposition beyond auditors' default mentality requires a learning agenda that can extend auditors' predisposed boundaries. Mintchik et al. (2021) explored the significance of advancing mindset development within accounting education to broaden the existing technical proficiency-focused curriculum. The authors posited mindset as *"… a combination of cognitive filters and processes through which professionals interpret their professional environments and execute their professional responsibilities…"* (p. 87). Mintchik et al. (2021) suggested that to identify fraud warning signs and cultivate a fraud-sceptical mindset, auditors should be exposed to fraud and forensic accounting contents in their education curriculum. As such, educators need to shift focus from technical matters to promote a more holistic thinking disposition in accounting education to improve accounting graduates' market relevance (Mintchik et al., 2021).

The audit process is based on auditors verifying financial transactions and gathering evidence to assess the reliability of their client's financial assumptions, and the accuracy of their financial reporting. Thus, the evidence collected forms the basis of an auditor's professional judgement on their client's financial statement. While it is possible that auditors gather adequate evidence, Griffith et al. (2015) argued that they do not approach the evaluation of evidence gathered from a critically reasoned perspective. Auditors need to cultivate a thinking disposition that allows them to evaluate financial assumptions and the overall significance of a client's combined information more holistically (Griffith et al., 2021; Griffith et al., 2015). In other words, auditors thinking should be inclined to seek for,

and be open to, a wider range of information beyond their preset inclinations to enhance their use of audit evidence (Griffith et al., 2015).

Plumlee et al. (2015) investigated the implication of auditors' possessing cognitive and analytical skills on their performance when confronted with irregularities in audits. The authors tested the effectiveness of creative and logical thinking training on audit juniors who participated in it. Plumlee et al. (2015) established that auditors trained in cognitive and analytical reasoning demonstrate increased proficiency in devising plausible explanations during atypical or complex audit situations. They contend that with adequate training, auditors' competency in problem-solving influences their capacity to reason more holistically, thereby enhancing their performance in uncovering and reporting fraud. This implies that equipping auditors with the appropriate fraud detection skillsets can increase the likelihood that they provide stakeholders with sustainable comfort on an organisation's financial integrity.

Wells (2005, p. 13) makes an explicit case for educating and training auditors in fraud detection skillsets. Wells asserted that "… *auditors are fighting a war without being taught how to recognise the enemy. Until that changes, expect more heavy casualties* ..." Hence, improving auditors' skill in evaluating audit evidence and interpreting the context of client assumptions necessitates a step-change in their education and training (Awolowo, 2019). Training auditors to recognise fraud warning signs demands a shift from the theoretical approach to learning prevalent in auditing education (Chiang et al., 2021). The upskilling may facilitate a broader thinking perspective, allowing auditors to consider client information more holistically, thus improving their ability to uncover fraudulent misrepresentations in financial statements.

Peytcheva (2014) conducted an experiment involving auditing students and experienced auditors, to evaluate auditors' cognitive performance in assessing management information to decide on the audit evidence needed. The author found that audit students and fresh audit trainees are more likely to exhibit higher cognitive performance than experienced auditors when prompted to think suspiciously. Peytcheva (2014) seems to imply that auditors do not alter their reasoning when confronted with prompts indicative of intentional misrepresentation. While this finding might be interpreted to suggest that

novice and experienced auditors already possess a thinking disposition attuned to detecting misrepresentations, evidence from audit failures, and prior studies (see Austin et al., 2020; Gaspar et al., 2022; Griffith et al., 2021; Hyatt et al., 2024; Mintchik et al., 2021), suggests otherwise. Mintchik et al. (2021) emphasised the significance of fraud and forensic accounting topics in auditors' education and training for auditors to cultivate a fraud-sceptical mindset.

Formal academic environments can provide the essential groundwork for training future auditors, providing the necessary skills and foundational technical knowledge. Siriwardane et al. (2014), through their survey of experienced auditors, revealed that beginners venturing into the auditing profession need the foundational knowledge and skills development that university education provides. Yet job-related trainings are equally important for new and practising auditors to develop practice-based knowledge, skills, and discipline-related attributes to fulfil the demands of the profession (Siriwardane et al., 2014). This suggests that forensic accounting skillsets needs to be integrated as part of auditing foundational education and professional development the auditing profession has to offer.

The consensus among the various studies highlighted in this section highlights the critical need to augment auditors' education and training with the integration of forensic accounting skillsets. However, a few notable gaps are observed in these studies. First, most of the studies are concentrated in the US (see Griffith et al., 2015; Griffith et al., 2021; Hamilton & Smith, 2021; Kramer et al., 2017; Lee & Welker, 2019; Mintchik et al., 2021; Peytcheva, 2014; Plumlee et al., 2015). This suggests an untapped knowledge from a UK context. Moreover, relying on research from one perspective can hinder the possibility of alternative solutions to global issues.

Second, most of the studies relied on scientific modes of enquiry (e.g., Hamilton & Smith, 2021; Kramer et al., 2017; Lee & Welker, 2019; Peytcheva, 2014; Plumlee et al., 2015; Siriwardane et al., 2014). Consequently, valuable insights that could be obtained from the participants are unexplored. Third, the studies identified areas to augment auditors skillsets (for instance, cognitive performance, emotional intelligence, critical thinking, interviewing skills, among others). However, the studies did not address the 'how' (that

is, the methods or approaches) for achieving the upskilling in auditors' education and training. Consequently, this study addresses these gaps, contributing to a more comprehensive understanding of how the integration of fundamental forensic accounting skillsets can be achieved in auditors' education and continuous development programmes.

2.9 Summary

Audit quality is conceptualised differently depending on the perspectives of regulators, the auditors, investors, and corporate directors. Prominent from IAASB and FRC, audit quality entails auditors exhibiting professional values and being sufficiently skilled to gather adequate evidence based on financial assumptions employed by their clients. However, the conceptualisation of the regulators fall short in that what constitutes sufficient skills remains undefined. This absence of clarity further heightens the ambiguity of what audit quality fully entails.

Academic researchers have, over the past three decades, attempted to unify the understanding of audit quality. DeAngelo (1981) combines the need for professional values and adequate skills to define audit quality as a concurrent effect of auditors' competency to uncover misstatements and their objectivity in fulfilling their mandate to shareholders by reporting the misrepresentation. As such, when professional values and commensurate competency are jointly imbibed, auditors can arrive at a well-assessed opinion on the financial state of the client organisation.

Further, several scholars agree that audit quality cannot be tangibly seen. Therefore, scholars have used broad categorisations to define proxies and determinants that indicate quality in audits. Adopting from prior studies, this chapter examined frequently discussed proxies and determinants under input and outcome proxies. Audit firm ranking is frequently employed as a proxy for audit quality. Studies find a divergence of evidence on the attribution of high quality based on firm size. In reality, the audit firm giants audited most of the high-profile corporate fraud scandals. Hence, this reality debunks the argument of superior quality in audits based on the size.

Auditors' client business area expertise represents another proxy for audit quality. Several studies adopt auditor tenure as a determinant of quality, where extended tenures are considered indicative of auditors' quality. Similar to audit firm ranking, most publicised fraud-organisations had extended engagement tenure with their auditors. In effect, audit tenure appears inadequate as a viable proxy when audits go wrong. Audit fees have also been studied as a proxy for audit quality. However, audit fees can represent a combination of other factors besides an indication of high or low quality audit. A presumption of increasing audit quality without unpacking all possible contributing elements may result in misleading conclusions. Nevertheless, the irrelevance of audit fees tend to be underscored by undetected frauds exposed in previous corporation collapses.

Further, this chapter examined audit quality proxies observed from an outcome perspective. Restatements are favoured as a precise proxy because they indicate an observable presence of low-quality audit. Nevertheless, restatements can be a manifestation of low financial reporting quality, or in compliance with changes to accounting standards. This implies that restatements do not necessarily imply fraud. Although enforcement sanctions or fines are proven indicators of low-quality audits, studies have argued about their low representativeness and retrospective feature, as an appropriate measure of audit quality. Notwithstanding these arguments, the quality of an audit is apparent in hindsight, in the absence of a failure, or the event of a fraud-related organisation scandal. In other words, audit failures confirm inadequate audit quality. Therefore, for this study, low audit quality is represented by audit failures.

This chapter established that audit failures tend to occur because auditors' lack the competency to question, evaluate, and interpret underlying context of information obtained from client management. Competency is frequently discussed and researched from a client industry expertise and audit firm capacity standpoint. However, auditors' competency in fraud detection should be evaluated from the perspective of them possessing the appropriate skillsets to uncover anomalies, to eliminate audit failures. Yet, competency with regards to auditors' possessing the appropriate skillsets in uncovering breaches has been underrepresented in academic studies. Therefore, to achieve the

research aim, this study focuses on auditors' competency to uncover fraud, as a means to improving audit quality.

Several studies have examined auditors' competency gap from the audit firm position. Other studies have evaluated the competency of individual auditors. Every auditor's training and competency in skills, including forensic related skills, is crucial to achieving higher-quality audits. Consequently, there is a need for the forensic accountants' specialised skillsets to foster higher levels of quality in individual auditors, for fraud to be uncovered in audits.

Prior studies indicate that forensic accounting expertise is integrated into certain audit programmes in the US (Asare & Wright, 2018; Chui et al., 2022; Jenkins et al., 2018). They assert that forensic accounting experts significantly elevate auditors' comfort levels during the design and review of fraud testing and fraud-related brainstorming sessions. This chapter established that adopting forensic experts' perspective on fraud detection can influence auditors' assessment of client organisations' financial information. The use of forensic accountants' skillsets tends to be driven by their mindset in identifying fraudulent activities. Including forensic accountants can improve auditors' chances of detecting financial statement fraud. However, this study explores training and educating UK auditors to cultivate forensic accountants' unique perspective and skillsets. The value of incorporating forensic accounting skillsets into auditors' education and training outweighs concerns about audit budgets, considering the cost of failed audits to organisations and the market economy.

Auditors typically apply their skills within their established approach and audit procedures. However, recurring audit deficiencies highlight auditors' inadequacy in challenging audit evidence or effectively interpreting the context of their clients' financial assumptions. Therefore, equipping auditors with forensic experts' 'cognitive authority' in fraud detection can enhance their abilities in areas where they are often deficient. Prior studies suggest that auditors lack the skills to effectively gather audit evidence to substantiate or challenge client organisations' financial estimations (accruals). Auditors tend to overly rely on client organisations' work, default to clients' explanations, disregard exceptional items in samples, or fail to probe deeply into irregular transactions. These deficiencies can

undermine their effectiveness in identifying misrepresentations, including those indicative of fraud.

Prior studies have established key skillsets that are vital to forensic accounting expertise in fraud detection. Some of the established skillsets employed by forensic accountants include deductive reasoning, critical thinking, problem solving, investigative flexibility, analytical, interviewing, interpretive and communication skills. However, the UK perspective on the fundamental skillsets for forensic accountants in fraud detection is underrepresented in extant knowledge. Consequently, this study fills the gap by exploring UK stakeholders' perceptions to identify key forensic accounting skillsets needed to develop auditors' fraud detection competencies.

Developing a thinking disposition that challenges their predisposed 'checkbox' and conventional audit process mentality requires a learning agenda that extends auditors' preset boundaries. Auditors' education and training requires a shift to embrace a holistic thinking disposition to enhance the profession's relevance to the market economy. Audit evidence forms the basis of an auditor's professional judgement on the truth and fairness of a financial statement. However, existing studies show that auditors do not effectively evaluate gathered evidence from a critically reasoned perspective. Training auditors to recognise fraud warning signs requires moving away from the theoretical approach in auditing education. Therefore, it is necessary to equip auditors, by integrating forensic accounting topics in their education and training, to enhance their skillsets in gathering and analysing client information more effectively. With this, auditors might potentially offer stakeholders with holistic comfort on an organisation's financial position.

In all, research on auditors' education and training in forensic accounting skillsets is underrepresented in the UK context. Additionally, most studies reviewed in this chapter relied on scientific methods of enquiry, leaving valuable insights from participants unexplored. Furthermore, the studies did not address how auditors' forensic accounting education can be integrated into their existing curriculum and professional development training. This study is underpinned by Kolcaba and Kolcaba's (1991) comfort theory to address these gaps.

Similar to the nursing profession, auditing could be considered as an intervention, which should result in comfort to shareholders on whose behalf auditors act. The auditors themselves, and other primary stakeholders would benefit from the comfort of enhanced audit quality with the integration of forensic accounting skillsets in auditors education and professional development. This comfort is expressed in three dimensions: first as a relief, by resolving the competency gap in auditors' fraud detection education with the specialised skillsets of forensic accounting; second as a state, which reflects the effects of peace emanating from an 'informed position' in exercising their professional judgement, with auditors attainment of fraud detection education. The third dimension is the renewal element, which promotes auditors' accountability to acquire and develop the forensic accounting skillsets and a fraud detection mindset through a re-education and continuous upskilling programme.

The agency diamond model (Fletcher et al., 2021) plays a supporting role in the theoretical framework for the study. The model defines the primary beneficiaries of the state, relief, and renewal elements of comfort. Therefore, interplaying the agency diamond model with comfort theory provides a solid framework to address the objectives set out in this study. The next chapter discusses the methodology employed for the study.

Chapter Three: Methodology

This chapter explains the methodological framework that underpins this research, presenting the theoretical orientation and practical approaches adopted to address the research aim and questions. The methodology forms a vital foundation for the study, ensuring the research is systematically conducted, coherent, and aligned with its objectives. The purpose of the study is to explore how forensic accounting skillsets can be integrated into UK statutory audits and auditors' education to close the competency gap in their fraud detection abilities. The overall objective is to develop an actionable educational and continuous training programme that can enhance auditors' skills in evaluating audit evidence and client management information more effectively. Consequently, auditors can be better equipped to detect misrepresentations, including fraudulent practices, in financial statements. Accordingly, the researcher set out the following research questions:

a) What are the key forensic accounting skillsets needed to fill auditors' fraud detection competency gap?
b) How and at what stage(s) of auditors' education can these skillsets be introduced into auditors' undergraduate and continuous development programmes?

To explore these questions, the philosophical perspective adopted for the research and its relevance to the study will be discussed. The philosophical positioning of a researcher is important because it shapes the research design, influences the approach to data collection and analysis, and provides a lens through which the investigated phenomenon is understood (Saunders et al., 2019). In this study, the chosen philosophical position guided all methodological decisions, ensuring methodological alignment, robustness, and credibility throughout the research process.

The chapter proceeds as follows: first the philosophical positioning is discussed. This is followed by an explanation of the research approach and strategy adopted for the study. The methodological design is then outlined, followed by an explanation of the sampling techniques and procedures. The methods of and procedures for data collection and analysis are then explained. Additionally, the ethical considerations addressed during the

research process are presented. Finally, the chapter concludes with a summary of the methodological framework.

3.1 Philosophical positioning

The philosophical positioning of a researcher embodies the assumptions and ideologies that influence the means and methods deployed to investigate a phenomenon. Since the mid-twentieth century, the pursuit of knowledge in the social sciences has been heavily dominated by scientific and controlled theorising, mirroring the natural sciences (Arseneault et al., 2021). Naturally, research in business and organisational management emulated this structured mode of acquiring knowledge (Arseneault et al., 2021). Thus, the mainstream position of sensorial and measurable modes of investigation has been prevalent in research conducted in the accounting and auditing fields (Chua, 2019; Power, 2003). By extension, studies in organisational fraud and forensic accounting topic areas mostly align with the dominant scientific philosophical perspective (Awolowo, 2019; DiGabriele & Huber, 2015; Stone & Miller, 2012).

The positivist philosophical perspective has dominated studies in the social sciences. A positivist orientation acknowledges the existence of reality as being separate from the knower (Chua, 2019). Research is therefore objectively carried out in a detached manner, uninvolved with the subjects under investigation (Johnson & Duberley, 2000). This detachment is taken for granted in the traditions of the natural sciences, where the complexities of the social world are insignificant to knowledge creation (Duberley et al., 2012). However, the dominance of positivism in accounting and its sub-fields (Chua, 2019) has been challenged with the emergence and acceptance of alternative philosophical perspectives in these fields (Chua, 2019; Johnson et al., 2006; Laughlin, 1995; Power, 2003).

This tolerance for alternatives (Locke & Lowe, 2008) breaks through accessible knowledge from the confinement of prediction testing and falsification of preexisting theories that restrict the extent of attainable truth (Villiers et al., 2019). In other words, having a diverse pool of philosophical perspectives in organisational studies can broaden legitimate truth into uncharted dimensions, which are relevant and adoptable by

organisations in practice (Villiers et al., 2019). Therefore, accessing legitimate truth on the dilemma of fraud, the competency of auditors and accountability to stakeholders requires a deeper insight that the limitations of experiments and statistical inferences of positivism cannot attain.

The interaction of socio-economic and behavioural issues across social science fields like accounting, psychology and organisational management, necessitates diverse modes of enquiry to address social phenomena and improve organisational practices. Laughlin (1995) stated that:

> *"… Accounting is a social practice conducted by diverse social actors. To claim that it has … theoretical characteristics similar to gravity is a proposition where there has to be some considerable leap of faith …"* (p. 83).

As such, any study into the social and behavioural phenomenon of fraud, its effects on society, and possible solutions, should aspire to understand the perceptiveness of the actors being studied (Lumineau et al., 2024; Ramamoorti, 2008). Johnson et al. (2006, p. 146) expressed that *"… there is no single, incontestable scheme of ontological and epistemological commitments which may be deployed to protect and regulate any (management) research…".* In essence, accepting various philosophical assumptions underlying personal ideologies and how truth is established is invaluable to diversifying contributions to knowledge (Gill et al., 2010; Symon et al., 2018).

3.1.1 Neo-empiricism

This study adopts a neo-empiricist philosophical position. Neo-empiricism is acknowledged as a valid alternative to the mainstream theory of knowledge in management and organisational research (see Prasad & Prasad, 2002; Johnson et al., 2006; Coule, 2013). The commitment of neo-empiricism aligns with the positivist realist-objectivist theoretical orientation (Johnson et al., 2006). However, a fundamental distinction is in its commitment to a non-scientific, non-numeric, textual mode of knowledge production. Therefore, while the core tenet of the neo-empiricist theoretical position is objective truth, it adopts an 'interpretivist mode of engagement with qualitative methods' to understand the complexity of reality (Kesseba et al., 2018; Johnson et al., 2006). Johnson et al. (2006) describes neo-empiricists as researchers who employ:

> *"… qualitative methods to develop inductively thick descriptions of the patterns in the inter-subjective meanings that actors use to make sense of their everyday worlds and … investigate the implications of those interpretations for social interaction …"* (p.138).

Neo-empiricism retains the emphasis on empirical evidence but recognises that interpretation plays a significant role in understanding the interactions of social phenomena. Opposed to positivists' commitment to predict and discover universal laws, neo-empiricists accept that multiple perspectives and interpretations contribute to a more holistic comprehension of real-world events, influenced by context and perception. Therefore, neo-empiricists recognise that knowledge is constructed through human experiences and interactions (Johnson et al., 2006).

Auditing is entrenched in processes and actions influenced by human interactions (Dirsmith et al., 2015). Dirsmith et al. (2015, p. 169) asserted that *"… doing auditing seemed to be a lot of talk, suggesting … that auditing was predominantly a social, rather than technical, process.*" Hence, the authors consider … *"auditing as a social practice …".* This study's inclination towards an objective interpretive mode of deriving knowledge is rooted in the reality of auditing as a social event, and fraud as a social behavioural concept. By objectively exploring the participants' cognition expressed through their perceptual and lived experiences, valuable insights into key forensic accounting skillsets in a UK context can be gained. Additionally, insights into how these skillsets can be incorporated into the various levels of education and professional training for auditors in the UK can be understood. As a researcher, expressing these insights and new knowledge, upholding the contextual construct of the participants requires an objective awareness of the interconnection of the insights obtained. Consequently, new knowledge based on the empirically observed realities can be conceptualised from facts (Kesseba et al., 2018).

Machery (2006) postulated that neo-empiricist theoretical orientation overcomes positivists' limitation on abstraction while maintaining an objective representation of the perceptions leading to an intangible concept. Explaining this position, the author

expressed that to neo-empiricists, *"… the concept of truth involves successively a speech act and the verification of its correspondence to a situation by a hearer …"* (Machery, 2006, p. 404). Machery (2006) and McCaffrey and Machery (2012) argue that neo-empiricism emphasises the role of sensory and physical experiences in shaping our reality. They stress that our understanding and categorisation of concepts are deeply rooted in our perceptual and physical experiences. However, Dove (2010) raises a significant concern that this perspective might overlook the inherent diversity in how different individuals or cultures conceptualise the same phenomena. He suggests that the variety and differences in how people understand and represent concepts play a vital role in the formation of perceptions.

Dove (2010), Machery (2006) and McCaffrey and Machery (2012) have articulated their perspectives from the domains of psychology, philosophy, and neuroscience. Their arguments overlook the role that individual lived experiences can play in knowledge acquisition. An individual's lived experiences are shaped by their social interactions, professional exposures, personal encounters, culture, environment, thoughts, among other factors, in addition to their sensory and physical experiences. The differences in individual lived experiences can contribute to the diversity of insights obtainable on a social phenomenon. This suggests that neo-empiricists can extend the reach of knowledge through insights based on empathic understanding of both concrete and abstract, observable, and intangible concepts, expressed in the context of participants' perceptions. Hence, conceptual divergence is of significance to the theoretical appropriateness of neo-empiricism for this study, to address a socio-organisational reality and avoid audit failures. In combining objectiveness with the quest for in-depth understanding, neo-empiricists can be said to bridge the divide between positivists and interpretivists inclination, as a form of overlap or 'cross-paradigm' perspective to warranted knowledge (Repenning et al., 2022).

In other words, neo-empiricists employ an empathic understanding (verstehen) of socio-behavioural contexts expressed through the inter-subjectivity of human interpretations about their awareness or experience of a social phenomenon (Johnson et al., 2006). The subjectivity in neo-empiricism differs from an epistemological subjectiveness (Kesseba et

al., 2018). For a neo-empiricist, sense-making in knowledge production is in how the perspectives of social actors, borne out of their encounters and organisational exposure, inform their interpretations about social realities. Hence the inter-subjectivity is in the interchange of the social actors' interpretations. This distinguishes neo-empiricism from the philosophical disposition of Johnson and Duberley's (2000) objectivist–subjectivist quadrant.

Critical theory and critical realism are both philosophical positions situated within Johnson and Duberley's (2000) objectivist-subjectivist quadrant. Laughlin (2007) proposes critical theory as an alternative philosophical perspective in management and organisational studies. Critical theory distinguishes itself from neo-empiricism in its epistemological considerations and reasons for conducting research. While neo-empiricism imbibes an objectivist ontological and epistemological commitment, critical theory commits to a subjectivist epistemology (Johnson & Duberley, 2000). This means that knowledge is socially derived from the researcher's interpretations of phenomena and the participants' understandings. Critical theory aims to address institutional issues of power, authority, and politics, invoking radical sentiments to drive changes in social and economic concerns. Truth in critical theory, therefore, focuses on liberating the suppressed from *"… asymmetrical power relations … and constraints…"* (Johnson et al., 2006, p. 142).

Laughlin (1995) advocated for critical theory as a mid-ground (from the two extremities of positivism and postmodernism) for studies in the accounting field. Logically, the merits of this proposition can be appreciated from the fusion of a realist perspective on the nature of the world, with a subjectivist mode of establishing knowledge through an understanding of the insights communicated by research participants. However, investigations into social phenomena should not be concentrated on discussions of institutional power, structures, authority, politics, and liberation. Similar to positivism, such concentration may limit the extent of knowledge that can be derived from research. To the contrary, this study is focused on bridging the divide between research and practice, by exploring the objective truth that can influence organisational practice.

Roy Bhaskar's critical realism is perhaps a less prominent theoretical orientation in management and organisational studies (Johnson & Duberley, 2000). Although critical realism draws on the neo-empiricist notion of objectivity, it postulates that knowledge extends beyond empirical observations to understand underlying structures and mechanisms that shape social phenomena (Johnson & Duberley, 2000; Zhang, 2023). To a critical realist, knowledge of reality is always partial, not absolute, and subject to interpretation. Reality is stratified, including empirical (what we observe), the actual (events that occur), and the real (underlying mechanisms and structures).

Critical realists believe that while derivable knowledge is independent of the researcher, it involves interpreting and explaining the deeper, and often hidden, mechanisms behind social events or phenomena (Blaikie, 2007; Zhang, 2023). Thus, while critical realists adopt a subjectivist epistemology, neo-empiricists adopt an objectivist epistemology. Using Johnson and Duberley's (2000) *'reflexivity and management research'* matrix (p.161), Figure 3.1 below illustrates the epistemological and ontological foundations of neo-empiricism, positivism, critical theory, and critical realism.

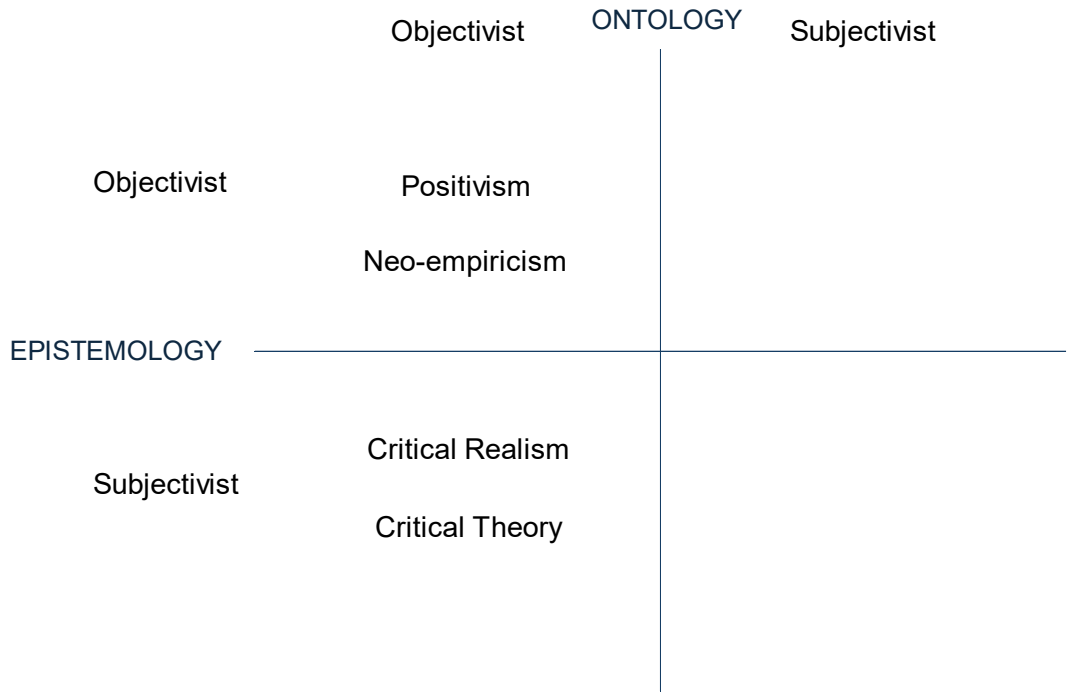


Figure 3.1: Philosophical foundation mapping adapted from Johnson & Duberley (2000)

Critical realist, like critical theory is committed to understanding and critiquing social structures. While critical theory focuses on exposing and challenging power structures to promote social transformation, critical realism strives to uncover and explain the underlying mechanisms that produce events. Both philosophical perspectives offer distinct contributions to the body of knowledge in management research (Johnson & Duberley, 2000). However, a focus on institutional structures and their underlying mechanisms still constrains the quest for immediate practical solutions to influence audit practices, which is what this study seeks to achieve.

The concrete nature of financial statement fraud and the failings of statutory audits in detecting and reporting these frauds are socio-organisational realities involving human behavioural activities. This study recognises auditing and fraud as social phenomena shaped by human interactions. In addition, the need for a sustainable solution is in the interest of organisational survival as going concerns and societal economic wellbeing. This means that the perspectives of the key actors in this domain cannot be relegated in any research focused on contributing to organisational practices. Neo-empiricists interpret objective truth on the fundamental skillsets and mindset to detect fraud and the educational and professional development programme within the participants' context. Thus, for this study, unlike critical realism's focus on inferring hidden structures, neo-empiricism emphasises understanding the behaviours and processes influenced by human actions. Having an awareness of the concerns of institutional and organisational structures, and the issues of organisational practices, provide a holistic understanding of the inter-relatedness of the social world and its actors (Prasad & Prasad, 2002).

Taking this distinct interpretive theoretical stance (Kesseba et al., 2018), this study adopts a realist position on the nature of audit failures and the need for forensic accounting skillsets in auditors' education on fraud detection. However, truth will be objectively derived from an in-depth insight into the perceptiveness of the participants to achieve a deeper understanding of the subjects investigated. Having a non-positivist dimension to studies on audit failures, financial statement fraud and forensic accounting offers an alternative theoretical perspective relevant to and adoptable in organisational practice.

Therefore, a neo-empiricist philosophical perspective (Johnson et al., 2006) is most suited to the purpose of this study.

3.2 Research approach

Neo-empiricists adopt an inductive approach to knowledge production (Awolowo, 2019). In designing an inductive study, attention is on the objective building of new theory rather than testing pre-existing theory, as is found in a deductively reasoned study. For a deductive research approach, emphasis is on explaining and predicting phenomena by establishing causality. Logic and defining rules (operationalisation) inform hypothetical testing of existing theory, leading to its falsification or corroboration (Gill et al., 2010). The rules, conditions and process of testing therefore become the core of the 'hypothetico-deductive approach' (Gill et al., 2010, p. 53). This follows the rigid structure of a scientific (experimental) mode of investigation known to positivism. However, this rigidity limits knowledge production to what is already known (Gioia et al., 2013). In effect, investigations conducted using a deductive approach generalise from existing theories to a specific premise to establish universal laws.

An inductive study approach, on the other hand, applies insights or observations from data to develop a new theory or conceptualised framework (Dodge, 2015; Myers, 2019). In applying insights, the researcher creates themes and identifies patterns or connections from the interpretations of social actors (Saunders et al., 2019). Here, the focus is on the significance of human perceptiveness in making sense of their interpretation of a social issue in a given context (Saunders et al., 2019). Therefore, researchers adopting an inductive approach tend to benefit from a diversity of perspectives, from the textual data collected, in generating new theory. This means that inductive studies recognise context, depth and robustness of the textual (qualitative) data gathered to successfully answer the research questions.

Gill et al. (2010) stated that social actors have inherent reasoning abilities that make it inapt to disregard their mindfulness of socio-behavioural issues impacting their social world. They argue that *"… human action is purposive … and becomes intelligible when … inter-subjective dimension to human behaviour …"* is accessed (p. 60). This can only

be accessed through an empathic understanding (i.e., verstehen) of social actors' subjective meanings and experiences about the situation or issue being studied (Gill et al., 2010; Johnson et al., 2006).

The experiences of forensic accountants, external auditors, professional body specialists, and educators in the accounting/auditing field can be empathically understood from their individual context and professional exposure. The subjective meanings and the inter-subjectivity of these perceptions can provide deep insights into how forensic accounting skillsets can be incorporated into auditors' education and continuous training programmes. Therefore, adopting an inductive approach, grounded in the data, offers more flexibility and provides a wider dimension to legitimate knowledge production on the research objectives.

3.3 Research strategy

Aligning with an inductive approach, the study employs a qualitative research strategy to knowledge production. Qualitative research encompasses a range of non-numerical or non-statistical research designs, capable of producing knowledge from diverse and yet distinctly unique viewpoints (Johnson et al., 2006; Symon et al., 2018). Qualitative researchers can creatively adopt and adapt their methods to the research context (Plakoyiannaki & Budhwar, 2021). Qualitative research offers researchers the flexibility to capture rich, detailed data on complex issues. Hence, theory development is contextualised, grounded in the data, and adaptable to organisational practices. This contrasts with quantitative research, which adheres to the scientific hypothetico-deductive approach, focusing on numerical data to measure variables and determine relationships between them.

A qualitative strategy aligns with this research's neo-empiricist philosophical position. Inductive neo-empiricism recognises the existence of people as custodians of meanings in the challenges, opportunities, and interactive events that shape and drive organisational activities. Thus, for this study, a qualitative strategy is driven by the researcher's desire to develop an empathic understanding of insights from key stakeholders in audit quality and forensic accounting in the UK. This strategy enabled me

to capture rich, contextual data, comprehensively addressing the defined objectives. In effect, producing an objective account of participants' perceptions provided the opportunity for a robust knowledge base for theory development, with deeper insights beyond a cause-and-effect relationship.

Moreover, as discussed in Chapter Two on literature review, research into integrating forensic accounting skillsets in auditors' education to address audit failures in the UK is underdeveloped. In view of the unfolding discussions on audit failures with the government, regulators, and audit circles, a qualitative study provides the latitude to explore the complexities and nuances from key stakeholders. By this, a richer knowledge contribution to the use of forensic accounting skillsets as a solution to auditors' fraud detection competency gap is proposed.

The legitimacy of qualitative research in management studies has been challenged based on its epistemological diversity (Symon et al., 2018). As discussed in section 3.1, critical researchers (critical theorists and critical realists) adopt a subjective epistemology while neo-empiricists adopt an objective epistemology. Even with neo-empiricists' value for objective truth, the underlying foundation of knowledge is based on multiple perspectives and interpretations, contrasting with the positivist pursuit of universal laws. For quantitative studies, the structured approach to prediction testing and identifying causal links benefits from standardised measures to assess the integrity of the research process. This reinforces the given nature of replicability of quantitative studies. On the contrary, qualitative research's inherent diversity and flexibility require researchers to deliberately consider the criteria by which the robustness of the study can be assessed (Johnson et al., 2006; Tracy, 2010). The evaluation criteria for this study is discussed next.

3.3.1 Evaluation criteria for qualitative research

Proponents of quantitative research question the academic rigour and criteria to scrutinise the rigour in qualitative studies (Guba, 1981; Johnson et al., 2006; Symon et al., 2018). Tracy (2010) emphasised that while there is value in defining evaluative criteria, the value in qualitative research should not be expected to conform to the criteria defined for quantitative studies. This is because the underlying theoretical principles, and methodological commitments are different (Pownhall, 2024). In quantitative research,

academic rigour is conventionally established by evaluating reliability and validity, which assess the consistency and accuracy of measurement instruments (Johnson et al., 2006; Pownhall, 2024; Symon et al., 2018). Reliability ensures that results are replicable under consistent conditions, while validity confirms that the instruments measure what they purport to measure. These criteria are central to psychometric evaluation and for statistical generalisability of findings (Johnson et al., 2006).

In contrast, qualitative research employs alternative indicators such as credibility, transferability, sincerity, rich rigour, dependability, significant contribution, and confirmability to establish trustworthiness (Johnson et al., 2006; Tracy, 2010). These criteria reflect the nuanced, context-bound nature of qualitative research, where rigour is achieved through reflexivity, transparency in analytical procedures, and the coherence of interpretations with participants' lived experiences (Aguinis & Solarino, 2019; Johnson et al., 2006; Pratt et al., 2020; Symon et al., 2018).

Furthermore, the diversity of questions and contexts explored by qualitative researchers can influence their methodological choices, which may necessitate a consideration of alternative value standards to establish academic robustness (Johnson et al., 2006; Symon et al., 2018; Tracy, 2010). Consequently, to demonstrate academic rigour and trustworthiness, qualitative researchers must be transparent in detailing their methodological choices and procedures adopted to arrive at their research findings (Aguinis & Solarino, 2019; Pratt et al., 2020).

Several qualitative studies have been instrumental to establishing and justifying how publishers, journal editors, reviewers and other researchers can determine quality in qualitative research (see, Guba, 1981; Denzin & Lincoln, 2018; Aguinis & Solarino, 2019; Johnson et al., 2006; Pratt et al., 2020; Symon et al., 2018; Tracy, 2010). For instance, Johnson et al. (2006, p.137) posited that research adopting a neo-empiricist position must demonstrate credibility, transferability, confirmability, and dependability by providing a reflexive audit trail. Tracy (2010, p.840) proposed that quality in qualitative research can be evaluated based on the researcher's sincerity, which involves transparency and self-reflexivity regarding their actions. Additionally, quality can be evaluated through substantial contributions at the conceptual, practical, and methodological levels, as well

as coherent links between the literature, research questions, findings, and interpretations (Tracy, 2010). These studies continue to widely contribute and influence the landscape and acceptance of interpretive studies as a legitimate means of knowledge production (Villiers et al., 2019). Table 3.1 below presents a summary of the application of Johnson et al.'s (2006) evaluative criteria in this study.

Table 3.1: Mapping of evaluative criteria applied in the study

Description of strategy applied	Credibility	Transferability	Dependability	Confirmability
Audit trail: Comprehensive detailing of every stage of the research: documenting the design choices, sampling, data collection, coding, and inductive analysis steps	X	X	X	X
Member verification: Participant verification of interview transcripts to confirm authenticity and clarify meanings	X			
Data triangulation: Triangulating participants by interviewing multiple interest groups central to the audit quality and forensic accounting skillsets-mindset discourse. Comparing data from the multiple interest groups to validate findings and reduce bias	X		X	X
Thick contextual description: Providing rich information about participants' backgrounds and interaction dynamics to facilitate applicability		X		

Interview guide validation: Review of the interview guide by the Director of Study before commencing interviewing, to ensure alignment with the research objectives and theoretical framework, thereby eliciting rich data relevant to the research questions	X		X	X
Independent review of data and analysis: Independent examination of raw data, analytical procedures, and findings by the supervisory team to confirm interpretations are grounded in the evidence	X		X	X
Embedding transcript data in discussion of findings: Integrating verbatim participant quotes into the discussion to demonstrate that interpretations are grounded in participants' own words and to substantiate conclusions	X			X
Transparent thematic development: Demonstrating how final themes and theory development emerged from the data to ensure clarity of the analytical process	X	X		
Reflexivity: Documenting researcher's positionality and maintaining reflexive notes on thoughts, observations, and decision-making processes, allowing readers to account for potential biases	X	X	X	X

Source: Author's compilation

3.3.2 Generalisation in qualitative research

Qualitative inductive 'bottom-up' approach to theory development raises concerns about generalisation (Parker & Northcott, 2016). This can be attributed to the limited scope of

participants, typifying a qualitative study in contrast to the larger participation in quantitative studies. Quantitative researchers may consider findings from a localised group, case, or context, unrepresentative of a broader population and thus presumed not generalisable. This argument assumes that the absence of statistical representation in qualitative studies limits the contributions of qualitative research outputs. Proponents of this view argue that the lack of statistical generalisability in qualitative research diminishes its ability to provide widely applicable insights (Guba, 1981; Villiers et al., 2019). Thus, qualitative research contributions tend to be undervalued by scientific researchers (Parker & Northcott, 2016), with a view to undermining the significance of knowledge produced.

Parker and Northcott (2016) highlighted the potential usefulness of generalisation to qualitative researchers in accounting research: Generalising can be seen as a means to develop theory, by connecting one's findings to other phenomena. In addition, it provides researchers and industry practitioners the avenue to resolve social issues and transform organisational practice within the context and situational proposition of a specific study. Yet the emergent theory and resolutions proposed can be transferred and adapted to inform wider practice. In effect, in qualitative research, generalisation is "… *to theory rather than the population*" (Darabi, 2016, p. 6). This means that the emerged theory (or research findings) can resonate with readers, or practitioners, who then transfer the findings to address their organisational needs (Tracy, 2010). Thus, by adopting a qualitative strategy, this study embraced the transferability of the emergent theory over the generalisability of a quantitative study. The ensuing sections in this chapter elaborate on the research design, providing a detailed account of the methodological choices and procedures employed in the study.

3.4 Methodological design

A qualitative design, using qualitative interviews, was employed to achieve the objectives of the study. Qualitative interviews operate on the premise that understanding and articulating the perspectives of others is both valuable and achievable (Patton, 2015). The interest of this study is to gain in-depth insights into participants' understanding of the key forensic accounting skillsets pertinent to auditors' fraud detection education. The

recommendations to address the failings in financial statement audits suggested by Awolowo (2019) and Brydon (2019) can be said to be a novel initiative within the UK. This means that knowledge about integrating forensic accounting skillsets into statutory audit programmes and auditors' education is, at best, incubatory. Thus, the use of semi-structured interviews allowed for versatile conversations in a flexible manner, providing opportunities for the participants to elaborate on any new dimensions (Kaczynski et al., 2014; Saunders et al., 2015).

Qualitative interviews, as Brinkmann and Kvale (2018, p. 13) assert, are a *"… uniquely sensitive and powerful method …"* to express individual perspectives articulated by the interviewees. Using semi-structured interviews facilitates an in-depth understanding of the perceptions of the key stakeholders to answer the research questions. The researcher and interviewee jointly create the conversation through their interactions, with the researcher positioned as a guide to maintain a focus on the research aim and objectives. Such interactions are inaccessible in quantitative studies using experiments, surveys, or questionnaires. For this study, employing semi-structured interviews offered a balance between structured and unstructured forms of interviewing. This aligns with a neo-empiricist's perspective of developing theory grounded in empirical data and direct interaction with participants (Kesseba et al., 2018).

Semi-structured interviews facilitated a flexible approach to exploring the perceptions of interviewees. With open-ended questions, the participants can provide in-depth accounts of their views, informed by their experiences on a subject matter. This provides richer, more comprehensive descriptions than closed questions or structured interviews (Clark et al., 2021). Further, the flexibility of semi-structured interviews also allows the researcher to explore new dimensions that arise during the interview (Clark et al., 2021). Yet, the researcher ensures the conversations stay focused on the interview guide.

In addition, the use of semi-structured interviews enables the researcher seek clarifications and probe deeper into specific answers. This allows the researcher to access interviewees' subjective experiences while giving them time to consider their thoughts more deeply on a subject matter (Brinkmann & Kvale, 2018). Thus, the researcher can fully make sense of the interviewees' perspectives – what Clark et al.

(2021, p. 573) referred to as *"… seeing through the eyes of the people studied …".* Then again, although the researcher leans on an interview guide to ensure a consistent line of questioning, the questions can be adapted to each participant (Clark et al., 2021). This makes it easier to gather relevant information from diverse individuals. This adaptability is particularly important for the study, where the interviewees are professional practitioners in different occupational fields: external auditing, forensic accounting, professional body institutions, and educational institutions.

The flexibility of semi-structured interviews raises the question of interviewer bias. The questions and follow-ups may vary depending on the interviewer's perspective and reactions. To mitigate the possibility of such biases, the process of seeking clarifications or asking follow-up questions can be prompted using the interviewees' own words (Roulston, 2018). For this study, the researcher elicited further information on specific answers by prompting the participants with precise words from details they previously provided. Hence, the additional insight provided by participants are not influenced by the researcher's opinion about the subject or the participants' responses. As such, the researcher retained an objective position throughout the interview process.

For qualitative researchers to fully make sense of their interviewees' insights, it is important they verify their understanding of participants' responses. The verification may involve the researcher restating the interviewees' responses, using the researcher's own words, to seek confirmation (Roulston, 2018). This allows the interviewees to clarify or expand on the details provided or to validate the researcher's sense making. Additionally, any variability in questioning can lead to inconsistencies in the data making it harder to compare responses across different interviews (Patton, 2015). For this study, one of the ways of avoiding inconsistencies was the use of an interview guide. The interview guide ensured all participants were asked about the same core issues while allowing for flexibility in follow-up questions.

Furthermore, the researcher was able to mitigate the possibility of inconsistencies by carefully ensuring that variations were made to adapt questions to an interviewee's preferred terminology or occupational nuances (Patton, 2015). For instance, a few of the external auditors interviewed were hesitant when the word 'fraud' was used in a question.

Noticing the hesitation, the researcher varied the choice of words, replacing the term with ‘misrepresentation’. This made the interviewees more comfortable and forthcoming in providing detailed accounts of their experiences. On the contrary, forensic accountants interviewed did not resist the use of ‘fraud’ in the questions. As such, the words ‘fraud’ and ‘misrepresentation’ have been used interchangeably, albeit contextually, in the findings and discussion chapters.

In all, adopting a qualitative interview design, using semi-structured interviews, provided an environment that allowed the interviewees to articulate their unique perceptions in their own words. This resulted in thick descriptions on the fundamental forensic accounting skillsets to enhance auditors’ fraud detection competency and how the skillsets can be incorporated in auditors education and continuous training. The specific sampling technique and procedure is presented in the next section.

3.5 Sampling technique and procedure

Participants for the study were primarily selected using the purposive sampling technique. Purposive sampling is non-probabilistic and is considered a practical means of recruiting participants for qualitative studies (Berndt, 2020). Participants are identified and recruited based on the researcher’s predefined selection characteristics. Purposive sampling allows researchers to exercise their judgement on the relatedness of a potential participant to the focus of the study. This targeted approach ensures that the data collected is rich and relevant to the research aim and objectives (Ahmad & Wilkins, 2024; Berndt, 2020; Patton, 2015).

For the study, the participants were strategically identified from the population of external auditors, forensic accounting experts, educators and auditing professional bodies in the UK. This population encompasses the key stakeholders presented in Fletcher et al.’s (2021) agency diamond model, as defined earlier in Chapter Two, Section 2.1.3. A primary inclusion criterion for selection was their professional experience within the UK, regardless of the geographical location of practice within the UK or the size of firm for the auditors. Recruiting participants across the specified fields relevant to the study focus

was expedient to ensure that the findings are not exclusive to external auditors, forensic accountants, educators, or the regulatory bodies.

Accordingly, the diverse perspectives were enriched by the triangulation of these relevant actors (Myers, 2019). Triangulating participants allowed me to explore the research questions from multiple angles, providing the latitude for a robust view to achieve the study's objectives (Myers, 2019). This resulted in a more holistic understanding of the interconnection of the forensic accounting skillsets and mindset, as well as the integration agenda for auditors' education and continuous development. Ultimately, triangulating participants from parties directly impacted by audit failure discourse led to higher credibility of the findings (Myers, 2019; Tracy, 2010). Additionally, the sample heterogeneity further strengthened the theoretical applicability of the study's conceptual output (Robinson, 2014).

Sampling in qualitative studies tend to consider representation more relevant than sample size (Myers, 2019). Baker and Edwards (2012) described indicators that may be used to defend participant numbers in interviews such as the scope of the study or phenomenon being investigated, and time constraints for the study. Other authors have argued that the adequacy of sample size should be dictated by the point of data saturation, when themes become repetitive (Dworkin, 2012). Supporting a consensus position, Saunders and Townsend (2016) state that decisions regarding sample size should be transparent and the representation sufficient enough to achieve information depth. Ultimately, the quest for depth and data richness displaces any debate on appropriate sample size in qualitative studies (Moser & Korstjens, 2018).

Notwithstanding, to Saunders and Townsend (2016), projecting between fifteen to sixty interviews is a reasonable estimation. Brinkmann and Kvale (2018), on the other hand, suggest a range between five and twenty five interviews can be considered sufficient. Braun and Clarke (2021) favoured an average of twenty-five interviews to be most suited for thematic analysis. Notably, an indicative participant size remains at the researcher's discretion based on the study's nature and purpose, and the researcher's commitment to depth over quantity. Therefore, qualitative researchers must remain flexible and responsive to challenges encountered while ensuring the study's objectives and their

commitment to rich data are not compromised over the number of participants (Moser & Korstjens, 2018).

The participants were purposely selected based on their professional relevance to the research questions. As such, the depth and quality of their perceptions is more valuable than the large sample size and statistical representation emphasised in quantitative studies (Ahmad & Wilkins, 2024; Myers, 2019). The criticality of the research topic calls for a holistic understanding from multiple core stakeholders to minimise biases from any one of these social actors. As such, I carefully assessed these key actors – educators, forensic accountants, professional body specialists, and external auditors - through professional networks on LinkedIn, audit firm websites, conference engagement and in some cases, participant referrals.

The first two potential participants were identified at one of the annual Association of Certified Fraud Examiner (ACFE) conferences in November 2022. Engagements at academic conferences also provided me with opportunities to recruit participants. Following an intensive period of assessing relevant profiles on LinkedIn, other potential participants were identified and contacted. Next, I visited a minimum of five audit firms' websites, carefully assessing their people profile information to identify suitable prospects in their auditing and assurance, and forensic, divisions. With this approach, I contacted at least ten potential participants with relevant profiles.

Several of the initial participants willingly connected me to contacts with characteristics relevant to the purpose of the study within their own networks. By integrating snowballing opportunities with purposive sampling, I was able to access hard-to-reach practitioners, thereby enriching the data with diverse perspectives (Geddes et al., 2018). Snowball sampling has the potential to result in selection biases because the selection opportunities are influenced by the social circles of referring participants (Geddes et al., 2018). This may lead to a skewed representation of participant categories recruited.

However, since snowballing was used along with purposive sampling, the potential for selection imbalance was significantly mitigated. Additionally, sampling multiple interest groups, from the parties directly impacted by the audit failure discourse, also reduced the potential for selection bias. The diversified initial selection, coupled with snowballing,

broadened the range of social networks and ultimately, the insights gathered in the study. The combined approach to recruiting participants reduced the likelihood of over-representing specific groups, thereby enhancing the representativeness of the sample. This contributed to the methodological thoroughness employed in the study, leading to more comprehensive and inclusive data. Consequently, the diversity of perspectives strengthened the study findings (Tracy, 2010).

Self-selection bias may occur in qualitative research designs that rely on voluntary participation. Individuals who chose to engage with the research may possess characteristics that distinguish them from those who declined participation. For instance, they may possess a heightened interest in the topic, stronger opinions, or greater confidence in articulating their lived experiences. This introduces the possibility that the data reflects a subset of perspectives that are not fully representative of the broader population. The possibility of self-selection bias was mitigated, in part, through the recruitment of multiple interest groups, facilitating data triangulation, participant verification of transcripts, and transparent reflexive practices were maintained throughout. Inclusion criteria were also clearly defined to support rigour in participant selection.

3.5.1 Participant selection criteria

Establishing clear sampling selection criteria is essential to establishing methodological rigour and relevance in qualitative research, particularly when investigating complex social phenomena. Inclusion criteria serve as a foundational guide for identifying participants whose experiences, expertise, and perspectives are directly aligned with the research objectives. In this study, inclusion criteria were designed to capture a diverse yet targeted range of insights on the fundamental forensic accounting mindset and skillsets to be integrated into auditors' educational and professional development training programmes. Table 3.2 below provides a summary of the purposive selection criteria utilised for this study.

Table 3.2: Participant purposive selection criteria

Participant Group	Selection Criteria
External Auditors	Currently or recently practising in UK statutory audit environments
Forensic Accountants	Experience in investigating audit failures, fraud, or financial misstatements in the UK
Professional Body Specialists	Affiliated with recognised UK audit/accounting bodies (e.g., ICAEW, ACCA, FRC) involved in oversight, standard setting, or disciplinary functions
Educators	Actively teaching and/or researching auditing, forensic accounting, or financial reporting in UK universities

Source: Author's compilation

Fifteen participants expressed interest in the study and provided their consent to be interviewed. The participants were recruited from November 2022 to July 2023. The participants' information, showing their years of experience and current occupational position, is presented in Table 3.3 below. To maintain the confidentiality of the participants, each participant has been assigned a pseudo-identifier (ID) in place of their names. The pseudo-identifiers relate to the interest group classification for each participant where:

a. Educators are identified as ED
b. External auditors as XA
c. Forensic Accountants as FA
d. Practitioners from professional bodies as PB

Table 3.3: Participant information

Participants ID	Gender	Position	Organisation	Years of experience	Background in external auditing
Educator (ED001)	Female	Senior Lecturer	University	30+	Yes
Educator (ED002)	Male	Professor	University	30+	No
Educator (ED003)	Female	Professor	University	30+	Yes
Forensic Accountant (FA001)	Female	Director	Entrepreneur	24	Yes
Forensic Accountant (FA002)	Male	Director	Entrepreneur	40+	Yes
Forensic Accountant (FA003)	Male	Director	Entrepreneur	40+	Yes
Professional Body specialist (PB001)	Male	Technical Adviser (ex)	Accounting body	40	Yes
Professional Body specialist (PB002)	Male	Head of Qualifications	Accounting body	37	Yes
External Auditor (XA001)	Male	Audit Quality Senior Manager	Audit firm	20+	Yes
External Auditor (XA002)	Male	Audit Quality Senior Manager	Audit firm	13	Yes
External Auditor (XA003)	Female	Managing Partner	Audit firm	37	Yes
External Auditor (XA004)	Female	Manager	Audit firm	8	Yes
External Auditor (XA005)	Male	Senior Manager	Auditing body	10	Yes
External Auditor (XA006)	Female	Manager	Audit firm	8	Yes
External Auditor (XA007)	Female	Partner	Audit firm	32	Yes

Source: Author's compilation

The educators are academics in the accounting field. They are involved in teaching and learning including curriculum development at universities. They teach accounting fields, developing auditors and forensic accountants, at both undergraduate and postgraduate levels. The forensic accountants are experts in fraud-related issues. Their skillsets are tailored to detecting financial discrepancies and fraudulent practices. As practitioners in fraud detection, their insights are imperative to establishing fundamental skillsets that would be relevant for auditors to uncover misrepresentations in financial statement audits.

Professional body specialists are practitioners of regulatory professional bodies like ICAEW or ACA. They are involved in professional curriculum development and in defining the skills requirement for the accounting field and auditing profession. They symbolise the pathway to professional recognition. The external auditors are the focus of this study. They are central to the credibility and reliability of financial reporting. They contribute to investor confidence and the overall trustworthiness of financial systems. Hence, for their strategic role in financial market stability, they are expected to possess appropriate skillsets to detect financial misrepresentations to avoid failures in audits.

A total of fifteen interviewees participated in the study. Three interviewees each for educators and forensic accountants, two interviewees for professional body specialists, and seven interviewees for external auditors. It has been established that the study design was not to achieve numerical representation by amassing a large sample size for generalisation purpose. Instead, the design focused on in-depth insights from strategically identified participants relevant to determine the key skillsets to improve auditors' fraud detection competence, and how these can be integrated into auditors' education and continuous development. Hence, a smaller number of participants allowed for more detailed exploration of their perceptions, uncovering both commonalities and divergences in their opinions (Moser & Korstjens, 2018).

Moreover, the sample size of fifteen participants was deemed adequate when no new information or insight emerged at this point (Hennink & Kaiser, 2022). 'Data saturation' was first observed after the twelfth interview. By that stage, the insights gathered echoed the perceptions from previous sessions, with no new perspectives emerging (Saunders et al., 2018; Alam, 2021). To confirm saturation, I conducted three additional interviews.

Consistent with the twelfth interview, these interviews did not yield any new insights. Furthermore, while the first twelve interviews lasted an average of sixty-six minutes, the final three interviews averaged only forty minutes. This decrease in duration further reflects the absence of new information to explore.

3.6 Data collection process

Data was collected through in-depth semi-structured interviews conducted with fifteen participants. To establish rapport with the participants, the researcher initiated contact to introduce herself and build a sense of connection. Contacts were initiated through mobile phone calls, in-person conversations, or emails in some cases. For example, where a participant's contact details included telephone numbers in LinkedIn, the researcher first reached out to the participant through a phone call. Making a first contact through phone call served as a courtesy to the participants, especially because there was no prior connection between the researcher and the participants. This proved to be particularly effective for participants recruited through purposive sampling. For snowballing recruitment, the referring participant emailed the potential participant directly linking them to the researcher. Once a participant expressed interest in the study, the researcher followed up with an email, providing more information about the study and a consent form.

Each interviewee was sent a formal invitation email requesting their participation in the study. Additionally, they were provided with a participant information sheet (see Appendix I) and a consent form (see Appendix II) for their participation. The participant information sheet contained a summary of the purpose and intended contributions of the study, whereas the consent form formalised each interviewee's voluntary participation in the study. The interviews were scheduled based on each participant's availability and convenience. Details of the agreed appointment date and time was booked as a calendar invite to each participant. Scheduling interview appointments via calendar invites effectively prevented cancellations, given that the participants were all practitioners with demanding schedules. A couple of interviews had to be conducted on weekends due to the interviewees busy schedule.

All the interviews were conducted using Zoom virtual meeting platform. A virtual meeting platform, in this case Zoom, provided a convenient interview arrangement to both the researcher and the interviewees, logistically and time wise (Deakin & Wakefield, 2014; Lo Iacono et al., 2016). Furthermore, virtual-based interviews offer systematic recording capabilities, as these platforms include built-in recording features. Consequently, it mitigates the challenges of manual recorders, such as the possibility of the researcher failing to start the recording or misplacing the recording device. The functionality also simplifies the transcription process of audio recordings. Notwithstanding the signed consent forms, each participant's consent was sought before I recorded the interviews.

An interview guide was prepared for the interview (see Appendix III). The interview questions were organised in three main blocks based on the research objectives: (1) skills relevant to fraud detection in audits; (2) education and continuous training; (3) drivers for change. This ensured that the line of questioning focused on eliciting conversations that would generate insights relevant to achieve the study's objectives and answer the research questions. The interviews started with basic questions to allow the participants time to ease into comfortably answering the core questions. Participants were asked questions such as "Can you give a bit of background about your occupation?" to kick off the interview.

Open questions such as "could you propose skillsets that you consider fundamental to boost auditors' efforts in fraud recognition and detection?" was asked to explore how each participant perceive what is needed to resolve auditors' competency gap. This led to follow up questions which allowed participants to elaborate on their views. Notwithstanding the follow up questions, every question in each block was addressed during the interviews. However, the order of questions was adapted flexibly, allowing participants' narrations to flow unrestricted while staying focused on the questions.

The interview questions were developed following a review of both professional materials and existing academic research articles in audit quality and forensic accounting fields. For example, I examined the Financial Reporting Council (FRC) Framework on auditors' skills to ensure audit quality. This led to the question examining what the interviewees consider as 'sufficient skills' for auditors to improve fraud detection in an audit

assignment. Overall, the interview questions were mostly adopted and adapted from Jenkins et al. (2018). A few of the questions were further inspired by Trompeter et al. (2013) and Hogan et al. (2008). An example of such questions is “how would you assess auditors’ education with respect to fraud recognition and detection?”.

The interview questions were reviewed and approved by the researcher’s supervisor before the first interview was conducted. The interviews were conducted in batches based on the participant recruitment process and the availability of participants. Although unplanned, this approach proved to be advantageous as it allowed the researcher to immerse herself in the data for each batch. The immersion facilitated a thorough reflection on the meanings of each participant’s perception, within the context of the participants. All interviews were conducted in the year 2023.

The interview sessions ranged from 137 minutes (over 2 hours) to 34 minutes, with an average of 61 minutes per interview. This translated to 258 pages and over fifteen hours of interview data. The raw transcript of each interview was promptly downloaded and saved upon the conclusion of the respective interview. In addition to the interview recordings, notes were taken intermittently and strategically during the interviews. These notes captured new information requiring further exploration and observed interviewee expressions, which were important for understanding the context of their words.

For example, a couple of interviewees took a defensive posture when talking about auditors’ responsibility in detecting fraud. To maintain connection with the participants, the researcher redirected the question substituting the word ‘fraud’ with ‘misrepresentation’. This aligns with what Myers (2019) refers to as ‘mirroring’, using participants’ words to *“… focus on their world and … language rather than imposing your own…”* (p. 160). Further, observing their posture and tone helped the researcher to contextualise their responses while making sense of the data.

To begin familiarising with the data, each interview recording was replayed immediately after the interview before transcribing the audio. The Zoom in-built transcript was downloaded and read alongside listening to the audio recording. Next, each audio recording was uploaded into Microsoft Word’s (MS Word) transcriber to produce another raw transcription of the interviews. The researcher observed that MS Word transcriptions

more accurately recognised enunciations compared to Zoom transcriptions, resulting in fewer inaccurately transcribed words. Based on this, the researcher decided to use the MS Word transcripts as my data documents. Notwithstanding, the researcher reviewed each transcript with the recorded interview to check for and correct all spelling and enunciation mistakes from the MS Word transcriptions. The transcriptions were subsequently sent to the interviewees for verification. This allowed them to validate their narratives and offer any additional elaborations or clarifications as needed. The participants made a few comments and corrections.

The interview recordings and transcriptions were securely stored on the password-protected University data drive and OneDrive. An additional backup was saved to a password-protected hard drive.

3.7 Data analysis procedure

Qualitative data analysis is a concurrent process with the data collection stage of the study. It entails a rigorous immersion in, and reflection on, the data collected to make sense of the information. Every aspect of the information can therefore be potentially connected to evolving categories or themes (Holliday, 2007). Data interpretation starts at the point of interviewing each participant and continues throughout the analysis process (Mayan, 2016).

This study resolved to understand the fundamental forensic accounting skillsets to improve auditors' fraud detection competency. It further explored how the mindset-skillset relationship (MSR) concept can be integrated into auditors' education and continuous training to avert future audit failures. To achieve the objectives, a general inductive analytical procedure was employed to interpret the interview data.

3.7.1 General Inductive Analysis Procedure

General inductive analysis is a systematic process with detailed assessment criteria to interpret the data and generate themes, concepts, or theories (Thomas, 2006). In qualitative studies, data analysis can be achieved using a variety of procedures such as discourse analysis, narrative or conversation analysis, grounded theory, content analysis,

or thematic analysis. Like grounded theory, the general inductive analysis culminates into a conceptualised framework or model. In this case, however, the conceptual framework is borne out of the main themes generated from the data (Thomas, 2006). Taking an objective view, a general inductive analysis procedure was considered most suitable to achieve the study objectives.

The use of Thomas (2006) general inductive analytical approach was considered suitable due to its straightforward and logical design. It emphasises deriving findings directly linked to the research objectives. As such, it proved beneficial in condensing the extensive raw data collected for the study into concise, relevant summaries that aligned closely with the specific objectives for the study which are to:

1. determine the key forensic accounting skillsets relevant to enhancing auditors' education and training from key stakeholders.
2. produce a programme for auditors' fraud detection competency, and
3. develop a programme for continuous certification of auditors' forensic accounting skillsets.

Braun & Clarke's (2006) thematic analysis is highly flexible and applicable to a wide range of theoretical perspective. However, Thomas' (2006) general inductive analytical approach offered a more focused and systematic procedure of analysing the data. Utilising the approach ensured clear connections between the data and research objectives, facilitating a coherent and structured analysis. Consequently, the findings and conceptual outputs directly reflect the data and the research objectives.

The first steps began with listening to the audio recording immediately after each interview. This was followed by transcribing the recorded interviews and familiarising myself with the words and context of the participants. It was important to transcribe each interview verbatim immediately after each interview. This approach ensured that the researcher's connections to the participants' meanings remained vivid, thereby facilitating an objective, yet empathic, understanding of the data. Furthermore, the researcher provide the interviewees with the opportunity to promptly verify the conversation or make adjustments where necessary while their narratives and reflections were still fresh in mind. This further assured the credibility of the collected data.

The transcribed data was extensively read and organised according to the interview guide question blocks before they were uploaded into NVivo 12, a Computer-Assisted Qualitative Data Analysis Software (CAQDAS). Organising the data according to the question blocks laid out in the interview guide ensured each transcript followed a consistent order. Having a consistent order proved to be particularly useful, as it made comparing data across transcripts more straightforward and facilitated the sense-making process.

Given the fifteen interviews and the substantial volume of data (258 pages), a qualitative data analysis software (NVivo 12) was deemed most appropriate to organise and manage the data and analysis process. With this, each step of the analysis process, from raw data to final themes, was managed efficiently. Saldaña (2021) asserts that researchers will also benefit from more flexibility in linking related categories or isolating dissimilar ones. In effect, the researcher is saved time (unlike a manual coding method) and better able to reflexively immerse in the insights and unfolding concepts (Blaikie & Priest, 2019). This ensured that the analysis and reasoning process can be transparently defended (Dodge, 2015).

Ultimately, the use of qualitative analysis software was instrumental to strengthening the credibility, transparency, and dependability of the analysis process and study findings. The process of reducing the data through coding was done in NVivo 12. This led to the creation of categories based on evolving similarities. The categorisation process was continuously refined until final themes connecting to the study objectives emerged. In all, the process of sampling, recruiting participants, data collection and analysis was over a period of thirteen (13) months, from November 2022 to December 2023. A full description of the analysis process, results and findings is covered in Chapter Four on data analysis.

Throughout the stages of data preparation, coding and analysis process, the researcher maintained comprehensive audit trail comprising of detailed notes to document her thoughts, observations, and reflections. The continuing notetaking allowed the researcher to be reflexive about her evolving interpretations of the data and in deriving insights from the participants' narratives. Moreover, since the interviews were conducted in batches, there were numerous opportunities for the researcher to reflect on the data. By regularly

pausing to reflect on the context and meaning of the data, the researcher obtained a deeper understanding and more contextual interpretation of the findings. For example, part of the researcher's notes on August 8, 2023, was that *'mindset is … loud enough in the data to be an additional outcome or theme to achieve the forensic accounting skillsets agenda.'* This led to the emergence of the forensic accounting mindset-skillset relationship (MSR) rhombus concept. Overall, the notes were instrumental in capturing the researcher's thought process and ensuring that the analysis remained consistent, methodical, and focused on the research objectives.

3.8 Ethical Consideration

Research ethics is fundamental to ensuring the integrity and trustworthiness of scholarly work. Consideration for research ethics was observed throughout the entire research process to ensure the study is conducted responsibly and respects participants' rights. For this, the entire research process conformed to Sheffield Hallam University's research ethics protocol. Prior to the data collection stage, an ethics application was submitted to the University's Research Ethics Committee for review and approval. Confirmation of the approval is provided in Appendix IV. The ethical review ensured all potential risks associated with conducting research with human involvement were comprehensively identified and mitigated before any contact with participants was initiated. Additionally, a data management plan was developed and provided to the ethics committee with the ethics application. The approved ethics application and data management plan are available in Sheffield Hallam University's ethics management system.

To introduce the research work, invitations were sent out to the selected participants with an information sheet summarising the purpose and intended contributions of the study. Participants were fully made aware of the study's purpose, the nature of the interviews and how their data will be utilised. The information sheet, in clear terms, informed the participants of the confidentiality of their involvement. Participants were informed that their participation was voluntary, and they had the option to withdraw from the study at any stage without providing a reason or facing any consequences.

Maintaining confidentiality, privacy, and anonymity is an essential part of a researcher's responsibility. Participants were notified that their responses would be anonymised, with

their data securely stored to safeguard their identities. To ensure anonymity, alpha-numeric identifiers were used for each participant instead of their names. For example, one participant who is an educator was identified in the transcript document, participants' profile table, and in writing up the findings and discussion chapters as ED [001]. The same logic was applied to the other interest groups interviewed: forensic accountants were identified as FA, professional body specialists as PB, and external auditors as XA. Pseudonyms were used for any word or information in the transcripts that could make a participant identifiable. For instance, the names of audit firms, organisations or institutions were replaced with aliases such as 'XYZ firm'.

The interview questions were carefully designed to prevent any potential discomfort for the participants. A preliminary version of the interview guide was reviewed by the researcher's director of study, and minor corrections were made based on the feedback provided. For example, the word 'challenges' was replaced with 'barriers' in the question *'what would you consider as possible barriers to the integration of forensic accounting skillsets to auditors' education and training?'*. This was to avoid any emotional or psychological harm that could be triggered due to participants' lived experiences. The adjustments were made prior to the commencement of the interviews. Other information such as duration of the interview and availability of the researcher for any clarification was included in the information sheet.

Together with the information sheet, a consent form was also provided to the participants to formalise their voluntary participation. The form contained the researcher's commitment to confidentiality, identity anonymisation, protection of participants' personal data, interview recordings and transcripts using password-protection in line with the UK 2018 Data Protection Act and the University's standard practice. In addition, the right of the participants to withdraw from the study at any time was acknowledged. Regardless of the signed consent form, participants were notified of recordings and their right to withdraw at any time prior to recording each interview session.

Further details of the participant information sheet and consent form are included in the ethics application submitted in Converis. Additionally, a data management plan was provided with the ethics application.

3.9 Summary

This chapter discussed the theoretical perspective through which the study was conducted. The study adopted a neo-empiricist theoretical position to understand the forensic accounting skillsets needed to improve auditors' fraud detection competency from the perceptions of educators, forensic accountants, professional body specialists, and external auditors. This led to the researcher developing a curriculum package which incorporates the forensic accounting mindset-skillsets relationship concept into auditors' education and continuous professional development programmes. The choice to adopt a neo-empiricist positioning was guided by the objectives outlined for the study. By aligning the study with neo-empiricist principles, the research approach and methodological design were shaped by a commitment to deriving insights grounded in the realities of practice.

Taking an inductive approach, a qualitative design was adopted for the study. Purposive sampling, combined with snowballing, was used to recruit participants from the population of educators in accounting fields in UK universities, forensic accounting, professional bodies, and external auditor practitioners. The combination of purposive sampling and snowballing facilitated access to otherwise hard-to-reach practitioners, whose wealth of experience significantly enriched the depth of insights obtained. Qualitative interviews, using semi-structured format, were conducted with fifteen participants to collect data. The process of recruiting participants, collecting, and analysing data spanned over thirteen months, from November 2022 to December 2023.

The data were analysed using Thomas' (2006) general inductive analytical procedure. The process of data analysis was conducted simultaneously with data collection. This involved transcribing the recorded interviews and preparing the data before uploading the data into NVivo 12, a qualitative data analysis software. Based on the recruitment process and participants' availability, the interviews were conducted in batches. This allowed the researcher to immerse in the data, leading to a rich understanding of the data and interpretation of meanings within the participants' contexts. A detailed account of the analysis process, the coding and eventual themes are covered in the next chapter, chapter four.

This chapter also discussed the ethical considerations undertaken in the study. The research process adhered to the ethics protocol designed by the university. Participants were sent an information sheet that provided an overview of the study's purpose, the nature of the interview, and the principles of anonymity and confidentiality regarding their involvement. Participants were informed of their right to withdraw from the research at any stage. All participants who showed interest in participating were given a consent form to confirm their voluntary involvement. Each participant signed the consent forms before the interview. Additionally, due consent was obtained before the interviews were recorded. The next chapter (Chapter Four) presents the analysis procedure and results derived from the study.

Chapter Four: Data analysis and results

This chapter presents the step-by-step analysis conducted on the data obtained from participants of this study. The purpose of this analysis is to identify and interpret key themes emerging from the data and examine how they interrelate. These themes highlight the perceptions of the forensic accountants, external auditors, professional body specialists, and educators interviewed; addressing how forensic accounting skillsets can be integrated into auditors' education and continuous to improve fraud detection in statutory audits. To achieve this aim, the following research questions were established:

- What are the key forensic accounting skillsets needed to fill auditors' fraud detection competency gap?
- How and at what stage(s) of auditors' education can these skillsets be introduced into auditors' undergraduate and continuous development programmes?

The analysis covers a discussion on the participants' profiles and their similarities. Then the process of transcription to data cleaning is explained. This will be followed by a detailed discussion of the findings, starting with coding process. Next, the sorting process, leading to the generation of categories, will be explained. This will be followed by a detailed discussion on the theme development phase of the analysis conducted. In all, the findings from the analysis will be presented. Finally, the closing section will highlight the key discussions from the data analysis.

4.1 Participants' profiles

This section describes the key characteristics of the study's participants. Understanding the participants background is expedient to appreciating the context of their insights and their relevance to answering the research questions. The participants represent the focal interest groups in identifying and developing a fit-for-purpose forensic skillsets agenda for the UK auditors to improve audit quality. For this study, these interest groups comprise of educators (ED), external auditors (XA), forensic accountants (FA), and practitioners from professional bodies (PB).

Examining each participant's key features is expedient to understanding the context of the data. This can provide insights into how their experiences influence their perspectives and the inherent biases. With four interest groups interviewed for this study, the participants' reality provides a basis to objectively assess their similarities, and the areas of divergence and agreement of opinion, which tends to be useful in establishing the study findings.

The participants are established professionals in the UK, with years of experience ranging from eight to over forty years. Cumulatively, the participants represent 399 years of experience. This combined years of experience attests to the depth of insight gained from the participants. Then again, all the participants, except ED001 and ED002, started off their career as external auditors working for audit firms. This means that more than eighty percent of the participants have audit field experience.

Interestingly, all the participants with a background in external auditing have worked for the top four audit firms at some point in their careers. In all, they have encountered the highlights and lowlights of the extent of auditors' education and training, and how it supports (or otherwise) the detection of misrepresentations or fraud in practice, over the past four decades. Therefore, their background in external auditing reinforces their relevance to the study and the credibility of their perceptions. Detailed insights into each participant and the similarities connecting the participants are presented in Appendix VI.

4.2 Approach to data analysis

Analysing qualitative data can take a variety of inductive approaches. For instance, Grounded Theory, thematic analysis, discourse analysis, narrative analysis, or general inductive analysis amongst others. These approaches can be influenced by the researcher's philosophical orientation, research, professional experience, and/or the nature of the investigation. Regardless of the motivation for a qualitative study, the analysis journey tends to be a creative endeavour.

The researcher, as a storyteller, interprets the insights gained on a phenomenon, social encounter, or organisational practice, from participants or secondary sources. Crafting

the ‘story’ therefore reflects the researcher’s creative ability to convey the outcome of the analysis in a transparent and defendable manner. This means that every qualitative study is a distinct work hence, *“… the analytical approach used will be unique …”* (Patton, 2015, p. 522). Despite the uniqueness in approach, the researcher strives to demonstrate credibility, and transferability, by following the analytic principles guiding the application of a selected method of inductive analysis (Thomas, 2006). This study adopted Thomas' (2006) general inductive analysis approach.

The analysis is driven by the set objectives for this study (Thomas, 2006). Analysing qualitative data involves the process of collecting the data. The researcher is absorbed in the information, making sense of the expressions, communicated by the participants (Gabriel, 2015). This means that a reflective and reflexive consideration of the data begins at the point of collecting data. These considerations propel the researcher’s decisions and creative endeavour in analysing the data. In effect, the researcher responds to the contextual perceptions of the social actors, relevant to the study objectives, to arrive at the eventual concepts.

4.2.1 Data preparation

Data preparation is essential to analysing qualitative interviews. It involves converting the audio-recorded interviews into text. Further, recognisable elements from the participants’ account are replaced with word markers, in accordance with the ethical considerations for anonymity discussed in Chapter Three. This process is considered part of data cleaning. These two stages, transcribing and data cleaning, are elaborated in the following sections.

4.2.1.1 Transcribing stage - converting the data

The Zoom audio recording was transcribed using Microsoft Word’s transcribe tool. Each interview audio recording was converted into textual data by uploading it to a Microsoft Word document. Although the transcription function in Zoom was activated during the interviews, the Microsoft Word option was preferred due to the text format. Transcription tools often make errors due to variations in accents and pronunciation compared to the pre-set computer language. For instance, the word ‘fraud’ was captured in some of the

raw transcripts as *'fault'*, *'flood'* or *'ford'* a few times. After generating each raw transcript, the researcher listened to the audio while concurrently reading the transcript. Engaging in this process, ensured a verbatim correctness of the transcript.

Listening to the audio and simultaneously reading the transcripts facilitated the researcher's in-depth understanding of the data. The researcher could control and repeatedly played back specific parts of the conversation using timestamps in the transcript. This approach enabled the researcher to understand each interviewee's perceptions clearly. In addition, it enabled the researcher to be attuned not only to the verbal expressions but also to the underlying considerations and emotions expressed by the participants. For instance, an interviewee gives a short laugh as a form of cynicism or introspection. Such moments were noted in the transcripts. These considerations and emotions aided the researcher's sense-making of the participants' subjectivity.

4.2.1.2 Data cleaning stage

The data cleaning stage involved organising each transcript to achieve a standardised layout for the computer-aided software analysis phase. The responses from each participant were organised within Microsoft Word documents, structured according to the main sections outlined in the interview guide. For instance, responses to the interview frame on relevant forensic accounting skillsets were arranged as 'Q1: Skills relevant to fraud detection in audits.' All questions relating to skills were organised under this frame.

The main interview frames were given a different heading style. The participants' responses were distinguished by assigning a different heading style to participants' ID, while a different font colour was assigned to the researcher's questions. These distinctions were aimed at attaining a credible coding process, minimising the possibility of mixing the participants' voices with that of the researcher.

To achieve transparency in the analysis process, three versions of the transcripts have been maintained. The first version is the raw version converted from the recorded interview. The second version is the verbatim transcript which has all intonation errors corrected, and emotions noted. The third version is the cleaned form with a uniform layout structure. Working through these versions meant that the researcher repeatedly read the

transcripts, further immersing the researcher in the data. Further, these three versions provide an audit trail of the steps followed in handling the data from the recorded audio (Bazeley, 2020), in readiness for the software-aided analysis process.

Next, the researcher excluded the participants' profile information and other identifiable details from the cleaned version. Where the recognisable information is embedded in the core interview responses, the researcher replaced the identifiable information with a word marker. For instance, 'XXX' was used to replace a named top audit firm where the information applied directly to a participant. One participant talked extensively about their background, including details about fraud investigations they had managed. The researcher deemed these details to be materially confidential and, consequently, decided to exclude them to protect the participant and the research.

This decision appears to align with Thomas' (2006) position on the need for researchers to assess what is considered essential in the data. Participants' career background information was collected in the first few minutes of establishing rapport, before delving into the core interview questions. This means that the views of the participants relating to the study objectives were unaffected by the exclusion of their profile information. Therefore, excluding the details did not compromise the objectivity of the researcher as a neo-empiricist. Moreover, the aspects of each participant's background, relevant to the research questions, were summarised in a table (presented in Table 4.1 above) for the analysis process.

4.3 The analysis process

Analysing qualitative data entails going through the transcripts in search of information that is relevant to the research question(s). The process tends to be intensive due to the volume of data involved. Hence, managing (from organising to reducing the data) and making sense of the data draws on the researcher's creativity (Weligodapola, 2019).

A researcher can choose to manage the data manually (for instance, on papers, boards, and sticky notes), employ a computer-aided analysis software or adopt a blend of both. For this study, although a manual data analysis approach was available, a computer-aided analysis was preferred, using the Microsoft Excel tool and the NVivo 12 Pro

software. This provided the researcher with more flexibility to explore the patterns and connections from the data, enhancing the analytical rigour.

4.3.1 Employing the NVIVO analysis software

The NVivo software is recognised as an efficient and effective analytical tool for qualitative data. Like other computer-assisted qualitative data analysis software (CAQDAS), NVivo supports the researcher's initiative in managing and structuring the data from a voluminous state to concepts central to the study objectives. Adopting a software-based analysis tool increases the transparency of the analysis process, thereby providing evidence on the analytical rigour and credibility of the findings (Bazeley, 2020). This holds particular significance for a neo-empiricist, as the formation of emerging concepts is rooted in the objective depiction of participants' subjective perspectives.

NVivo is a flexible and practical tool that is unconfined within qualitative research methods and analysis techniques. For instance, NVivo is compatible to case study research design (see Alam, 2021), grounded theory (see Hutchison et al., 2010), content analysis, comparative analysis, phenomenology, ethnography, including mixed methods amongst others (Jackson & Bazeley, 2019). For this study, the NVivo software version 12 Pro was utilised to reduce the data by assigning codes to reflect the meaning of the data, identify themes and establish connections within the data.

The cleaned transcripts were imported into NVivo. Each transcript, representing a file in NVivo, was labelled according to the participants' identification (ID). A case was created for each file, allowing the participants' profiles to be matched to the files. The participants' profile table was subsequently uploaded into NVivo. Each participant, therefore, represents a case. The case names correspond to the pseudo-identifier (ID) assigned to each participant, as previously indicated in Chapter 3. In Table 4.1 below each participant's case classification is displayed.

Table 4.1 Participants' case classification

Name		Files	References	Modified On	Modified By	Classification	
ED001		1	1	7/14/2023 12:43 PM	AA	Participants ID	
ED002		1	1	7/14/2023 5:05 PM	AA	Participants ID	
ED003		1	1	7/21/2023 12:32 PM	AA	Participants ID	
FA001		1	1	7/21/2023 3:39 PM	AA	Participants ID	
FA002		1	1	7/26/2023 5:28 PM	AA	Participants ID	
FA003		1	1	7/28/2023 5:46 PM	AA	Participants ID	
PB001		1	1	8/1/2023 3:26 PM	AA	Participants ID	
PB002		1	1	10/28/2023 10:18 PM	AA	Participants ID	
XA001		1	1	8/3/2023 5:18 PM	AA	Participants ID	
XA002		1	1	8/8/2023 3:00 PM	AA	Participants ID	
XA003		1	1	10/28/2023 10:19 PM	AA	Participants ID	
XA004		1	1	8/10/2023 3:37 PM	AA	Participants ID	
XA005		1	1	7/12/2023 1:02 PM	AA	Participants ID	
XA006		1	1	8/18/2023 3:44 PM	AA	Participants ID	
XA007		1	1	8/18/2023 4:13 PM	AA	Participants ID	

Source: Author's NVivo output

4.3.2 Phase 1 – generating initial codes and sorting by Research Question

Each transcript (file in NVivo) was coded individually. To generate the initial codes, the researcher adopted a combination of coding strategies. An open and literal coding strategy involved using actual words from the transcripts in short phrases to represent codes (Saldaña, 2021). This means that the codes connote the expressions offered by the participants in communicating their perceptions (Adu, 2023). For instance, the code 'think critically' was assigned to participant FA002's statement *"… train people how to think more critically"*.

An interpretation-based coding strategy involved creating words or phrases based on the participant's context and the researcher's understanding of the underlying meaning (Adu, 2023). For instance, the code 'problem-solving skills' was assigned to participant FA003's statement *"… What are the facts? if we find the facts, we'll know what happened."*

Adopting open, literal, and interpretation-based coding strategies meant that the researcher liberally absorbed the contents, contexts, and nuances of the data, before assigning representative expressions or phrases as codes. This made the participants' insights the central focus of the codes generated.

Adhering to Thomas' (2006) general inductive analytic approach, portions of the transcripts that were not pertinent to the research objectives were left uncoded. In open coding, there is often a tendency to assign codes based on the interview questions (Adu, 2023). However, all codes generated were repeatedly reviewed by the researcher and sorted into groups based on the research questions. This further ensured that the researcher remained focused on the significant information to achieve the pre-defined objectives for the study. The coding and sorting by research question were performed in NVivo.

A total of 106 codes (referred to as Nodes in NVivo), representing 776 node references, were generated from the analysis. Upon further reflection on the research questions, fifty-eight codes were considered significant and pertinent to the study's aim and objectives. These nodes, representing 427 node references were sorted for each research question (RQ) and presented in Table 4.2 below.

Table 4.2 Summary of initial codes generated from transcripts

Name	Files	References	Created On	Created By
(RQ1) Forensic accounting skillsets	**15**	**230**	8/21/2023 2:29 PM	AA
Probing for answers	11	34	7/12/2023 3:00 PM	AA
Gets into the details	10	25	7/12/2023 3:11 PM	AA
Being analytical	8	14	7/12/2023 2:37 PM	AA
Being curious	8	14	7/12/2023 2:25 PM	AA
Having confidence	7	10	7/12/2023 3:15 PM	AA

Identifying patterns and anomalies	7	16	7/14/2023 5:16 PM	AA
Determined to follow-through	6	10	7/12/2023 2:34 PM	AA
Think critically	5	7	7/19/2023 3:02 PM	AA
Be critical	4	4	7/12/2023 2:41 PM	AA
Communication skills	4	6	8/8/2023 12:10 PM	AA
Having a nose for fraud	4	6	7/14/2023 3:20 PM	AA
Having a psychological disposition	4	18	7/12/2023 2:15 PM	AA
Having an investigative mindset	4	13	7/25/2023 4:45 PM	AA
Understanding human behaviour	4	8	7/28/2023 11:46 AM	AA
Cognitive psychology skills	3	13	7/26/2023 3:19 PM	AA
Develop a nose for fraud	3	4	7/14/2023 3:25 PM	AA
Interpretation of data	3	7	7/19/2023 3:09 PM	AA
Interviewing skills	3	5	7/26/2023 3:16 PM	AA
Being observant	2	3	7/19/2023 3:04 PM	AA
Judgement skills	2	2	8/8/2023 3:13 PM	AA
Problem solving skills	2	4	7/21/2023 2:43 PM	AA
Creative skills	1	1	8/8/2023 12:26 PM	AA
Detection skills	1	2	8/10/2023 4:18 PM	AA
Listening skills	1	3	8/8/2023 4:53 PM	AA

Teamworking skills	1	1	7/12/2023 2:51 PM	AA
(RQ2) Stages to introduce skillsets	**13**	**22**	8/21/2023 2:53 PM	AA
Incorporate from first year	7	13	7/19/2023 6:49 PM	AA
Incorporate from Level 5	5	6	7/12/2023 8:01 PM	AA
Incorporate in final year	2	3	8/8/2023 1:19 PM	AA
(RQ3) How can the skillsets be incorporated	**15**	**143**	8/21/2023 2:57 PM	AA
Build into professional exam schemes	9	12	7/19/2023 6:59 PM	AA
Designing syllabus with relevant skillsets	9	13	7/14/2023 1:02 PM	AA
Incorporate practical cases in education	9	17	7/21/2023 3:26 PM	AA
In-job training on forensic practices	9	13	7/25/2023 3:02 PM	AA
Create standardised fraud trainings	7	10	7/14/2023 12:40 PM	AA
Scenario simulation in job trainings	7	12	7/25/2023 3:14 PM	AA
Developing programmes and resources on fraud detection	6	6	7/14/2023 4:33 PM	AA
Incorporate in firm training programmes	4	7	8/8/2023 2:08 PM	AA
Introduce materials on forensic skillsets	4	4	7/12/2023 5:34 PM	AA
Fraud training at professional level	3	5	7/14/2023 2:45 PM	AA
Group discussions in training programmes	3	3	8/1/2023 2:32 PM	AA
Incorporate on-job mentoring attachment	3	3	7/28/2023 4:51 PM	AA
Introduce psychology of fraudsters	3	5	8/8/2023 1:37 PM	AA

Audiovisuals in training programmes	2	2	8/8/2023 5:27 PM	AA
Cross- training to develop skillsets	2	6	7/25/2023 3:05 PM	AA
Incorporate emotional intelligence practises	2	3	8/8/2023 5:01 PM	AA
Introduce mock or mini plays	2	5	8/10/2023 2:53 PM	AA
Training on identifying anomalies	2	3	7/19/2023 5:50 PM	AA
Introduce forensic terminologies in syllabus	2	3	7/12/2023 5:31 PM	AA
Have forensic accountants in audit team	1	3	7/12/2023 4:12 PM	AA
Incorporate debates	1	1	8/18/2023 4:14 PM	AA
Incorporate evidence gathering practises	1	1	8/8/2023 1:28 PM	AA
Incorporate fraud risk factors training	1	1	8/8/2023 1:48 PM	AA
Incorporate getting to the bottom	1	1	7/28/2023 4:25 PM	AA
Introduce open-minded creative thinking	1	2	8/1/2023 2:01 PM	AA
Probing and corroborating evidence training	1	1	7/28/2023 4:46 PM	AA
Virtual reality audit trainings	1	1	8/2/2023 1:40 PM	AA
(Others) Element of mindset to detect fraud	**11**	**32**	8/21/2023 3:30 PM	AA
Mindset to detect fraud	7	22	7/12/2023 9:05 PM	AA
Mindset of professional scepticism	5	6	7/25/2023 4:29 PM	AA
Extending auditors' mindset	3	4	7/25/2023 4:58 PM	AA

Source: Author’s NVivo output

4.3.2.1 Initial codes generated for forensic accounting skillsets

Twenty-five initial codes were generated for research question one on forensic accounting skillsets. The codes ‘probing for answers’ and ‘gets into the details’ were most frequently referred to as fundamental skills for auditors to improve their competency in fraud detection. These codes represent about fifteen and eleven percent, respectively, making up about twenty-six percent of the codes generated for the key forensic accounting skillsets. Other significant skills offered by the participants include ‘having a psychological disposition’, ‘identifying patterns and anomalies’, ‘being curious’ and ‘being analytical’. Together, these six codes represent more than fifty percent of the coded references for RQ1. The codes were further analysed and sorted to establish their connections during the categorisation phase of the analysis which is discussed in section 4.3.3.1.

The researcher compared the codes to the participants' cases in NVivo to obtain a better understanding of the context of participants' perception of the skillsets. This further enabled the researcher’s sense making of the data to arrive at the final themes. To illustrate, a comparison showed that seven participants identified both ‘probing for details’ and ‘gets into the details’ as fundamental forensic accounting skillsets. All three forensic accountants (FA001, FA002 and FA003) specified both skills while three of the seven external auditors (XA004, XA005 and XA006) indicated the two skills, respectively.

Participants across the four interest groups interviewed identified both skills as fundamental to auditors’ detecting fraud. Figure 4.1 below displays a cross-analysis of the participants identifying ‘probing for answers’ and ‘gets into the details’ as key forensic accounting skills required by auditors.

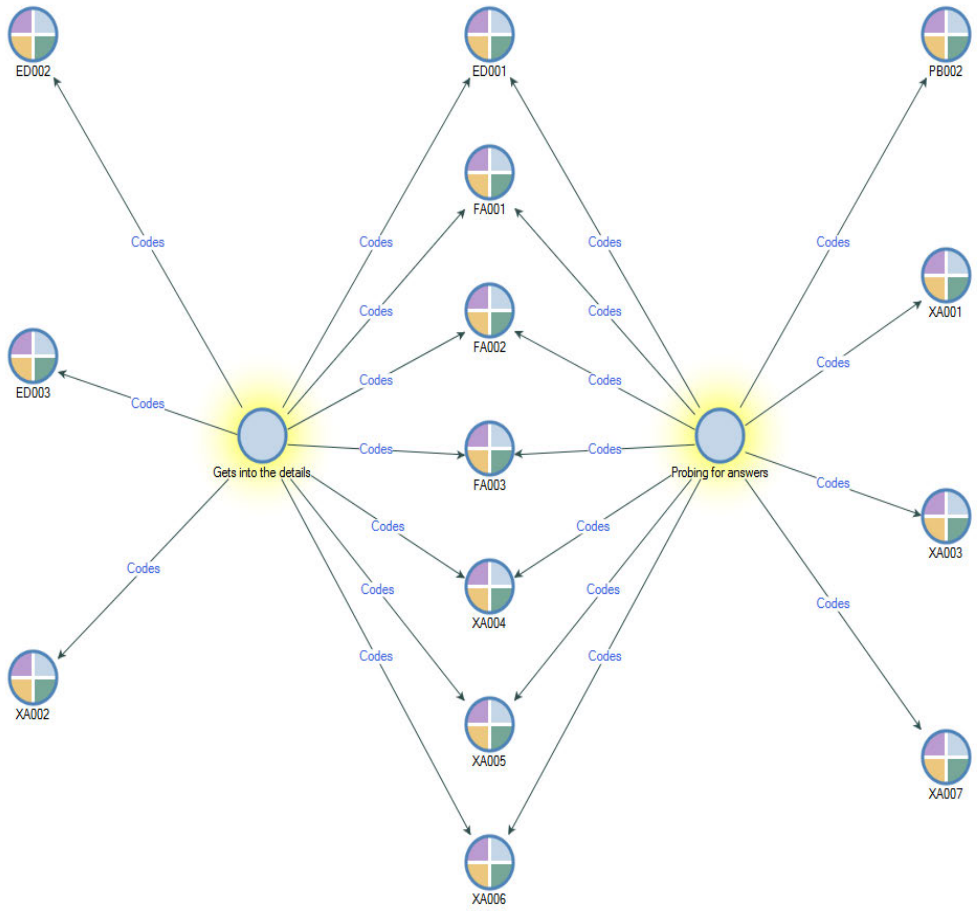


Figure 4.1: A cross-analysis of the top two codes on forensic accounting skillsets
Source: Author's NVivo creation

4.3.2.2 Initial codes generated for stage to introduce the skillsets

Three initial codes emanated from the transcripts on the stage to introduce forensic accounting skillsets in auditors' education and training (see Table 4.1 above). The code 'introduce from first year' was most prominently referred to by the participants, representing fifty-nine percent of the codes generated in the analysis. The codes and the embedded meanings were further analysed to establish their connections during the categorisation phase of the analysis which is discussed later in section 4.3.3.2

4.3.2.3 Initial codes on how to integrate the forensic accounting skillsets

Twenty-seven initial codes were created on how the identified forensic accounting skillsets can be integrated into auditors' education and training (see Table 4.1 above). 'Incorporate practical cases in education' was mostly offered by the participants as how

forensic accounting skillsets can be integrated into auditors' education and training. The references represent about twelve percent of the codes generated in the analysis. 'In-job training on forensic practices' and 'designing syllabus with relevant skillsets' each made up nine percent of the total number of codes generated. 'Scenario simulation in job trainings', and 'build into professional exams' each accounted for eight percent of the codes while 'create standardised fraud trainings' correspond to seven percent of the codes generated.

Together, these codes represent about fifty-four percent of the references in the analysis. Further analysis and sorting to establish their connections were conducted at the categorisation phase of the analysis, considered later in section 4.3.3.3

4.3.2.4 Other codes - the element of mindset to detecting fraud

The participants also emphasised the importance of a fraud detecting mindset to applying the identified forensic accounting skillsets in practice. Their perception resulted in three distinct initial codes on mindset as an overarching element to improving audit quality (see Table 4.1 above). 'Mindset to detect fraud' featured prominently, representing close to seventy percent of the codes. This code, together with 'extending auditors' mindset' make up eighty-one percent of the references on this additional perspective from the participants. Further analysis exploring the relationship of these codes to the overall objectives is discussed later in section 4.3.3.4.

4.3.3 Phase 2 – categorising the codes relevant to the research questions

The categorising phase of the analysis entails refining the codes and sorting them based on their similarities and connections. By this, the codes are grouped, leading to categories with subgroups, based on the patterns and connections identified. This process is characterised by the researcher's sense-making of the participants' perceptions in relation to the study objectives. Consequently, the categories depict the researcher's understanding of the participants' interpretations and the intersubjectivity of these interpretations.

The categorisation followed Thomas' (2006) general inductive analytic approach. The sorting, refining, and grouping of the codes flowed from the analysed data. In other words, the underlying meanings from participants' significant interpretations were evaluated against the study objectives to arrive at the condensed categories. In effect, the findings are related to the study objectives. The systematic procedure followed to arrive at the categories and the developed themes ensures the confirmability of the outcomes (Thomas, 2006). This section provides a detailed overview of the categorisation following the patterns identified in the initial codes and central to the study objectives.

The code table, generated during the coding phase (see section 4.3.2), was imported from NVivo into a Microsoft Excel document to begin categorising and further refining the codes. The researcher began by sorting the codes in clusters based on their similarities. First, the significant codes, identified from the frequency of references (as explained in section 4.3.2) were sorted. Next, the researcher searched for connections between the significant codes and the remaining codes for each research question. This led to further sorting and merging of the codes.

For instance, the code 'understanding human behaviour' was grouped with 'cognitive psychological skills' to establish one of the categories for key forensic accounting skillsets. Hence, this phase involved assessing the relationship between each code pertinent to the research questions and determining the categories based on the connections. Subsequently, the categories developed from the analysis in Microsoft Excel were reproduced in NVivo.

4.3.3.1 Categorisation for key forensic accounting skillsets

Nine categories were developed from the initial codes generated in phase 1(See Table 4.2 and see section 4.3.2.1). These categories are presented in Table 4.3 below. Each of the categories are explained and their relationships examined in the subsequent subsections. These relationships were established from the researcher's understanding of the participants' interpretations.

Table 4.3: Node categories for key forensic accounting skillsets

Name	Files	Refere	Created On	Created	Modified On	Modified
(RQ1) Forensic accounting skillsets	15	220	10/14/2023 4:19 P	AA	10/14/2023 4:19 P	AA
Questioning related	12	45	10/14/2023 4:20 P	AA	10/14/2023 5:51 P	AA
Psychological disposition related	7	39	10/14/2023 4:23 P	AA	10/14/2023 5:53 P	AA
Thoroughness related	11	32	10/14/2023 4:23 P	AA	10/14/2023 5:52 P	AA
Pattern identification related	7	25	10/14/2023 4:23 P	AA	10/14/2023 5:44 P	AA
Curiosity	11	24	10/14/2023 4:24 P	AA	10/14/2023 6:44 P	AA
Persistence related	8	23	10/14/2023 4:24 P	AA	10/14/2023 5:46 P	AA
Analytical	8	14	10/14/2023 4:23 P	AA	10/14/2023 5:41 P	AA
Reasoning related	8	13	10/14/2023 4:25 P	AA	10/14/2023 5:47 P	AA
Problem solving related	3	5	10/14/2023 4:25 P	AA	10/14/2023 5:50 P	AA

Source: Author's NVivo output

Category one: Questioning related skills

The questioning related skills category comprised of other subgroups merged together based on their relationships. 'Probing for answers' appeared as a dominant forensic accounting skill required for auditors to improve the quality of audits performed. Participants across the four interest groups expressed the necessity for auditors to question information received from client entities and then probe further. This skill requirement is closely linked to 'communication skills' and 'interviewing skills' exhibited by forensic accountants, which are merged in the category. Auditors should be competent communicators and be appropriately equipped to conduct interviews to effectively probe information or seek answers that can bring misrepresentations to light.

There is a close relationship between this category and the curiosity related skills. This informed a further refinement of the categories, leading to the eventual themes. This will be highlighted in section 4.3.4 on defined themes and considered in the discussion chapter. The questioning related category and subgroups are presented in Table 4.4 below.

Table 4.4 Category one – Questioning related skills for auditors

Questioning related		12	45
Probing for answers		11	34
Communication skills		4	6
Interviewing skills		3	5

Source: Author's NVivo output

Category two: Thoroughness related skills

A second category of key forensic accounting skillsets is the thoroughness related skills. This category comprised of subgroups, all connected to achieving accuracy in audits. The results show 'getting into the details' as a prominent forensic accounting skill that would enhance auditors' ability to detect misrepresentations in statutory audits. There is a strong relationship between this skill and 'being observant', 'listening skills', and 'teamwork'. The participants expressed the need for auditors to be conscientious, paying attention to details. Similar to forensic accountants, auditors should be deliberately alert to the correctness of information, whether numerical, verbal, or textual, rather than simply going through the motion of an audit procedure.

There is a strong connection between the thoroughness and persistence related skills. This relationship is further highlighted in the final themes and examined in the discussion chapter. The category and its subgroup are presented in Table 4.5 below.

Table 4.5 Category two – Thoroughness related skills for auditors

Thoroughness related		11	32
Gets into the details		10	25
Being observant		2	3
Listening skills		1	3
Teamworking skills		1	1

Source: Author's NVivo output

Category three: Psychological disposition related

The psychological disposition related skills represent the consciousness and tendency towards discovering misrepresentations. 'Having a psychological disposition' appeared as a fundamental skillset of forensic accountants, which is expedient for auditors to recognise misrepresentations in management information. This code relates directly with 'cognitive psychology skills' and 'understanding human behaviour'. Participants expressed the behavioural undertone of misrepresentations, including fraudulent misrepresentations. This implies that psychological disposition skills can improve auditors' approach to client management meetings.

Auditors should be equipped to understand and interpret human behaviour, to adequately assess the veracity of information obtained from client entities. A detailed exploration of this category and its extended relationship with other categories is contained in the discussion chapter. Table 4.6 below shows the psychological disposition related skills category and its subgroups.

Table 4.6 Category three – Psychological disposition related skills for auditors

Psychological disposition related		7	39
Having a psychological disposition		4	18
Cognitive psychology skills		3	13
Understanding human behaviour		4	8

Source: Author's NVivo output

The researcher compared participants suggesting auditors' need for psychological related skills to those specifying the questioning related skills (category one above). Four external auditors (XA001, XA003, XA004 and XA007), two forensic accountants (FA002 and FA003) and one educator (ED001) identified both skillsets as fundamental to discovering fraud. Having external auditors agree with forensic accountants' views on the importance of a psychological disposition emphasises the significance of this category. A cross-analysis of the participants identifying both psychological disposition and questioning related skills is presented in Figure 4.2 below.

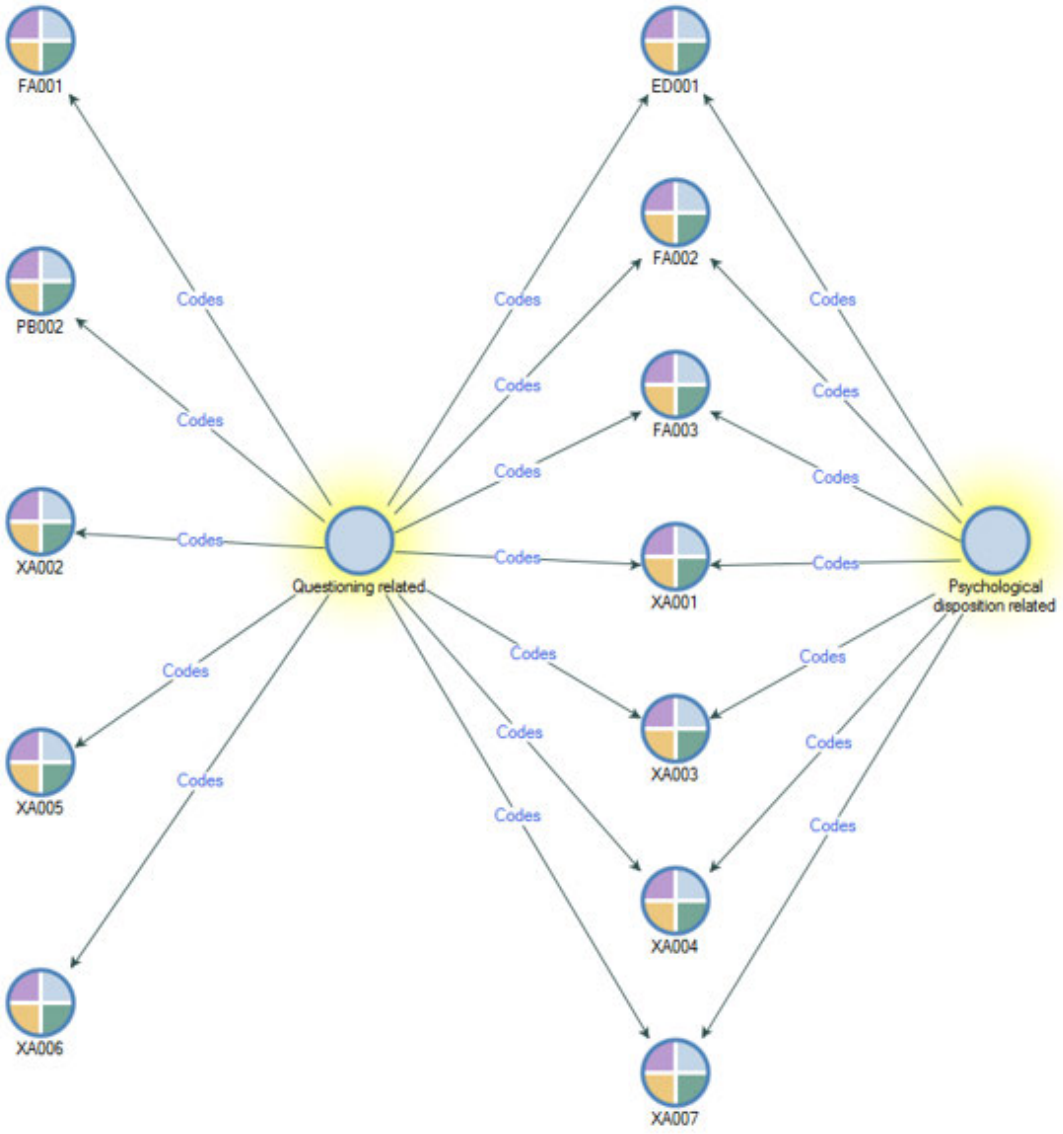


Figure 4.2: A cross-analysis of psychological and questioning related skills
Source: Author's NVivo creation

Category four: Pattern identification related skills

Another category of key forensic accounting skillsets is related to pattern identification. Participants from each of the interest groups referred to 'identifying patterns and anomalies' as part of the skills needed by auditors to uncover fraudulent transactions. Recognising patterns and detecting outliers is essential for auditors to be able to accurately express their professional opinion regarding misstatements, or the absence of misstatements, in financial reports. Further reflection on this category revealed a strong

connection to the other categories developed. For instance, 'identifying patterns and anomalies' encompasses being attentive to details, being analytical, 'being observant' and 'having a nose for fraud'. The interconnection of this category to the others is examined in a later section. The category and its subgroup are presented in Table 4.7 below.

Table 4.7 Category four – Pattern identification related skills

Pattern identification related		7	25
Identifying patterns and anoma		7	16
Interpretation of data		3	7
Detection skills		1	2

Source: Author's NVivo output

Category five: Curiosity

Participants in the four interest groups indicated curiosity to be an essential skill for forensic accountants, which auditors should employ in order to improve the quality of audits. 'Being curious' relates to auditors having a desire to learn more about a transaction or an information. Participants expressed that being curious entails having an inquiring mind which steers the need for elaboration. This links to auditors need to possess a 'nose for fraud'. There is a close connection between curiosity and questioning related skills. This relationship is examined further in section 4.3.4 on defined themes and considered in the discussion chapter. Table 4.8 presents the category and its subgroups.

Table 4.8 Category five – Curiosity related skills

Curiosity		11	24
Being curious		8	14
Having a nose for fraud		5	10
Develop a nose for fraud		3	4

Source: Author's NVivo output

Category six: Persistence related skills

The persistence related skills address the tenacity displayed by forensic accountants in following through on details or a line of enquiry conclusively. Each interest group – external auditors, forensic accountants, educators, and professional body specialists - agree on the need for auditors to persist in order to substantiate information received from client entities. Participants described 'having an investigative mindset' as following the lead to uncover the facts. There is a solid connection between this category and the 'thoroughness related' skills category. This connection led to a further refinement of the categories, which is reflected in the final themes. The persistence related category and its subgroups are presented in Table 4.9.

Table 4.9 Category six – Persistence related skills

Persistence related		8	23
Having an investigative mindset		4	13
Determined to follow-through		6	10

Source: Author's NVivo output

Category Seven: Analytical skills

Participants referred to 'Being analytical' as a fundamental skill required to be able to evaluate evidence or information. Auditors should have the competency to understand beyond the numbers presented by client entities. This skill associates closely with the 'reasoning related' and 'problem solving related' skills. At this stage of the analysis, these skills were not combined to highlight their individual features. The interconnection of the analytical, reasoning and problem solving related skills resulted in a further refinement of the categories which is explained in section 4.3.4. The analytical skills category and its subgroup are presented in Table 4.10.

Table 4.10 Category seven – Analytical skills

Analytical	8	14
Being analytical	8	14

Source: Author's NVivo output

Category eight: Reasoning related skills

Participants from each of the four interest groups identified reasoning skills as a fundamental skill employed by forensic accountants in detecting fraud. The participants emphasised the need for auditors to improve their competency in critical and creative thinking which would enhance their analytical abilities. There is a strong link between 'analytical' and 'reasoning related' and 'problem solving related' skills. These combined, can enhance how auditors apply judgements to arrive at decisions that inform their professional opinion on an audit. Further consideration of the category is addressed in the section on themes and the discussion chapter. Table 4.11 below depicts the category and its subgroups.

Table 4.11 Category eight – Reasoning related skills

Reasoning related	8	13
Think critically	7	11
Be critical	4	4
Judgement skills	2	2

Source: Author's NVivo output

Category nine: Problem solving related skills

Although 'problem solving' has a low frequency of reference, it was acknowledged by external auditors and forensic accountants as an important skill in detecting fraud. The participants connected the use of this skill to auditors' effectiveness in applying 'reasoning related' and analytical skills. Auditors need to be creative in adopting an appropriate approach to solving problems in an audit assignment. The relationship between this

category and others already explained is covered later in the final themes section, and the discussion chapter. The category and its subgroup are presented in Table 4.12 below.

Table 4.12 Category nine – Problem solving related skills

Problem solving related		3	5
Problem solving skills		2	4
Creative skills		1	1

Source: Author's NVivo output

Overall, there are solid connections between the nine categories. Although the categories are closely interrelated, they are not exchangeable. A closer reflection on the interconnections led to a further refinement of the categories, which resulted in the themes developed. A layout of the categorisation at this stage of the analysis is shown below in Figure 4.3.

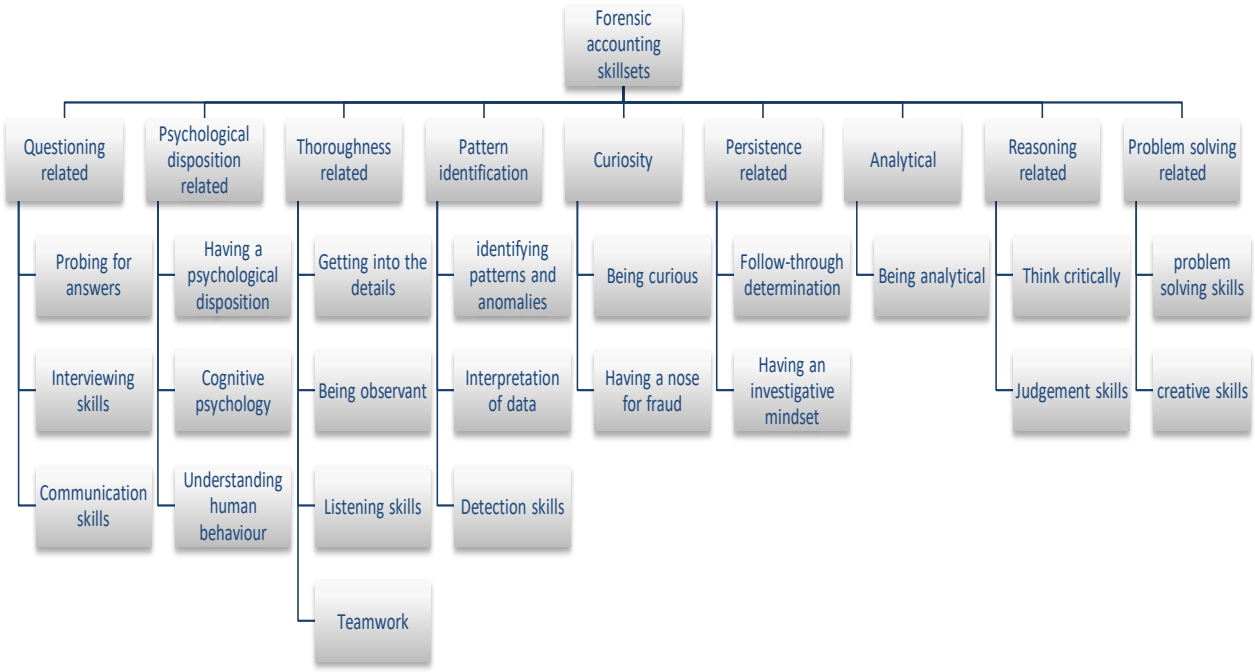


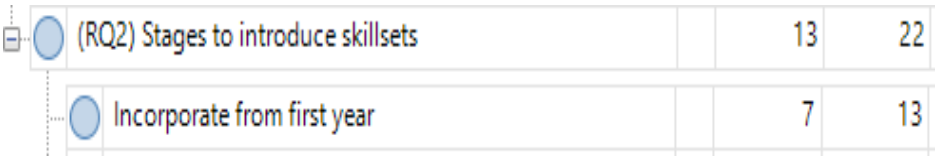
Figure 4.3: Codes categorisation representing key forensic accounting skillsets
Source: Author's creation

4.3.3.2 Stage to introduce the identified skillsets in auditors' education and training

Participants from each of the interest groups preferred to have forensic accounting skillsets exposure included in auditing and accounting education from the first year of higher education and professional training. Participants stated that introducing contents on the skillsets at an early stage would mean that auditors become familiar with basic concepts from the onset of their education or training. This would then be reinforced progressively throughout the undergraduate years and beyond, onto the graduate and career development training at the firm level, and the professional qualification examinations. The first year in this sense encompasses all entry routes available to joining the auditing profession – either a direct undergraduate degree in auditing and accountancy, firm graduate trainees from any field of study, and the apprenticeship route.

Further sorting was not required to answer the research question or arrive at a theme. Rather, understanding the most significant information and context by the participants enhanced the researcher's reflection in developing the final themes and conceptual framework. The significant references making up the category is presented in Table 4.13 below.

Table 4.13 Incorporating forensic accounting skillsets in auditors' education and training



(RQ2) Stages to introduce skillsets	13	22
Incorporate from first year	7	13

Source: Author's NVivo output

4.3.3.3 Categorisation for integrating the skillsets in auditors' education and training

Four categories were generated on how to integrate the forensic accounting skillsets identified in this study into auditors' education and professional training. The categories were developed based on similarities and differences informed by the researcher's

understanding of the participants' viewpoints. Each of the categories are explained in this section. Table 4.14 below highlights the categories.

Table 4.14 Node categories for integrating the skillsets

(RQ3) How can the skillsets be incorporated		15	140
Skillsets development interventions		13	46
Forms of training and learning		10	41
Modes to implement integration		13	36
Topics for curriculum content		8	17

Source: Author's NVivo output

Category A: Skillset development interventions

Participants suggested a variety of interventions to facilitate auditors' development of the essential forensic accounting skills at audit/accounting firms and at professional qualification levels. 'In-job training on forensic practices' refers to the need for auditors to be exposed to fraud detection practices as part of their on-the-job training. These interventions include exposing auditors to fraud detection practices on-the-job, through cross-training or mentoring attachment with forensic accountants. At a professional qualification level, participants suggest that the fraud trainings be built into the professional exam schemes.

There is a strong connection between this category and the 'modes to implement the integration'. This relationship is explained in the final themes and elaborated in the discussion chapter. The category and its subgroup are displayed in Table 4.15 below.

Table 4.15 Category on skillsets development interventions

Skillsets development interventions		13	46
In-job training on forensic practices		9	13
Build into professional exam schemes		9	12
Incorporate in firm training programmes		4	7
Cross- training to develop skillsets		2	6
Fraud training at professional level		3	5
Incorporate on-job mentoring attachment		3	3

Source: Author's NVivo output

Category B: Forms of training and learning

Forms of training and learning refers to the various learning methods that can be adopted to enhance auditors' education at undergraduate and graduate training levels. Participants stated that incorporating practical cases on how forensic accounting skills are employed in a real-world situation can facilitate auditors' understanding of the relevant skills. Combining theoretical knowledge with practical knowledge can improve auditors' capabilities on the field and in evaluating information from client entities. The category and its subgroups are displayed in Table 4.16.

Table 4.16 Forms of training and learning

Forms of training and learning		10	41
Incorporate practical cases in education		9	17
Scenario simulation in job trainings		7	12
Introduce mock or mini plays		2	5
Group discussions in training programmes		3	3
Audiovisuals in training programmes		2	2
Incorporate debates		1	1
Virtual reality audit trainings		1	1

Source: Author's NVivo output

Category C: Modes to implement integration

'Modes to implement integration' describes the steps that can be taken to enable auditors develop the forensic accounting skillsets to improve audit quality. Participants suggested that creating fit-for-purpose syllabi, with contents on the relevant skillsets, can boost auditors' fraud recognition and detection capabilities. They further expressed the need for standardised fraud trainings and programmes for auditors, to improve auditors' awareness and identification of fraud. Implementing syllabus designs and resources could be as basic as introducing forensic terminologies in the syllabus. The relationship between this category and category A on skillsets development interventions is examined in section 4.3.4 on themes and the discussion chapter. Table 4.17 contains the category and its subgroups.

Table 4.17 Category on modes to implement integration

Modes to implement integration	13	36
Designing syllabus with relevant skillsets	9	13
Create standardised fraud trainings	7	10
Developing programmes and resources on fraud detection	6	6
Introduce materials on forensic skillsets	4	4
Introduce forensic terminologies in syllabus	2	3

Source: Author's NVivo output

Category D: Topics for curriculum content

The final category on how to integrate forensic accounting skillsets into auditors' education and training is on the topics suggested for curriculum content. Although the frequency of references is lower than other categories already described in this section, participants from the four interest groups are represented in the references for this category. Interestingly, fifty percent of the references are contributions from external auditors. This can be considered a significant insight in that external auditors are the central focus of the study outcomes.

Participants alluded to the gap in auditors' education in the area of human behaviour. 'Psychology of fraudsters' refers to understanding the human behaviour, such that auditors are better equipped to interpret actions and dispositions that may present when they are on the field. 'Emotional intelligence practices' refers to the training contents to build auditors' ability to notice signs of unease from client entities which might be indicative of a red flag. This category is examined further in the discussion chapter. Table 4.18 contains the category and its subgroups.

Table 4.18 Category on topics for curriculum content

Topics for curriculum content		8	17
Introduce psychology of fraudsters		3	5
Incorporate emotional intelligence practises		2	3
Training on identifying anomalies		2	3
Introduce open-minded creative thinking		1	2
Incorporate evidence gathering practises		1	1
Incorporate fraud risk factors training		1	1
Incorporate getting to the bottom		1	1
Probing and corroborating evidence training		1	1

Source: Author's NVivo output

The four categories outline distinct aspects of how the fundamental forensic accounting skills can be incorporated into auditors' education and training across the various training levels. The categories were further analysed to identify areas of similarities which led to the eventual themes developed. A graphic presentation of the categories and subgroups is displayed below in Figure 4.4.

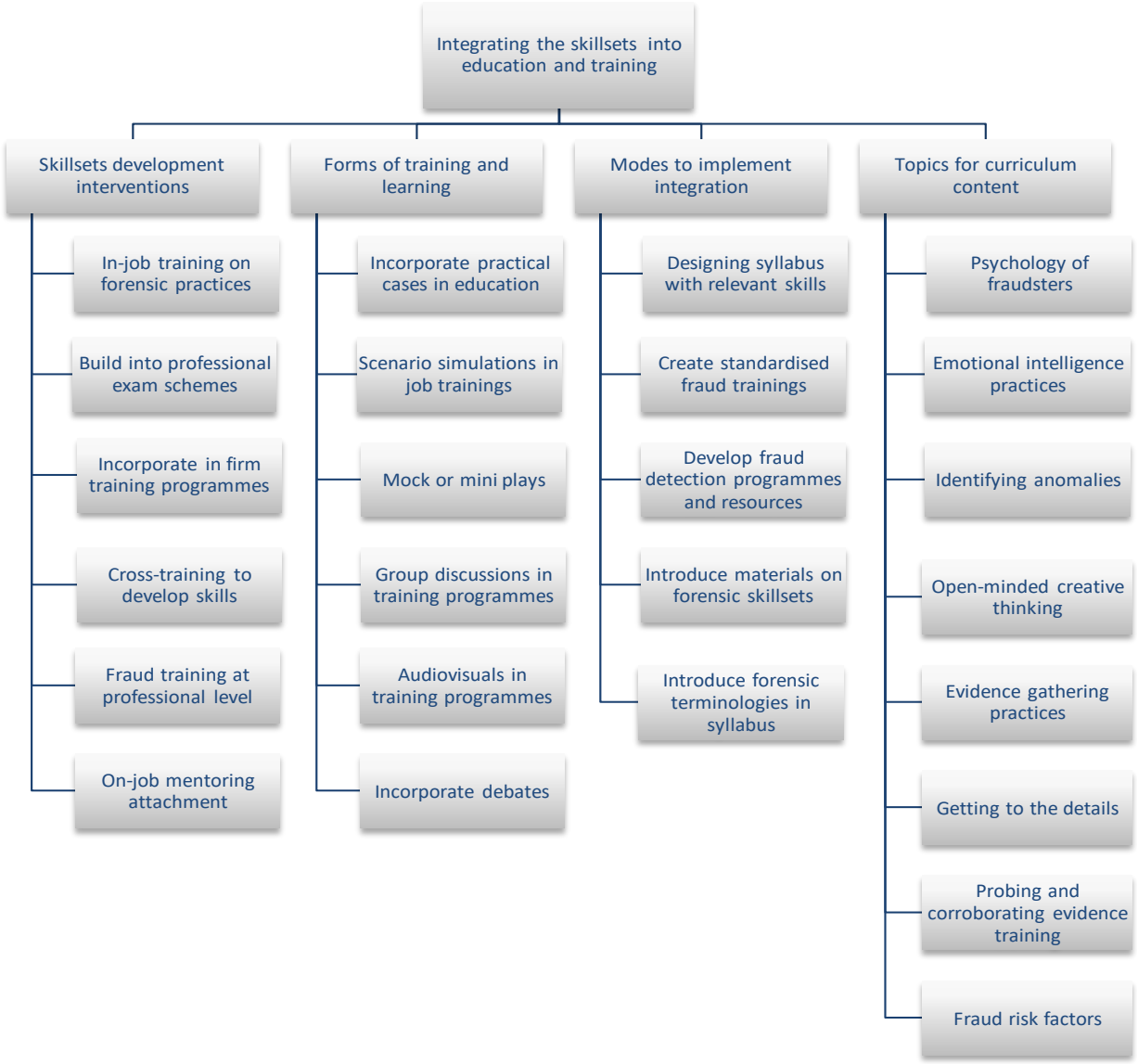


Figure 4.4: Categories representing how to integrate the skillsets into auditors' education and training
Source: Author's creation

4.3.3.4 The overarching significance of a mindset to detect fraud

The role of mindset to auditors' ability to identify misrepresentations stood out in the participants' responses. Although the objectives defined for the study did not include the perspective of mindset, there is an overarching relationship between the forensic accounting skillsets and the mindset to detect fraud. This additional finding led to the researcher creating a separate category on the element of mindset.

Participants across the four interest groups interviewed, considered auditors' mindset towards detecting fraud as a central factor in utilising the fundamental forensic accounting skillsets in practice. Like forensic accountants, auditors should receive training that cultivates a mindset attuned to recognising and responding to signs that may indicate potential fraud. This could improve audit outcomes, resulting in enhanced audit quality. The category and its subgroups are presented in Table 4.19 below. Further discussions on the intersection of a forensic accounting mindset to the deployment of the skillsets is covered in section 4.3.4 on themes, and the discussion chapter.

Table 4.19 Forensic accounting mindset as a significant category

(Others2) Element of mindset to detect fraud		11	32
Mindset to detect fraud		7	22
Mindset of professional scepticism		5	6
Extending auditors' mindset		3	4

Source: Author's NVivo output

The researcher compared participants with views on auditors' need for a fraud detecting mindset to those proposing the skillsets presented earlier in this chapter. Of the fifteen participants interviewed, eleven highlighted the importance of a fraud detection mindset in guiding how auditors can apply the identified skillsets to improve the quality of audits. Therefore, majority of the participants concur that there is a need for a shift in auditors' mindset focused on uncovering misstatements or misinformation. This establishes the significance of a fraud detection mindset to the objectives of this study. A cross-analysis of the participants identifying the element of mindset to detecting fraud is presented below in Figure 4.5.

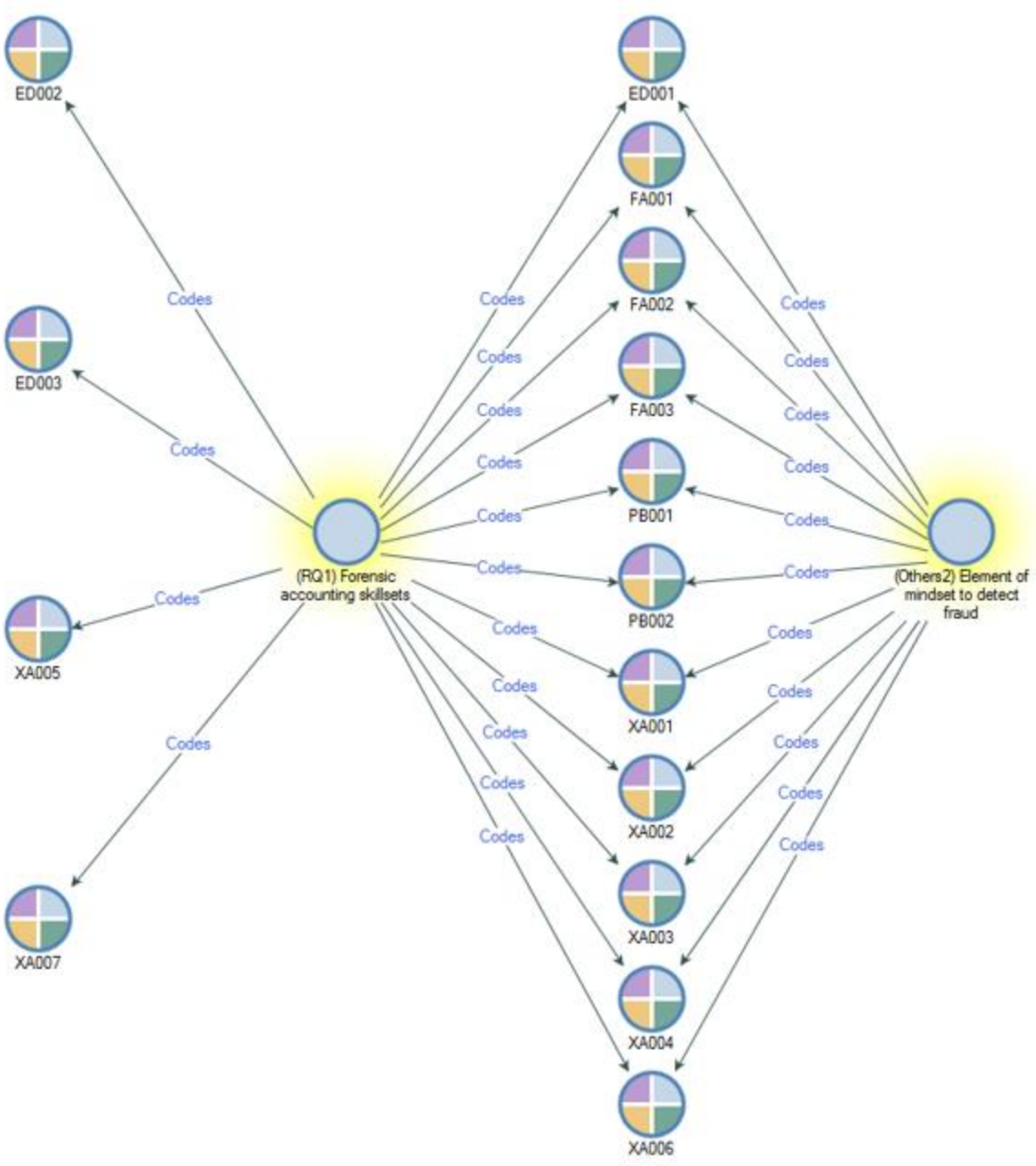


Figure 4.5: Cross-analysis of participants proposing a fraud detection mindset for auditors
Source: Author's NVivo creation

4.3.4 Phase 3 – Defining the themes

The themes were developed progressively through the systematic inductive procedure deployed in analysing the data. Starting from the data collection stage, the researcher immersed in the data by listening to the audio recordings and reading the transcripts

repeatedly. The context of each participant's insight was recognised based on their background and lived experiences.

To achieve an objective interpretive consistency, the researcher's supervisory team was involved in verifying the steps taken to develop the themes, and the relatedness of the outcomes to the research objectives. First, one of the supervisors read a few transcripts selected from each of the interest groups – educators, external auditors, forensic accountants, and professional body specialists. Next, the supervisors reviewed the code table. By these, the supervisors were able to comprehend the perspectives shared by the participants, and as such, could validate the representation of the themes generated.

A further refinement of the categories presented in section 4.3.3 led to the merging of some of the categories. The researcher determined how to combine the categories based on the relationships established from the participants' perspective. This section therefore examines the final themes and their meanings. The research questions guided the development of the final themes, which reflect the distinctive objectives of the study. The interrelation of these themes is also examined. The concluding stage of the analysis leading to the developed themes is defined in the following sections.

4.3.4.1 Themes on forensic accounting skillsets to improve audit quality

Four themes emerged on the fundamental forensic accounting skillsets required to enhance auditors' recognition of misrepresentations during audits. The themes are Questioning skills, Conscientious skills, Psychological skills, and Intellectual reasoning skills. This section provides a detailed overview of each of the themes.

Questioning skills

The theme, Questioning skills, was created from combining two prominent categories. The categories merged are Questioning related skills and Curiosity. 'Having a nose for fraud' was excluded from the Curiosity category as the meanings offered by participants for this code differed from the interpretations connecting questioning related skills and 'being curious'. Other codes like 'interpretation of data', listening skills and detection skills were also merged-in based on the context from participants. These other codes, although

less prominently discussed by participants, were included because all the skills identified are distinct and considered non-exchangeable. Figure 4.6 depicts the formation of the theme.

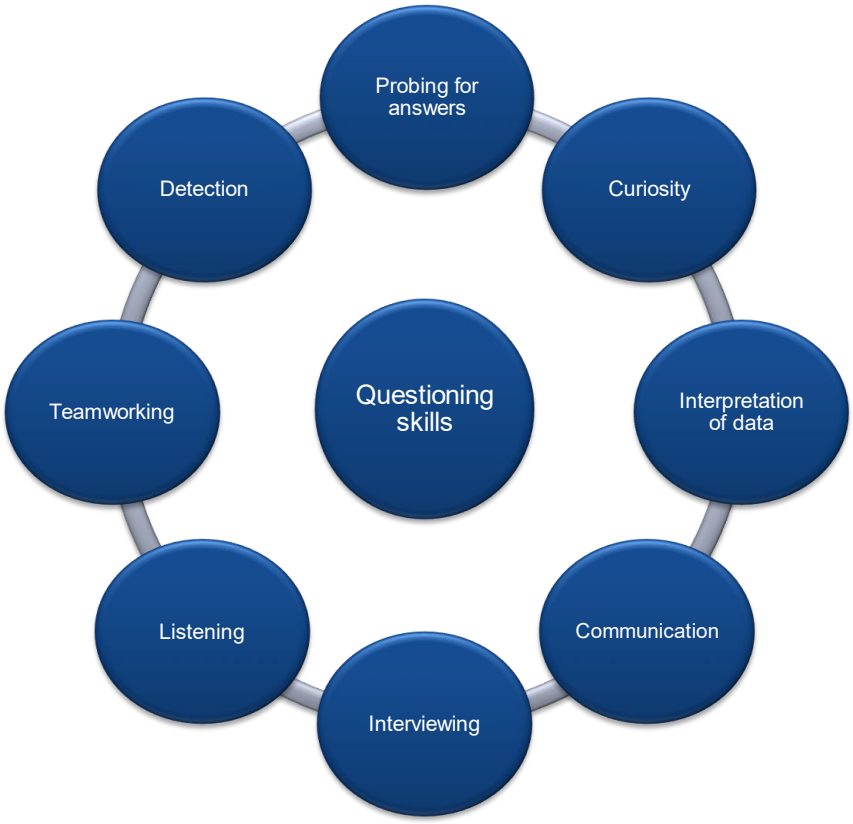


Figure 4.6: Questioning skills
Source: Author's creation

Questioning skills are essential to establishing the veracity of information obtained from client entities in an audit assignment. In probing for answers, participants described that auditors should seek clarifications beyond the immediate responses volunteered by the client management. Seeking clarifications link to auditors engaging a curious mind and practising active listening. The desire to learn more about a transaction, or the assumptions taken by the client entity on an accrued entry can aid in appropriately interpreting the transaction and related information.

Again, probing for answers would entail auditors engaging with their audit team to match the information received against a corresponding entry account. Participants explained

that teamworking at the audit field can enhance the quality of checks done by the auditors. This can trigger a heightened sense of curiosity, leading to further questioning. Moreover, effective questioning can be developed with interviewing and communication skills. These two skills may boost auditors' understanding of verbal and nonverbal cues from client personnel or management, facilitating the detection of misrepresentations. Questioning skills comprise of specific, yet interrelated skills found to be fundamental to uncovering the underlying context of a transaction or information.

Conscientious skills

The theme, Conscientious skills, was created by merging Thoroughness related and Persistence related skills. Participants described thoroughness and persistence related skills as fundamental to forensic accountants' success in fraud detection. These skills include an attentiveness to details, and a determination to 'get to the bottom' of an inquiry. Participants identified that auditors must be willing, and equipped, to be attentive to details, keenly alert to the peculiarities that may arise while on the field. One of the participants referred to the alertness as *"… having your wits about you …"* during an audit. This implies that accuracy, correctness, and completeness are essential to auditors' ability to detect irregularities in audit assignments.

To arrive at the Conscientious skills, listening skills and teamworking were considered less related to this theme. This led to their exclusion and regrouping as part of the Questioning skills examined earlier. On the other hand, there is a strong connection between being detail-oriented and identifying patterns and anomalies. Participants alluded to the place of instinct or experience to being able to identify unusual patterns and anomalous transactions. Like forensic accountants, auditors are required to possess the intuitiveness to recognise outliers in transactions and information that can indicate fraud. This can enhance their investigative abilities to improve the quality of audits. A graphic formation of the theme is displayed in Figure 4.7.

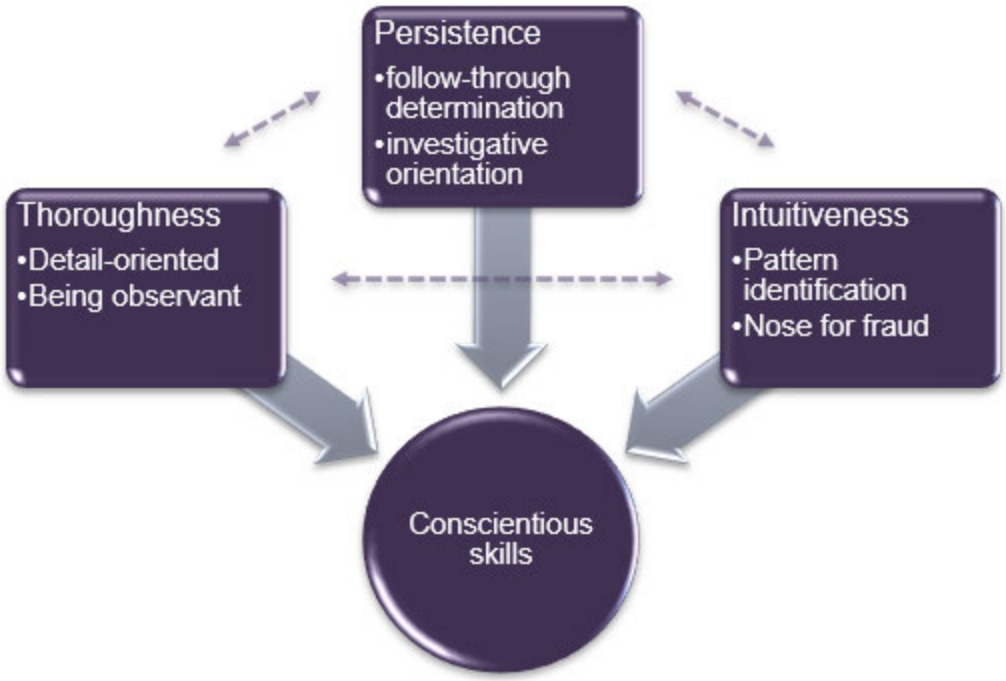


Figure 4.7: Conscientious skills
Source: Author's creation

Intellectual reasoning skills

Intellectual reasoning skills emerged from combining three categories: Analytical, 'Reasoning related' and 'Problem solving related'. Intellectual reasoning skills connect to how forensic accountants approach and execute an investigation. Participants expressed the need for auditors to engage creative and logical thinking approaches in their assessment of fraud possibilities during an audit exercise. These reasoning capabilities can be enhanced by strong analytical abilities to address situations or problems that may arise in the course of an audit.

Participants linked being analytical to include having an intellectual capacity to think through and process information to reach a logically informed conclusion. This implies that critical thinking can aid auditors' analytical capabilities, thereby leading to an informed judgement regarding the underlying assumptions taken by client management in their financial reporting. Further, being analytical connects to identifying patterns and anomalies. Both skills, combined with reasoning skills can boost what a participant refers

to as their *'… chance of finding fraud …'*. The theme formation is presented in Figure 4.8 below.

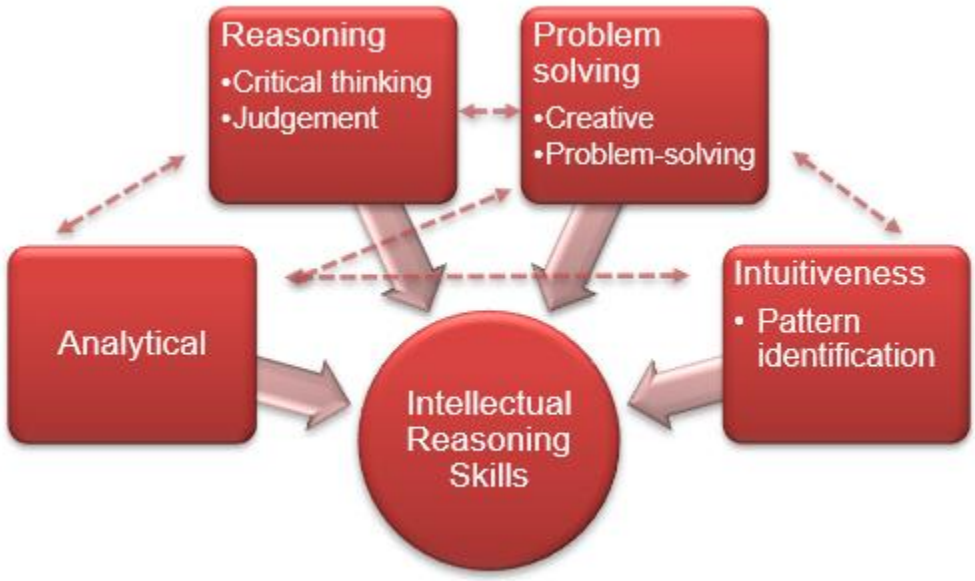


Figure 4.8: Intellectual reasoning skills
Source: Author's creation

Being creative describes engaging in unconventional thinking to determine probable scenarios. Combined with critical thinking, auditors can adopt a more versatile approach to detecting misrepresentations in audits. From the analysis, identifying patterns and anomalies combines being analytical, attentive to details, observant and 'having a nose for fraud'. This means that, from a classification point of view, intuitive skills relate as a subgroup within the other themes. Ultimately, there is an interrelationship between these themes.

Psychological observation skills

Psychological observation skills emerged as a distinct skillset fundamental to forensic accounting. Psychological disposition refers to the consciousness a forensic accountant would exhibit towards uncovering anomalies or detecting misrepresented financial information. A participant describes it as *'… a different way of making you tick …'*. This implies that auditors can improve the quality of audits by imbibing a level of that

consciousness forensic accountants bring to the table. Having a psychological disposition relates to cognitive psychology and understanding human behaviour.

Cognitive psychology entails being aware of the psychological or intrinsic biases that can manifest during an audit assignment. Such biases can influence how an auditor would confirm or willingly accept an information from senior client management personnel. This can be a deterrence to further questioning to clarify an entry or assumption taken by the client. Together with such biases, understanding human behaviour can aid auditors' consciousness in interpreting verbal and non-verbal signs from client personnel, which can indicate red flags during an audit.

Psychological disposition, cognitive psychology and understanding human behaviour can enhance an auditor's likelihood to develop a nose for fraud, raising their intuitiveness. A display of the theme structure is presented in Figure 4.9 below.

Figure 4.9: Psychological observation skills
Source: Author's creation

In all, the themes - 'Questioning skills', 'Conscientious skills', 'Psychological observation skills' and 'Intellectual reasoning skills' – led to the four pillars of forensic accounting skillsets. Each of these pillars comprise of several distinct skills that have specific characteristics. To improve audit quality, auditors need to master these skills which are

tailored to several aspects of competence that can enable them detect signs of misrepresentation. This implies that each skill within the pillars is not substitutable. Notwithstanding, there is a relationship of skills among the pillars.

The interrelationship of the skills indicate the prominent connections established from participants' views. From the analysis of the results, questioning requires a level of psychological observation skills. For instance, an understanding of human behaviour can support auditors' abilities in interpreting information and interviewing client personnel. Also, a psychological disposition to detecting irregularities can increase curiosity which then triggers further questioning. Then again, curiosity tends to spur the need for conscientious skills. For example, an attentiveness to details can aid the elaboration required to learn more about an information or basis of assumption taken by client management on a financial entry. This can raise the chances of auditors identifying patterns and anomalies indicative of falsifications in financial statements.

Another interconnection between the forensic accounting skillset pillars is the 'pattern identification' and 'nose for fraud'. Although pattern identification and nose for fraud could have been classified as a fifth theme, intuitive, both appear to anchor across the four pillars. This anchoring could explain the presence of intuitiveness in the interactions possible when all these skills are implemented in practice.

Therefore, the themes, questioning skills, conscientious skills, intellectual reasoning skills and psychological observation skills, answer the first research question of the study: *What are the key forensic accounting skillsets needed to fill auditors' fraud detection competency gap?* These themes make up the forensic accounting skillsets pillars developed in this study and illustrated in the interrelationship map in Chapter Six. The results reveal that each component of a skillset pillar is a distinct skill. While one skill can complement or enhance the use of another skill, none of the skills can be exchanged for the other.

Interestingly, the study revealed that some of the skillsets identified are not exclusive to forensic accountants. Participants alluded to the existence of the skillsets in other professions, including auditing. The distinguishing factor discovered from the study is how

the skillsets are employed in forensic accounting practices. This gave prominence to the psychological observation skills. This implies that the psychological disposition of forensic accountants plays a pivotal role in how they engage in detecting fraud. From the study findings, auditors need a shift in their disposition to detecting misrepresentations. This resulted in the addition of a theme on mindset.

Mindset shift

The place of mindset to the use of forensic accounting skillsets featured prominently as an additional theme in the views expressed by the participants. This led to the creation of 'mindset shift' as a distinct theme. From the participants' opinions, the mindset of forensic accountants to detect misrepresentations or fraud dictates the use of the skillsets in an investigation. For instance, this mindset to detect fraud drives their psychological disposition, resulting in a heightened level of scepticism towards all data and information obtained in an investigation.

The mindset to detect fraud is a fundamental component of how forensic accounting skillsets are employed. To avoid audit failures, auditors should benefit from embracing a shift in mindset towards detecting misrepresentations resulting from fraud. Possessing the capability to interpret client management's information can clarify the underlying context of an accounting assumption. This implies that possessing the skillsets alone may not achieve the desired improvement in audit quality if auditors' mindset towards misrepresentation or fraud detection remains the same.

Consequently, the interplay between a mindset to detect misrepresentations or fraud and the skillsets already discussed becomes a two-way approach to competency, to fulfil the audit quality improvement agenda. This led to the creation of the forensic accounting mindset-skillsets relationship (MSR) concept. The concept will be introduced in Chapter Five, Findings and Discussions, and its theoretical implications will be addressed in the concluding chapter.

4.3.4.2 Themes on integrating the skillsets into auditors' education and training

Three themes emerged on integrating the forensic accounting skillsets into auditors' education, training, and continuous development programmes. The themes are Modalities for the integration, Techniques of training and learning, and Contents for a mindset-skillsets agenda. This section provides a detailed overview of each of the themes.

Modalities for the integration

Modalities emerged from combining two categories: the skillsets development interventions and modes to implement integration. The interventions suggested by participants mostly address the mindset-skillsets development from a graduate training, apprenticeship, and professional qualification levels. On the other hand, the modes offered by participants to achieve the integration encompasses the formal education route, through a discipline-specific university undergraduate degree. Therefore, merging the two categories provide a wholesome coverage of the diverse route into the auditing profession.

Acknowledging the forensic accounting mindset and skillset relationship in learning resources, programmes, teaching, and training materials for auditors, may enhance their ability to identify misrepresentations or fraud during an audit. This implies that auditors should have the opportunity to develop and renew the mindset to detect anomalous transactions and information progressively throughout their career. For instance, driving a fraud identification mindset can be through on-the-job training programmes on forensic practices at firm level. Firms may also widely adopt cross-training of auditors through periodic short-term secondment or mentoring attachment to forensic accounting specialists.

The profession's qualifying examinations appear to be a pivotal point of training for auditors, notwithstanding the route of entry into the profession. As such, introducing forensic accounting terminologies and materials into the professional examination syllabus may demonstrate a recognition of the relationship between a mindset shift, skillsets, and auditors' performance in practice. Hence, modalities for the mindset-

skillsets integration provide an end-to-end coverage of the levels of intervention to improve auditors' competency in fraud detection. A formation of the theme is presented in Figure 4.10 below.

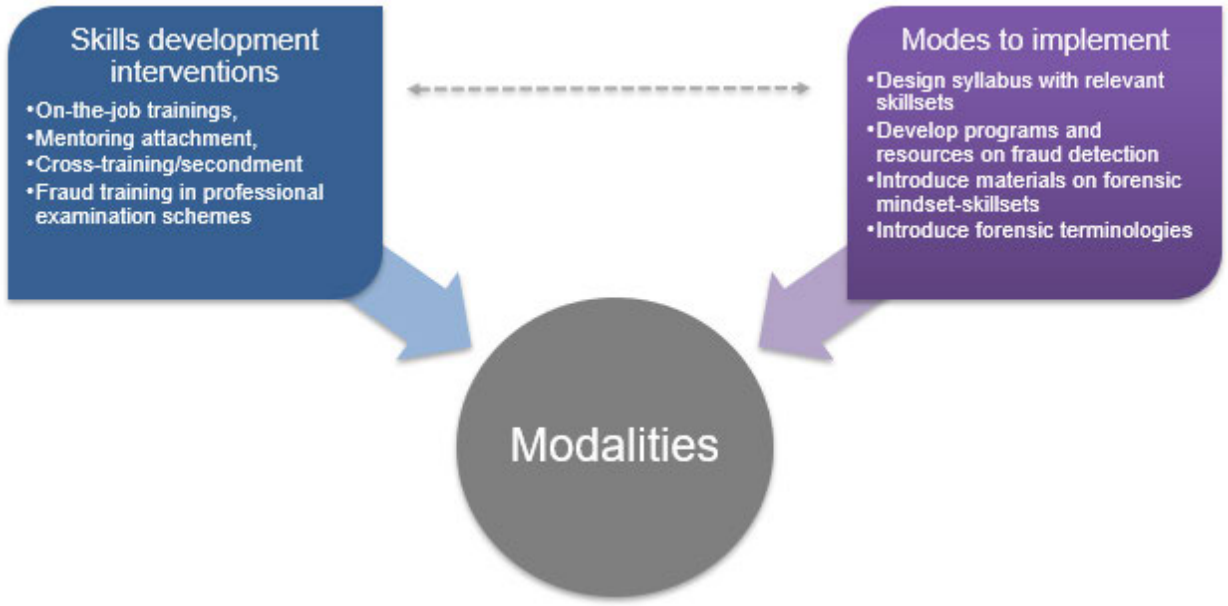


Figure 4.10: Modalities for integrating forensic accounting mindset-skillsets in auditors' training
Source: Author's creation

Techniques of training and learning

The theme 'techniques of training and learning' emerged from the forms of learning activities proposed by the participants, which can be incorporated into auditors' education and training programmes. The techniques can be integrated into the undergraduate teaching and learning practices. For instance, the use of actual cases of audit failures to stimulate classroom debates. Similarly, the techniques can be included in professional examinations and job-related training programmes. For example, scenario simulations or mini plays can be utilised to evaluate how auditors may employ the mindset-skillsets relationship when in a client setting. Consequently, techniques of training and learning can be instrumental to support auditors' understanding of how real world events can challenge theoretical and professional concepts, and vice-versa.

Techniques of training and learning extends the modalities discussed above. While the modalities provide the structure, the techniques represent the channels to execute the defined structure. This means that the techniques represent the various forms of practical applications to provide auditors with hands-on knowledge within a safe space. Auditors may therefore be more equipped to employ their acquired forensic accounting mindset-skillsets relationship to enhance their competency in fraud detection. As such, auditors can achieve improved quality in client audits.

Contents for the mindset-skillsets agenda

The theme ‘contents for mindset-skillsets agenda’ was derived from the category on curriculum topics suggested by the participants. The content for the curriculum enforces the link between the modalities and the techniques for integrating the mindset-skillsets agenda into auditors’ education and training. This makes the curriculum contents a crucial component of the integration programme, thereby representing the substance of the integration. The topics proposed by the participants can be linked to the four pillars of forensic accounting skillsets discussed earlier in section 4.3.4.1. Thus, the contents are classified into four elements, connecting to the mindset-skillsets relationship (MSR) rhombus. The elements are: Emotional intelligence for auditors, Psychology of fraudulent behaviours, Fraud investigation techniques, and Reasoning approaches to detecting misrepresentations.

The first element on emotional intelligence for auditors would cover topics unpacking emotional intelligence and its importance in identifying fraud risk factors and anomalous transactions and information. Topics on psychology of fraudulent behaviours would address auditors’ awareness and consideration of psychological dimensions to understanding client management information. This would include knowledge of motivations and behaviours of fraudsters. Contents on fraud investigation techniques comprise of the practical aspects of the topics. For instance, auditors’ knowledge of evidence gathering can enhance how they probe for information or seek corroborating documentation to clarify the underlying significance of a financial entry.

The final element, reasoning approaches to detecting misrepresentations, emphasises the importance of open-mindedness, creative and critical thinking to discover misrepresentations in financial transactions. The participants suggest these contents to be introduced from the early years, across all educational and training programmes open to auditors. Collectively, the four elements describe indicative topics aimed at equipping auditors with the competency represented in the mindset-skillsets relationship rhombus, to enhance audit quality. Figure 4.11 shows the theme formation.

Figure 4.11: Contents for auditors' forensic accounting mindset-skillsets curriculum
Source: Author's creation

The modalities, techniques, and contents for a mindset-skillset agenda require a progressive integration from entry level of undergraduate education, apprenticeship, graduate, and professional qualification, and consistently through career progression trainings. This means that, irrespective of the pathway of entry into the auditing profession, there should be a structure to support auditors' development of the mindset-skillsets duo to reverse the repeated cycles of failed audits.

Therefore, these themes, modalities, techniques, and contents, answer the second research question of the study: *How and at what stage(s) of auditors' education can these skillsets be introduced into auditors' undergraduate and continuous development programmes?* The findings reveal the structure (modalities) required for auditors to be equipped with the mindset and skillsets of forensic accountants, starting from the entry

stage of their education and training. The modalities involve concerted interventions through cross-trainings and on-the-job mentoring on forensic accounting practices at the audit or accounting firm level. In addition, such skills interventions should be built into the professional qualification examination schemes.

From the findings, standardising fraud detection training and mandating programmes and resources on forensic accounting in the syllabi can significantly influence auditors' approach to upskilling. Hence, there is a need for collaboration between the stakeholders - the audit firms, professional bodies, regulators, and the academia - for a sustainable adoption of the mindset-skillsets education and training. This would be further discussed in subsequent chapters.

In addition to the modalities, the study found several techniques which can be adopted to enable auditors' learning and proficiency in forensic accounting mindset and skillsets. The techniques could be in form of practical cases to stimulate critical discussions and debates within a classroom environment, examination settings, and on-the-job training programmes. Simulating scenarios or the use of mock plays is favoured by participants as being effective in building critical awareness of real-world situations that auditors may encounter on the field. Hence, encountering such situations in a safe space can be a comforting experience which can reinforce how auditors engage the fraud detection mindset and skillsets in reality.

Together with the modalities and techniques, the study established indicative contents for auditors' forensic accounting mindset-skillsets education and training curriculum. The contents comprise of four elements, which are linked to the forensic accounting skillsets pillars discussed earlier in section 4.3.4.1. The four elements of the contents are emotional intelligence for auditors, psychology of fraudulent behaviours, fraud investigation techniques, and reasoning approaches to recognising misrepresentations. The findings of this study reveal that incorporating these elements into auditors' education curriculum and training programmes can enhance auditors' competence in detecting misrepresentations or fraud, thereby improving audit quality.

The three themes provide a pathway for audit firms, professional bodies, regulators, and the academia to implement an educational transformation for auditors, aimed at

enhancing audit quality. Redesigning auditing curriculum, at all levels of education and professional trainings can influence a renewed mindset for existing auditors, upcoming, and future generations of auditors. A framework summarising the themes representing how the forensic accounting mindset-skillsets relationship can be integrated into auditors' education and training programmes is displayed in Figure 4.12 below.

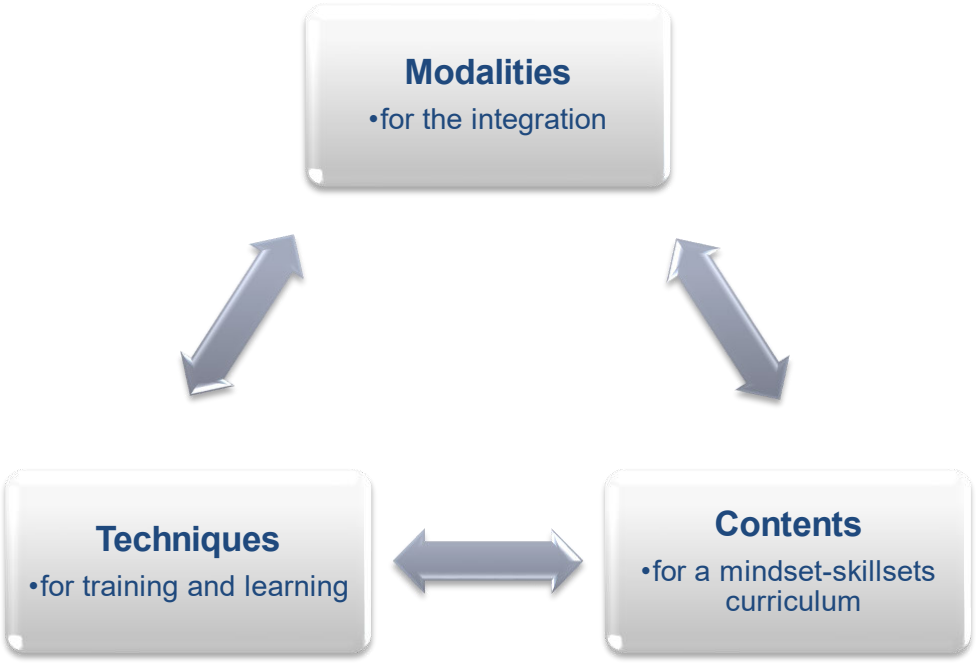


Figure 4.12: Auditors' forensic accounting mindset-skillsets integration triangle
Source: Author's creation

4.4 Summary

This chapter discussed the analysis and results of the data collected from four interest groups - educators, external auditors, forensic accountants, and specialists from professional bodies - through semi-structured interviews. The discussions address the issue of identifying the key forensic accounting skillsets to improve the quality of audits in the UK, and how and when these skillsets can be introduced into auditors' education and training programmes. The discussions show a step-by-step detailing of how the collected data were transcribed, cleaned, and prepared for analysis. The analysis was aided by the

NVivo pro12 software and Microsoft Word and Excel tools. The analysis resulted in the main themes of this study.

The chapter discussed the key forensic accounting skillsets that can enhance auditors' performance in detecting fraud thereby changing the narratives on the quality of audits in the UK. Five themes emerged on the skillsets: questioning skills, conscientious skills, intellectual reasoning skills, psychological observation skills, and mindset shift. The skillsets, questioning, conscientious, intellectual reasoning, and psychological observation together represent the main pillars of forensic accounting skills. On the other hand, mindset shift represents the core of how forensic accountants employ the skillsets in practice. These themes led to the formation of the forensic accounting mindset-skillsets relationship rhombus (MSR) concept.

Each of the skillset pillars consist of specific skills, grouped based on their similarities to a central focus. Notwithstanding the distinct pillars, the skillsets are interrelated. This implies that each skill within the pillars serve a purpose towards identifying misrepresentations or fraud in an audit assignment. For instance, auditors can improve their abilities in interpreting information and interviewing client management by possessing an understanding of human behaviour. This example shows the relationship between questioning skills and psychological observation skills. As such, while the skillsets are interconnected, they are not substitutable. This means that each skill within the four pillars play a role in auditors' competency to discover misstatements or misrepresentations thereby enhancing the quality of audits.

The skillsets represented in the four pillars are not exclusive to the forensic accounting field. However, the distinguishing element of how these skillsets are employed is the mindset to detect fraud. Auditors' need a mindset shift to utilise the skillsets in an audit engagement. Therefore, embracing the mindset of forensic accountants is pivotal to changing the narratives on the quality of audits. This does not imply that auditors are expected to become forensic accountants. However, auditors should be equipped with the mindset that gives credence to their professional judgement on the accuracy and completeness of the financial statements, including the lack of material misstatement due

to errors or fraud. In effect, improving audit quality goes beyond a skillset agenda. Auditors need a two-fold approach of mindset and skillsets to advance audit quality in the UK.

The chapter also discussed the integration of the mindset-skillsets relationship into auditors' education and training programmes. Three themes emerged from the analysis: modalities, techniques, and contents. This led to the creation of a framework, the auditors' forensic accounting mindset-skillsets integration triangle (Figure 4.12). For auditors to be equipped with the mindset and skillsets combination, there needs to be an upgrade in their education and professional development programmes. The much needed improvement in audit quality requires a step-change in curriculum, training syllabi, and on-the-job developmental exposures for auditors.

Today's auditors enter the profession through various routes. There is a pathway through an undergraduate degree in accounting and auditing. Other pathways to the profession include the apprenticeship programmes, or an undergraduate degree in a related or other disciplines. The integration framework therefore presents an inclusive solution, catering to all entry points into the auditing profession. For auditors to develop the forensic accounting mindset-skillset combination, the existing curriculum and training programmes should be redesigned. For instance, forensic accounting terminologies and materials should be introduced to various curriculum and training syllabi. In addition, there is a need for standardised programmes and resources on fraud detection in auditors teaching and learning plans. These can create a consciousness of their responsibility towards fraud detection, influencing auditors' disposition to identifying and reporting misrepresentations in practice.

The interventions to develop auditors' forensic accounting mindset and skillsets is aimed at all entry levels into the profession. Audit firms can introduce cross-training programmes or mentoring attachments for auditors. At the professional training level, the professional bodies need to incorporate forensic accounting terminologies in the study materials and examinations. This study has shown that the skills of forensic accountants are not unique to the discipline. However, auditors need to be aware of the forensic accounting nuances

that can enhance their performance in audits assignments. Therefore, it is important to include these nuances in their study materials and professional examinations. A progressive approach of integration is required, starting from the early years in undergraduate studies, graduate and apprenticeship training, and professional examinations. This would signal a deliberate emphasis on the mindset and skillsets essential for their success in detecting misrepresentations.

There are techniques to teaching and learning that can be adopted to incorporate the forensic mindset and skillsets into auditors' education and training programmes. The use of actual cases of failed audits in learning and training materials or scenario simulations can inform auditors' situational awareness. This can stimulate group discussions and debates in training programmes aimed at reinforcing how the mindset-skillsets relationship can be effective in practice. Additionally, mock plays provide an opportunity to demonstrate their understanding of employing the mindset-skillsets relationship in a safe space. This theme therefore provides the channels of actualising the learning and training of auditors whether within the universities, audit firms, or professional institutions.

The content of the curriculum outlines the topics revealed in this study for auditors' forensic accounting mindset-skillsets education and training. The curriculum contents are divided into four elements: emotional intelligence for auditors, psychology of fraudulent behaviours, fraud investigation techniques, and reasoning approaches to detecting misrepresentations. This theme connects the modalities and techniques of integrating the mindset-skillsets relationship concept into the education and training of auditors. The content of the curriculum is therefore a vital part of the integration programme, as it reflects the essence of the study.

The study set out to find a solution to address how a forensic accounting agenda can enhance the credibility and reliability of audit quality in the UK. The study used a qualitative approach to identify the main themes and concepts that emerged from the data. The findings of the study fulfil the research objectives, providing insights into the forensic accounting mindset-skillsets agenda in improving audit quality.

Achieving the adoption of the MSR concept and the integration framework in auditors' education and training, requires the collaboration of the audit firms, professional bodies, regulators, and the academia. This is central to ensuring a sustainable comfort in auditors' competency in detecting misrepresentations and the relevance of the profession to the market economy. Further discussions on the concepts developed and how the theoretical framework for the study underlies these concepts will be covered in later chapters.

Chapter Five: Findings and Discussions

This chapter discusses the major insights obtained from the study on the forensic accounting skillsets and the integration agenda. From the analysis and results elaborated in the preceding chapter, four themes emerged regarding the fundamental forensic accounting skillsets for auditors' competency in detecting misrepresentations and fraud. These four themes (questioning, conscientious, intellectual reasoning, and psychological observation) led to the development of the forensic accounting skillset pillars presented in Chapter Four. This chapter examines the themes, discussing the major insights gained from the study on auditors' need for these skillsets to enhance the quality of audits.

Furthermore, this chapter discusses the additional theme of a mindset shift. The theme of mindset shift and its relation to the four pillars of forensic accounting skillsets is examined. This will lead to a discussion of the concept of forensic accounting mindset-skillsets relationship (MSR). The chapter explains why a different mindset is necessary for auditors in enhancing their competency in uncovering misrepresentations or fraud. Identifying the relevant skillsets and auditors' need for a mindset shift to detect misrepresentations or fraud only addresses one aspect of the research focus.

Additionally, this chapter discusses the major insights obtained from the study on integrating forensic accounting mindset and skillsets into auditors' education, training, and continuous professional development programmes. The analysis and results elaborated in Chapter Four revealed three themes encompassing the integration framework: Modalities for the integration, Techniques of training and learning, and Contents for a mindset-skillsets agenda. This fulfils the second aspect of the research focus (research question two), assuring a more rounded comfort in auditors' potential to improve audit quality. The themes led to the creation of the auditors' forensic accounting mindset-skillsets integration triangle.

Consequently, this study extends previous studies by addressing the growing concern of auditors' performance in uncovering misrepresentations or fraud in two folds. Firstly, the study revealed the mindset and skillsets forensic accountants possess and apply in detecting fraud in the UK environment. Secondly, the study revealed how auditors can

develop these forensic accounting mindset and skillsets through comprehensive education and training programmes to improve audit quality. First, the findings on forensic accounting mindset and skillsets for auditors' fraud detection competency will be presented. Next, the findings on each component of the integration framework – the modalities, techniques for training, and the curriculum contents – will be discussed.

5.1 Forensic accounting skillset pillars and mindset shift for auditors' fraud detection competency

For auditors to improve their capabilities in detecting misrepresentations in financial statements, they must possess and apply the forensic accounting skillsets in practice. Forensic accountants employ questioning skills to obtain information and seek clear answers that can reveal a financial entry's true context and significance. Questioning skills in the context of this study comprise of several distinct skills with similar skills that rally around the central focus of probing or inquiring for clarity. This means that while the skills are different, they share a common goal of inquiring deeper into a topic. Their commonality towards seeking answers resulted in the first forensic accounting skillset pillar – Questioning skills.

5.1.1 Questioning Skills

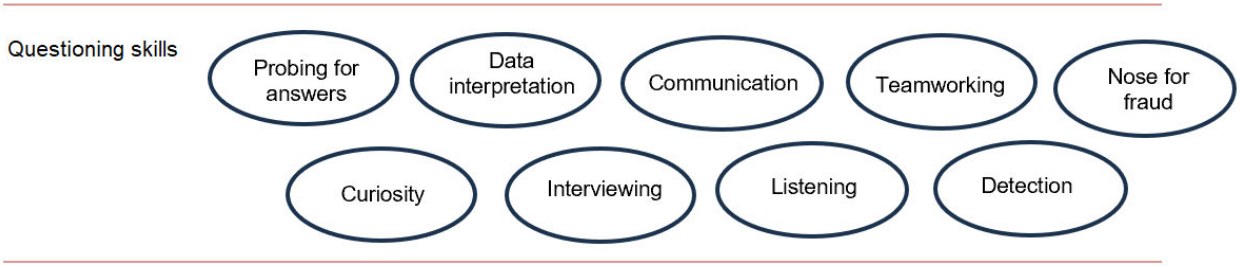


Figure 5.1: Questioning skills pillar
Source: Author's creation

The questioning skills pillar (Figure 5.1 above) includes interviewing, communication, probing, curiosity, data interpretation, listening, teamwork and detection skills.

Questioning skills are essential for auditors to ask effective questions that elicit accurate and relevant information from client management during an audit session. By doing so, auditors can better understand the nature and implications of the information obtained. This can enable auditors to better evaluate the substance of the assumptions made by client management in a reported financial transaction. Some of the participants expressed this:

> *"… I suspect it [i]s areas where the auditors are relying on what management has told them, and I think that's possibly the main area that needs to have more focus."*
>
> FA001

> *"… Definitely I can remember interviewing one guy and he basically said, you know auditors were often kind of graduates fresh out of university, not very experienced and they were easy to hoodwink. They would come to him asking for information. He was committing fraud, and he would just give them false information and off they would go, and they would be quite happy ..."* ED002

The finding confirms that auditors, at all levels, need to probe beyond readily volunteered information from client management to identify irregularities that may suggest fraudulent practices. An example from one of the external auditors states:

> *"… imagine someone who [i]s just a graduate and the first year on the job, there is that hesitation to ask questions and you may find yourself just taking the word of the audited entity as is, without probing further and considering the junior auditors are the ones that are into the details of things, into the act of ticking …"* XA004

As discussed in Chapter Two (Literature Review), the tendency of auditors to accept client-provided information at face value without conducting further inquiry has attracted considerable research. Some of the responses from forensic accountants interviewed illustrate this point:

> *"I suspect it is areas where the auditors are relying on what management has told them, and I think that is possibly the main area that needs to have more focus … But then you need to be able to assess whether or not what they are telling you is actually accurate or not. So, I think maybe that is the area that needs to be firmed*

up on. More work needs to be done in order to substantiate what management are telling you. It is not acceptable to just say, oh well, I was told by the finance director that this is what has happened." FA002

This practice has been found to compromise the quality and reliability of audit reports, exposing auditors and the firms to professional negligence. One of the participants said:

"… So, you are given a document. You look at it, you maybe think that something isn't quite right about it, but do you have the confidence to go back and say back to the financial controller, back to the finance director and say, well, you know you have told me such and such about this particular document, I'm not quite sure that I fully understand what you're telling me. Would you mind going through it again?" FA002

The finding supports Austin et al. (2020) in that auditors can enhance the quality of audits by reconsidering client information, even if it challenges their prior judgements. Thus, auditors should be willing to revise their conclusions based on new or conflicting evidence obtained from further questioning.

For auditors to be effective in questioning, they should be curious and possess good interviewing and communication skills. With interviewing skills, auditors can be more effective in probing client management for information. They can ask more questions tailored to extract clear and relevant details based on the answers they get from the client organisation. As pointed out by some of the participants:

"… curiosity tends to get you to ask more probing questions that would eventually, or most times, get you an answer to whatever it is that may be fishy." XA004

"… whoever had been investigating, asking the questions, had not asked the question either often enough or sufficient enough …" PB002

"… if it's a high level of connivance, especially management fraud, the auditor will not know unless you are looking outside, you are asking questions and you are able to communicate well … where communication comes to play is that when you

are talking to somebody and he's not consistent in response, then you probe further." XA003

This then means that auditors should be able to communicate effectively. They should be able to present their arguments or questions clearly and confidently. As such, they can explore deeper a line of enquiry and uncover more information that either confirms or rules out misrepresentations in financial statements. One of the external auditors puts it this way:

"… another skill that auditors need to have is good communication skills, to be able to ask the right questions and understand and interpret the answers … The skills to have difficult conversations and the confidence to have difficult conversations. So, you know, to ask a question, if something does not seem right or complete with the answer, to have the confidence to then keep on asking and asking and probing and probing to then understand whether something is an issue or not." XA007

These communication and interviewing skills findings align with Hegazy et al. (2017) and DiGabriele (2008). In addition to curiosity, probing, and interviewing skills, effective communication requires auditors to have active listening skills. One of the participants expressed that:

"… I have seen that where I in particular, I am able to adopt an approach that makes you listen to them [client personnel] - listening is good too, listening skills …" XA003

To question effectively, auditors need a combination of skills that enable them to gather substantive evidence about the true context of client organisations' assumptions. One of the forensic accountants illustrated this:

"… the external auditors were doing phase one, which is ask the question, you know, where is the proof that this exists? But they were not doing phase two because nobody had taught them that you need a second way of corroborating that evidence." FA003

Questioning skills, therefore, include interrelated skills that play complementary roles in

elucidating clearer information and understanding of client organisations' assumptions. As such, effective communication is vital for auditors to uncover fraud. By using interviewing techniques to encourage client organisations to share relevant information, auditors can probe deeper into the details and follow their curiosity. Listening attentively can also help auditors understand the implications of the information they receive and detect any inconsistencies or red flags. The statement below from FA002 summarises auditors' need for questioning skills:

> *"… the other thing that sort of sticks in my mind was that one of the audit clients said to me that I was the only auditor that he knew who wouldn't accept the first answer that they were given."* FA002

5.1.2 Conscientious Skills

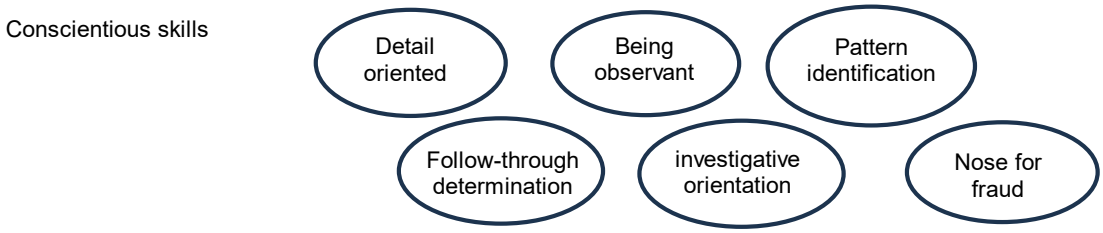


Figure 5.2: Conscientious skills pillar
Source: Author's creation

Conscientious skills represent the second pillar of forensic accounting skillsets (illustrated in Figure 5.2 above). This skillset pillar includes detail-oriented, investigative, observation, follow-through, and pattern identification skills. Conscientious skills encompass skills related to thoroughness, grit, and intuition. Auditors are essential in ensuring the accuracy and trustworthiness of financial statements. Auditors require conscientious skills to ascertain the accuracy, correctness and completeness of financial transactions and information obtained from client organisations. Hence, to be thorough, auditors should be detail oriented. The participants expressed that:

"I think the necessary skill sets that an auditor should have … include, you know, detailed oriented approach to things; that's an important skill set." XA002

"… just simply like an attention to detail, spotting anomalies, you know, spotting clear red flags if you like. A lot of those are generic skills that would not necessarily just be good for uncovering fraud, but for any kind of mistake or error." ED002

While ED002 commented on the generic nature of some skillsets, forensic accountants are able to employ these skills effectively to detect fraud. This suggests a difference in how forensic accountants utilise their skillsets compared to auditors' use of the same skills. One of the educators and forensic accountants stated that:

"… sometimes you do not need that many skills, but you do need to be awake when you are doing the audit. So, some of it is simply having your wits about you. …" ED003

"Having attention to detail … That was my boss's favourite phrase that we must have attention to detail. And as well just taking the time to do things properly, not skipping through looking for the easy option, not looking for shortcuts, paying attention to things, taking the time to do things properly … I think it more comes down to doing things in more detail than are perhaps already done in an audit ..." FA001

Adopting the attention to detail of forensic accountants in audits is not about altering the legal framework of auditors' statutory engagement. Instead, it is about enhancing their performance in fulfilling these statutory responsibilities in the interest of shareholders and the market economy. This supports Awolowo's (2019) finding on audit concerns. As one of the forensic accountants put it:

"… bring in … forensic accounting skills into the audit because you will then have a more investigative approach. … objective is not that you turn the auditors into bloodhounds, but you just make them better watchdogs ..." FA002

Auditors should imbibe an investigative approach to auditing client organisations to minimise the possibility of failed audits. This would mean that auditors exercise

persistence, a determination to follow through, and obtain necessary evidence that clarifies the true context of a financial transaction or information. Quotes below illustrate the agreement of forensic accountants and external auditors interviewed on this:

> *"… I am a great believer in finding facts. What are the facts? If we find the facts, we will know what happened [laughs]…If you are an auditor, you should investigate to find the facts, no matter where they lead you."* FA003

> *"… So, where you are performing an audit and the information that you have been provided does not agree or correlate with the information that you are auditing, you should be able to pick that there is a mismatch and that will come about when there is attention to the detail … I think it is going to help greatly because someone who does not pay attention to details may not pick out where there is, say, an altered document."* XA004

Equipped with the capacity to dig deeper into the details of a transaction, auditors can better exercise their intuition in identifying patterns and outliers. This is essential for detecting potential misrepresentations and enhancing the quality of audits. Referring to forensic accountants, one of the external auditors indicated that:

> *"… the depth of what they review or the questions they ask will be deeper than what we look for in a four minute review or in patterns in the journals."* XA005

In all, conscientious skills involve a combination of related skillsets, including being detail-oriented, investigative, follow-through determination to find the underlying cause of an issue, and an inclination to identify unusual patterns and anomalous transactions. Financial statements' accuracy, correctness, and completeness are paramount to auditors' judgement of the truth and fairness of the financial reports. Consequently, conscientious skills can enable auditors to demonstrate thoroughness, persistence and apply their intuition in an audit exercise.

This appears to reflect O'Shea's (2017) finding that students inclined towards forensic accounting topics exhibit a higher propensity for conscientious skillsets than conventional accounting students. Thus, conscientious skills can contribute to auditors' competency in upholding financial scrutiny and ethical practices, thereby improving the quality of audits.

5.1.3 Intellectual Reasoning Skills

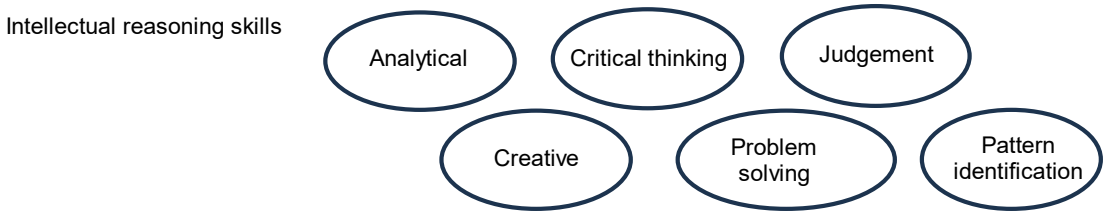


Figure 5.3: Intellectual reasoning skills pillar
Source: Author's creation

Intellectual reasoning skills (illustrated in Figure 5.3 above) represent the third pillar of the forensic accounting skillset. Similar to questioning and conscientious skills, intellectual reasoning skills comprise related skillsets that define how forensic accountants approach and execute an investigation. These skills: analytical, reasoning, problem solving and intuition, collectively support forensic accountants' assessment of the likelihood of irregularities or confirm the occurrence of fraudulent practices. The findings indicate that auditors must engage intellectual reasoning skills in examining financial transactions. One of the forensic accountants stated that:

> *"One is it depends on your inherent thinking skill or analytical skill if you want to put it that way … I mean, just how good are you intellectually at processing evidence, analysing that evidence, and structuring a conclusion …"* FA002

Auditors need to recognise, analyse, and interpret unusual financial entries, gaining insight into the underlying assumptions taken by client management. The ability to reason logically, critically, and creatively can enable auditors to navigate complex financial information effectively and make fact-informed judgements. One of the auditors stated that:

> *"… the biggest issue with professional scepticism is that it requires judgement. It requires an auditor to make a judgement call from planning the audit work to executing the audit procedures and eventually in completing the audit engagement."* XA002

Auditors' judgement on the integrity of financial statements contributes significantly to maintaining trust in the audit process and the financial reporting system. This means making fact-informed judgement is essential to bolster market confidence and economic stability. One of the forensic accountants recommend that:

> *"… if you want to improve professional scepticism you've got to train people how to think more critically ..."* FA002

Therefore, intellectual reasoning skills can assist auditors in navigating complex data or information with precision. This aligns with Griffith et al. (2015) who allude to the significance of critical thinking in auditors' ability to recognise problems during an audit. They further submit that when auditors employ critical thinking skills, they are in a better position to act on their intuitions, thereby improving the quality of audits. By analysing complex transactions, auditors can identify patterns, uncover abnormalities, and logically draw meaningful insights. With these, they are better positioned to solve problems during an audit and exercise their professional judgement on the integrity of financial reports. One of the participants said:

> *"… You do not know what it is you are going to find or if you are going to find anything and it is more like a problem solving situation as opposed to just go and do this test and repeat it ten times. So, I suppose that problem solving is maybe the one thing that I did not mention previously in terms of skill set …"* FA001

Problem solving requires creativity. Auditors need to think beyond the regimen of box-ticking to identify problems and connect the dots between different process reviews. By this, they can identify underlying issues and ensure a more comprehensive assessment of clients' financial practices. One of the auditors in a senior management position puts it this way:

> *"… I think it is also important for an auditor to be creative because problems and issues in the corporate world evolve, and it seems that there is no one-size-fits-all approach to solving those problems nowadays. It is important to be creative and that means, you know, creativity means that an auditor must explore other ways of solving issues. But the most important aspect of being creative is tailoring the*

approach to the problem rather than, you know, using boilerplates methodologies or steps in order to address certain issues or problems in the corporate world."

XA002

Creative thinking can support auditors' consideration of alternative scenarios when brainstorming. With this, they are better positioned to anticipate less obvious risks and develop tailored approaches to challenges encountered in an audit exercise. Combined with critical thinking, auditors can employ analytical skills to examine supporting documentation, question assumptions and assess information more rigorously. Consequently, equipping auditors with intellectual reasoning skills can improve their capabilities in assessing fraud possibilities. As such, auditors can overcome Rose et al.'s (2020) conclusion regarding their limitation in generating and evaluating multiple plausible explanations when brainstorming. This thereby enables auditors to improve their chances of detecting misrepresentations or fraud.

Moreover, the evidence from participants on auditors' need for intellectual skills aligns with Plumlee et al. (2015). With analytical reasoning and cognitive skills, auditors can be more adept at solving problems encountered in assessing fraud risks. Also, the ever evolving technology advancements and fraud landscape in organisational practices, dictate that auditors require a concerted approach to harnessing their skills to identify and address red flags during audits. This was highlighted in comments from the external auditors interviewed:

"… because of the analytical tools, because of the use of technology the response to the setup questions determines the test that you do. Whereas in the years when we started our training, it was all about human - we see it, we look at it, then we think …"

XA003

"… But when that is flagged, you need to be able to look at the data yourself to say this thing it is pointing me to, is it really a fraud?"

XA001

Critical and creative thinking, as well as analytical or problem-solving skills, are not exclusive to the forensic accounting field. Tsiligiris and Bowyer (2021) argue that these skills are not new to the accounting profession in general. However, studies still find that

forensic accountants can effectively apply these skills to detect fraud (Lal Bhasin, 2013). Reflecting on Tsiligiris and Bowyer's (2021) claims, this study finds that by applying intellectual reasoning skills, auditors can significantly enhance the quality of audits.

Jenkins et al. (2018) found that auditors in the US already engage forensic specialists in audit brainstorming sessions. This shows that forensic specialists bring an additional perspective to the designing of fraud-testing procedures and reviewing audit work. The findings of this study align with Jenkins et al. (2018). With intellectual reasoning skills, auditors can more effectively assess and verify the financial integrity of client organisations by considering a holistic range of plausible risk factors that can uncover irregularities in financial reports.

5.1.4 Psychological Observation Skills

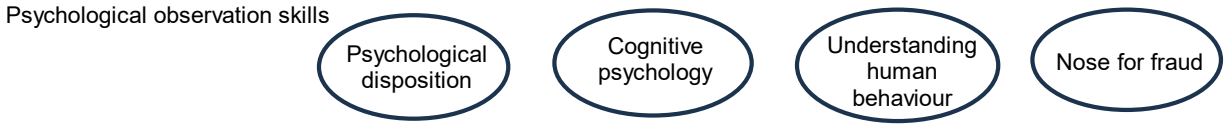


Figure 5.4: Psychological observation skills pillar
Source: Author's creation

Psychological observation skills, depicted in Figure 5.4, are the fourth pillar of the forensic accounting skillsets. It plays a fundamental role in how forensic accountants detect fraud. Psychological observation skills encompass having a psychological disposition, an understanding of human behaviour, a nose for fraud and cognitive psychology. These skills enable forensic accountants to examine beyond financial data, considering behavioural cues and motivations to uncover irregularities and fraudulent activities. Psychological disposition depicts a keen awareness that drives how a forensic accountant addresses issues and processes information or responses in a questioning scenario. One of the forensic accountants puts it this way:

> *"… you are going to keep looking at the body of evidence because you are convinced there is a clue in there that something is wrong. And you are going to keep examining it in different ways until you actually reveal what that anomaly, discrepancy, inconsistency is. And it is quite a subtle difference in approach, but it is very real ..."* FA002

Auditors can enhance the quality of audits by adopting forensic accountants' psychological observation skills. In their field work, auditors can benefit from an understanding of human behaviour and an awareness of cognitive influences. Possessing these skills may significantly impact their interactions with clients during questioning, information requests, and response reviews. One of the forensic accountants, who is experienced in training auditors, elaborates on this:

> *"… these days they can have all of the accounting records at their fingertips, and they can interrogate it. But all the questions that … analysis raises, how [are] they resolving it? They are going to talk to someone, getting a representation basically about that information. So, all of this cognition stuff becomes very relevant, and I do not think auditors are being trained in this at all. … there are cognitive missteps that you are likely to make that would make it more difficult for you to spot when someone is lying to you. So, I think these studies around human cognition are very relevant to auditors, and I don't think there's any training."* FA002

To be aware of cognitive influences, auditors need to be skilled in recognising their own cognitive biases and potential biases from clients, and how these biases can affect their judgement. The essence of statutory audits is hinged on their independent position to address the information asymmetry between the owners of an organisation and those entrusted with governance. Shareholders, in particular, and creditors depend on the assurance provided by the auditors to consider their stake and make further investment decisions. This mediating role is fundamental to establishing comfort in the representativeness of the financial performance and financial position of these organisations. Chapter Nine provides an in-depth discussion of the theoretical implications of the study outcome.

Beyond technical competence, auditors' understanding of human behaviour and cognitive influences may significantly impact their ability to detect misrepresentations indicative of fraud. By considering psychological factors and biases, auditors may be better positioned to enhance the accuracy and thoroughness of their assessment of financial information. For instance, a nuanced understanding of human behaviour can allow auditors to build trust with clients. Trusts facilitate cooperation and access to critical information. This then means that auditors can improve their questioning techniques and adapt to client nuances in their communication. Excerpts below from a forensic accountant and external auditor show their agreement on this point:

> *"You have got to know what is different about the behaviour of human beings around you, to know if they are involved in a fraud. … I get used to how people would behave when they are committing fraud, I get used to how people behave when they are not committing fraud. … real feel for the underlying human behaviour because fraud at the end of the day is about human behaviour."*
>
> FA003

> *"… Including, not only verbal communication, eye contact and then you have an idea that this person may not be telling me exactly as it is. … So, you must be able to ask, you must have confidence, you must be able to identify body languages which also comes with experience … you need to read people's behaviour …"*
>
> XA003

Understanding human behaviour is important for auditors. This is because emotions, biases and communication styles differ from one person to another. So, auditors require the skill to tailor their approach when engaging with individuals in client organisations. As such, auditors can be conscious of cognitive biases that may arise during an audit assignment. Recognising these biases means auditors can approach their work with greater objectivity and critical thinking. One of the audit partners stated that:

> *"… auditors need to have high emotional intelligence because there is definitely an element of […] You need to be able to read the nonverbal language and nonverbal signs, to sense when somebody is very comfortable with the responses they are giving you, sense when they are uneasy about the responses that they*

are giving you. … being able to understand if somebody is deliberately portraying themselves as overconfident to try and detract from something that may not be as everybody would like it to be within the company." XA007

This means that psychological observation skills relate directly to auditors' use of intellectual reasoning, conscientiousness, and questioning skills. One of the forensic accountants articulates how this interrelationship can play out in practice. Referring to auditors, FA002 expressed that:

"… They need to understand that one of their cognitive weaknesses is that they will give a greater weight to an explanation that has come from someone in a position of authority within the organisation, rather than someone at a more junior level and that is fundamental to their decision making. …Things like cognitive bias, confirmation bias is one of them. You know, response to positions of authority is another one ... From the more objective and fundamental through to things that seem a bit sillier, like we are more likely to believe someone who we identify with. So, you know, supposed conversation is, 'oh yeah, which school did you go to? I went to Eton. Oh well, so did I'. You are more likely to accept what that person is telling you because they have common background with yourself, and this happens all the time." FA002

This supports Austin et al. (2020), who highlighted the issue of bias in their study. When auditors recognise their own biases and those of client staff, they are more equipped to balance their attention in gathering evidence. This balance is crucial for considering the possibility of encountering confirmatory or conflicting evidence that may not align with their initial judgement.

Upskilling auditors to recognise cognitive biases can significantly impact how they verify information or accept inputs from client management personnel. These biases may lead to unconscious favouritism, which can result in overlooking critical red flags. In essence, psychological observation skills can enhance auditors' susceptibility to further questioning or probing to obtain clearer details about a transaction or the underlying context of the assumptions taken by the client. One of the participants commented that:

"… Yes, you should educate auditors on fraud schemes. That is only half of what you need to do. I think you need to also train them on these cognitive pitfalls because … when it comes to fraud and probably the same applies to insolvency as well - you are not just operating in a world of pure fact. You are operating in a world of human motivation [laughs]." FA002

As Jenkins et al. (2018) revealed, auditors recognise forensic accountants' cognitive authority in fraud detection. This means that auditors recognise forensic accountants' competence, trustworthiness, and credibility when using their skillsets to identify and call out fraudulent practices. As such, the findings of this study support Jenkins et al. (2018). Equipping auditors with questioning, conscientious, intellectual reasoning, and psychological observation skills may enhance their competence, trustworthiness, and credibility in detecting misrepresentations or fraud.

Prior studies have examined the skills relevant to forensic accounting in detecting fraud (e.g., Hegazy et al., 2017; Plumlee et al., 2015; Lal Bhasin, 2013 and DiGabriele, 2008). However, none of these studies presented the skillsets in groups based on their similarities or classified them as pillars of related skills. Therefore, the forensic accounting skillset pillars represent a significant output of the study, contributing to knowledge.

Notwithstanding the importance of the skillset pillars to enhancing auditors' competency in detecting irregularities or misrepresentations in financial statements, a critical element distinguishes forensic accountants' approach to utilising these skillsets in practice. One of the educators expressed this critical element as:

"… with the different skills being more to do with their psychology … it is the person that somebody is rather than the skills. … An auditor can do the same analytical tests that a forensic accountant can do. An auditor can dig deep into numbers, but an auditor tends to be, needs to be told to do it. Whereas the forensic accountant, maybe thinks a little bit more for themselves and thinks a little bit more independently away from the day job. … I think you have got to bring the forensic accountants in because the classic auditor has not got that psychological out, that mindset that I was talking about. … I am saying that it is just a different mindset, a different set up, a different way of making you tick …" ED001

This implies that forensic accountants' approach to an investigation; their contextual understanding of a situation or information, curiosity and sceptical disposition, and attention to behavioural cues, are driven by the mindset to detect fraud. Initially, this study focused on skillsets as its primary agenda. However, a key finding emerged indicating the vital role of mindset in enhancing forensic accountants' effectiveness in uncovering irregularities. This critical finding prompted the inclusion of a mindset shift as an additional significant theme in the study. This crucial element is discussed next.

5.1.5 Mindset shift – a significant agenda towards improving audit quality

To enhance their performance in financial statement audits, auditors need to cultivate a mindset shift specifically focused on detecting misrepresentations. Cultivating a fraud detecting mindset would entail auditors accepting their professional responsibility and ethical duty of care to shareholders as depicted in Awolowo's (2019) Agency Triangle. As already discussed in section 5.1, auditors should be better watchdogs to fulfil their role and improve shareholders' and public trust in the legitimacy of their contribution to the market economy. As watchdogs, auditors are responsible for instilling confidence in the financial market.

Their assurance should be built on their competence, knowledge, and commitment to the effective execution of the audit process and maintaining a robust financial reporting system. However, their competence and commitment seem to be diluted by inherent ideologies that seem to cloud their effectiveness in detecting misrepresentations and impact the quality of audits. One of the auditors expressed that:

> *"We go through accountancy college learning about, you know, the auditor is a watchdog, not a Bloodhound. That is the mentality. Now, forensic accounting if you do not mind, is a change of mindset where you are saying you should actually be a bit of a bloodhound as well."* XA001

This means that auditors must be able to deliver comfort to the financial market in that they know what to do, what they are doing, and have what it takes to get it done at all times. Therefore, the argument of a watchdog approach becomes redundant when

auditors are ill-equipped to identify indicators of irregular activities or cannot detect the underlying importance of a client management's rationale behind financial estimations. Two of the participating forensic accountants stated that:

> *"… my experience in looking at audit negligence cases is that invariably, there were indications to the auditors of something not being quite right. The problem was the absence of response to those red flags. … with a more forensic mindset, they would or should be a better response to those red flags."* FA002

> *"You have got to have that kind of way of seeing the world. So, I think it is more than a skill set. It is to do with something psychological about your makeup. … if you have not got the right mindset, you do not find fraud."* FA003

This study argues that to change the narrative on auditors' role in failed audits, there has to be a change in auditors' mindset towards detecting fraud. Possessing the necessary skillsets for fraud detection is essential, but not the sole requirement. Auditors must engage a fraud detection mindset for the skillsets to be effectively deployed in an audit assignment. A fraud detecting mindset, therefore, stands as the distinguishing factor. By combining a mindset and the necessary skillsets to detect fraud with their technical expertise, auditors can significantly enhance their effectiveness in safeguarding the financial markets. To this, one of the external auditors in a senior manager role stated:

> *"… But if we change the narrative such that an auditor goes into the room or the client with an investigative mindset, I think the whole narrative will change, the approach will change ..."* XA002

While the scope of an audit engagement defines the existing audit practises, this study is not focused on changing the existing scope or legal framework of statutory audits. As expressed by one of the forensic accountants:

> *"… But there is a practical implication there in that could you ever train auditors to have the same mindset as forensic accountants, given that by definition auditors are not doing this day in, day out. [Laughs] They are doing something different, which has a different mindset and a different approach ..."* FA002

To the contrary, the study argues that auditors have the latitude to augment their capabilities in uncovering misrepresentations or fraud within the existing legal framework. For instance, the issue of materiality in statutory audits. Within the material financial entries sampled, auditors can exercise more diligence in evaluating the justifications for the entries. This would mean that auditors employ a mindset of 'something may be found' to assess the validity and appropriateness of these justifications.

Furthermore, a fraud detection mindset can facilitate their psychological observation skills and use of conscientious skills to assess the reliability or appropriateness of information gathered when verifying audit evidence. This means that without deviating from the concept of materiality, a fraud detection mindset can facilitate auditors' interpretation of client management's rationale to inform their professional judgement. One of the forensic accountants stated that:

> *"… the audit mindset is to get enough evidence that you can reach a satisfactory conclusion as quickly as you possibly can. So, I always summarise it as getting to yes as quickly as you can. So, here is an audit objective. I have got to collect evidence to support the conclusion about that objective. How quickly can I get to a satisfactory state of that evidence? … the fundamental issue is your willingness to accept that fraud may be going on within your client."* FA002

By embracing a mindset shift, auditors can extend beyond the conventional approach of merely validating data or box-ticking. This supports Griffith et al. (2015) who argue that changing auditors' mindset may enhance the quality of audits. They propose this can be achieved by improving how auditors assess the underlying context of client managements' assumptions on accounting estimates. If auditors maintain the status quo mindset regarding misrepresentations or uncovering fraud (Jenkins, 2024), possessing the fundamental forensic accounting skillsets alone may not lead to the desired improvement in audit quality. Participating external auditors shared this perspective in saying:

> *"… Let us bring in that mindset of forensic accounting. … I can be trained like that example I gave you of someone above my pay grade. He has got the skill, but his mindset was not aligned to understanding that this could be a fraud. … I think that*

is now a mindset problem, not a skill set problem. Because you have got the skills. It is just the mindset where you have decided, either consciously or unconsciously, not to ask those questions." XA001

"…Mindset is what you really think, how you think but skill set is your abilities really, like how you can translate what you think into actions. So, while they are different technically when we are exploring what an auditor should have, it should not just be all about the mindset, but also skill sets. So, both should really be combined." XA002

These findings show that auditors require both a fraud detecting mindset and the skillsets identified to effectively evaluate the validity of information, or rationale for estimations provided by client organisations. With the 2021 revision of ISA (UK) 240, the ambiguity of auditors' responsibility towards fraud in financial statement audits appears to be somewhat clarified. That is one step in the right direction; however, it is insufficient to drive an improvement in audit quality. Integrating a fraud detection mindset with the identified skillsets can enhance auditors' alertness to potential indicators or red flags during an audit. A heightened awareness can lead to a more critical evaluation of audit evidence from client personnel, identifying and responding to any element that might be disputable or questionable.

A fraud detection mindset is important to isolate the tendency for a preconceived interpretation of audit evidence in favour of client organisations' assumptions. Whereas Austin et al. (2020) refer to a change to a balanced focus in the audit documentation process, this study argues for a shift in mindset combined with the forensic accounting skillset pillars. The findings, therefore, support the conclusions of Austin et al. (2020), emphasising the necessity for auditors to cultivate a mindset attuned to fraud detection. This mindset is pivotal in guiding auditors on applying the fundamental skillsets during the collection and assessment of audit evidence, thereby facilitating a shift in their documentation focus. One of the forensic accountants said:

"… if you have not got the right mindset, you do not find fraud. … If you have got an analytical mind, if you can see the patterns, if you can understand conceptually how it looks, then you have got a chance of finding fraud ..." FA003

The study by Griffith et al. (2015) revealed that a change in auditors' mindset can lead to a shift in their cognitive patterns. That is, with a different thinking disposition, auditors can more effectively evaluate the legitimacy of the assumptions taken by client organisations to calculate estimated financial entries. Griffith et al. (2015) argue that understanding this cognitive mechanism is essential to improving auditors' performance in assessing information or evidence that appears to confirm or challenge a client's rationale on a financial estimate. The findings of this study align with Griffith et al. (2015). A mindset shift may prompt auditors to conduct a more comprehensive review. That is, they can ask further questions and reassess their analysis of evidence that may either corroborate or contradict the evidence at hand before making a final decision.

The presence of both confirmatory and conflicting evidence plays a crucial role in an audit outcome. This will ensure that auditors are holistic in exploring, and responding to, every feasible and implausible option while interpreting client data. Ultimately, auditors can better form a well-founded professional judgement regarding the veracity of financial statements. As such, auditors may successfully resolve the concerns of negligent audits to achieve higher quality standards in statutory audits. A further look at this premise is discussed in the theoretical implications section of the concluding chapter.

As it stands, embracing the forensic accounting mindset-skillset relationship as a culture for auditors requires the cooperation of other stakeholders in the audit ecosystem. For instance, statutory audit is a regulated field of work. This means that audit regulatory bodies, like FRC, play a pivotal role in defining the premise on which audits are conducted and the standards and principles that govern the auditing practices. For instance, following the outcome of the enquiries into the Carillion audit failure, ISA (UK) 240 on auditors' responsibilities to detect fraud in financial statement audits has been revised. By revising ISA (UK) 240, the regulators can be seen to signal a shift in how auditors should perceive their role. Additionally, this revision also serves to encourage a shift in how auditors approach and fulfil their professional responsibilities in practice.

Similarly, the accountancy professional bodies (e.g., ICAEW) and academic educators are a significant part of the audit environment. Both play a crucial role in shaping auditors' technical knowledge and practical skills development. This highlights that enhancing

auditors' competency, through the forensic accounting MSR concept, requires a collective endeavour involving the regulators, professional bodies, academic educators, and the audit firms. A few of the participants commented on this:

> *"I do not think academia, professional bodies, practitioners working in isolation is ever going to get that problem solved."* ED001

> *"It is not just in the hands of the profession to be able to change things. It really has to be within industry as well. You know, everybody has to be working together …"* FA001

> *"I think there should be a consensus [laughs] among these institutions - the universities, the professional bodies, the firms, the regulators, Financial Reporting Council, they should be on the same page. … Now if these institutions can talk to each other and agree that this is going to be for the enhancement of our financial market, then the change will start to come."* XA002

For instance, any change in the auditing standards, like the recently revised ISA (UK) 240, is disseminated in the formal education and mandatory professional training available to auditors. As such, for auditors to embrace and internalise the mindset-skillset relationship concept in practice, the regulators must set the tone for the adoption. One of the external auditors puts it this way:

> *"When the FRC speaks, the entire profession listens. Maybe that is a starting point ..."* XA001

The concept of forensic accounting mindset-skillsets represents a comprehensive approach to ensuring auditors' professional judgements are consistently reliable. By this, auditors can provide wholesome and sustainable comfort on the financial integrity of client organisations to their shareholders and the market economy. It also means that where misrepresentations are identified, auditors can take the required steps to disclose such misrepresentations in the interest of shareholders, fulfilling their agency role. Consequently, by embracing the concept of forensic accounting mindset-skillsets, auditors can be empowered to reverse the narratives of negligent audits, thereby enhancing the overall quality of audits. The following sections will discuss how the

forensic accounting mindset and skillsets can be integrated into auditors' education and professional trainings to improve audit quality.

5.2 Modalities for integrating the forensic accounting mindset-skillsets agenda

This section discusses the first theme, modalities, to embed the concept of forensic accounting mindset-skillsets in auditors' education and professional training programmes. The sub-themes making up the theme, modalities, is discussed in detail, focusing on the meanings derived from the participants.

The theme 'modalities' underscores the diverse strategies for embedding the forensic accounting mindset-skillsets agenda into auditors' educational and professional training programmes. Modalities encompass a combination of interventions tailored to cultivate auditors' forensic accounting mindset-skillsets development. These interventions address the hands-on, practical aspects of the development programme. For instance, audit firms can adopt on-the-job training on forensic practices for their auditors. The firms can also expose their audit staff to cross-training, secondment, or mentoring attachment with forensic specialists. Additionally, the professional bodies can include fraud training in their mandatory professional qualification schemes.

Furthermore, modalities address the more technical subtleties of implementing the forensic accounting mindset-skillset agenda in auditors' educational and professional development programmes. For instance, designing syllabi and developing programmes on fraud detection for scholarly and career development activities; introducing forensic terminologies and materials on forensic accounting mindset-skillsets. These strategies are examined in detail in this section.

5.2.1 Modes to implement the forensic accounting mindset-skillsets agenda

One mode to embedding forensic accounting mindset-skillsets in auditors' education and training is to design syllabi incorporating standardised fraud training and the relevant skillsets. Auditors must develop a well-rounded awareness of the corporate environment. Incorporating fraud training into the syllabi would enable auditors to be alert to corporate

actions that, if undetected, could lead to financial statement fraud or accounting scandals. Fraud training could ensure that auditors are better prepared to understand and navigate the complexities of the corporate world. Also, fraud training can improve auditors' ability to assess their clients' financial assumptions effectively. Two of the educators remarked that:

> *"… how much of the accounting training is dedicated to fraud? I think that is a kind of important question. I would suspect, probably not a significant amount. I mean, I am sure that kind of legal aspects of fraud are covered. I certainly hope they would, you know, so they at least know what it is. But do they go into depth of, this is how frauds occur. And these are some examples of different types of frauds. … I strongly suspect, but this is hunch rather than evidence, that there is not a huge amount of training on fraud … from accountancy degree to accountancy professional training. There is not much there. … develop their syllabuses so that they included those areas."* ED002

> *"And then obviously designing syllabus to try and create the graduates that they can mould into future employees and be auditors, forensic accountants or whatever that might be."* ED001

Kramer et al. (2017) found that educators and practitioners in the audit industry agree that forensic accounting should be offered as part of auditors' education. They found that forensic accounting should be embedded at all levels of auditors' education and training programmes to cater for non-graduates and entrants from other disciplines. Consistent with Kramer et al. (2017), this study revealed that fraud and forensic accounting topics should be incorporated from the onset of undergraduate, professional studies, and audit firm training programmes. Participants expressed their views as:

> *"I will just start from the first year. …you would repeat it year on year."* ED003

> *"… for me it needs to be there as the foundational education. … You have got to learn the basics, at the foundational level. But then you add to them through continuous education as you carry on through the profession."* FA002

"I think it needs to start very early and needs to be constantly sort of reinforced."

PB001

"… it should be mentioned from the first year actually, but then not as deep as from the second year … so literally just telling them … what all this is really about. And then … you start bringing in or speaking more about these skillsets that needs to be acquired in audits from the second year and then gradually, like the third year, there is more emphasis on the importance of having these skillsets and how you not having the skillsets can actually impact negatively on the audit quality ..."

XA006

The participants collectively emphasise that integrating forensic accounting mindset-skillsets into auditors' academic, professional, and career development programmes should be foundational and progressively reinforced. This implies that embedding forensic accounting mindset-skillsets into auditors' educational and professional training syllabi should be seen as an essential component of their career development. Adopting this strategy could enable auditors to become more attuned to their responsibility of detecting financial statement misrepresentations and fraud. Therefore, cultivating the mindset to be 'better watchdogs' from the first years of academic and professional training could drive the effective deployment of forensic accounting skillsets in an audit assignment.

Auditors' education and professional development programmes ought to reflect the full scope of the statutory audit legal framework. The FRC's 2021 clarification on ISA (UK) 240, regarding auditors' fraud responsibilities, necessitates a corresponding revision to existing educational and professional training materials for auditors' development in this area. Thus, incorporating standard fraud and forensic accounting materials into syllabi would be a deliberate strategy to develop auditors' competency in uncovering misrepresentations, including fraud. Two of the external auditors stated that:

"… we have … the educational side, which is more from the universities … to try to incorporate more of these things in the syllabus and then be more practical rather than theoretical ..."

XA006

"I think that is part of the educators' work to bring all of those things together and say look, in any part of business, these are things that are really important. So, we need to upskill you in communication, emotional intelligence, being able to understand how a business operates …" XA007

The FRC can play a significant role in setting the tone for auditors' fraud and forensic accounting skillsets curricula at a discipline-specific undergraduate level and the professional training environment. The university environment and the accounting professional body institutions cannot independently enforce a revision to the education and training syllabi. This is due to the close ties between taught modules in the academic institutions and the exemptions available from professional qualifying examinations. As such, there is need for these stakeholders to collaborate to bring about the much-needed transformation in auditors' fraud detection mindset and skillsets, to improve audit quality. One of the professional body specialists stated that:

"… whoever is setting the curriculum needs to be talking to the people who are forensic accountants and reflecting whatever it is they are saying are the required knowledge and skill sets. It is as simple as that; you just ask the market." PB002

To create a fit-for-purpose education and professional development training for auditors, there needs to be dedicated programmes and resources focused on fraud detection. Having such programmes and resources built into their educational and training syllabi can allow auditors to progressively cultivate a sensitivity to issues that may suggest fraudulent activities. This progressive development of sensitivity is essential in preparing auditors to detect misrepresentations in financial statements. As one of the educators expressed:

"… I think there is also a whole series of things they can do in terms of like running events, having resources, producing documents, publications, having website resources that people can just go to and use that to kind of develop themselves..." ED002

The audit firms and professional institutes hold a significant role when it comes to running events or producing documentaries or online resources to support auditors' fraud

detection development. Their significance stems from the multiple entry pathways into the auditing profession. The more traditional route would be for university students pursuing accounting-related courses to progress into the profession as audit trainees. Degree-holders in other disciplines and non-degree holders on apprenticeship routes would also start their auditing career as trainees. This means that the modes to integrate the forensic accounting mindset-skillsets agenda must cut across the various entry points. Audit firms, universities, and professional institutions must adopt standardised fraud and forensic accounting mindset-skillsets curricula to achieve consistent and sustainable improvements in auditors' fraud detection competence.

Another mode to implement is the introduction of materials on forensic mindset and skillsets. Embedding some technical aspects of forensic accounting would mean that accounting undergraduates and audit trainees become familiar with the concepts early in their education and/or career development. This can shape their disposition toward discussions on corporate fraud and its implications for their professional responsibilities. One of the auditors in a senior management position stated that:

> *"… any opportunity to introduce forensic accounting topics at the undergraduate level is going to make a huge difference in terms of the readiness of our graduates in the UK and to be fair anywhere … the most practical way in order to equip those professionals to have the same skill sets is to make sure that the learning and development programmes offered by audit institutions or audit firms also include forensic accounting topics."* XA002

In addition, introducing materials on forensic accounting mindset and skillsets would entail including field specific terminologies and related nuances reflecting the subject area in the curricula. As previously discussed in Chapter Five, some of the forensic accounting skillsets identified are not unique to the field. In other accounting fields, or other professions, skills such as critical thinking are found to be applicable. The distinguishing factor for forensic accountants is the mindset to detect fraud. As such, it is essential to embed forensic accounting terminologies within accounting and auditing learning materials to drive a shift in auditors' disposition to detecting fraud. One of the educators commented that:

"There is no reason not to introduce the terminology, that is all it is really, terminology and an understanding that … even just the analytical skills that you teach an accountant, for them to understand how they can use their skills in different places, different areas … I think it is the terminology, and the materials need to be such that examples are given. The word forensic is used, the word fraud is used so that new qualified accountants can leave and think, well, ok, I am happy to be an auditor because this is what makes me tick, and this is the job I want. But I do know that if I did have this additional psychological skill sets, I could decide to be a forensic accountant. And I think that link is missing in education."

ED001

5.2.2 Interventions to develop auditors' forensic accounting mindset-skillsets

Interventions to integrate a forensic accounting mindset and the identified skillsets into auditors' education and professional development can take several forms. These interventions are designed to address the practical aspects of the professional development programme. From a professional practice perspective, audit firms can adopt on-the-job training in key forensic accounting topic areas for auditors. With this, auditors can develop practical and relevant knowledge in this critical area, ensuring they are well-equipped to handle the complexities that may arise during an audit assignment and within their daily responsibilities. Participants expressed that:

"… there's nothing like understanding the principles and then on-the-job coaching to really bring it to life."

XA007

"… the professional training they get is a partnership between the student, their employer, the professional body, and whoever is tutoring – could be like university or be like private tutor. Because it's not just about exams. Exams is one of the four pillars of training to be a chartered accountant. Skills development, to my mind, is the most significant of the four pillars, and that is very much what are the skills that are needed? We've identified those, but then how can we develop those? Well, that's primarily on-the-job training."

PB002

Cultivating a mindset to detect fraud in auditors will require a deliberate attention to the educational and professional development programmes auditors are exposed to. Opportunities to cultivate this mindset within the academic environment might be limited to students in accounting-related fields. However, this does not preclude the importance of capturing this phase in the mindset-skillsets development agenda. Siriwardane et al. (2014, p.194) expressed the academic environment as the *'pedagogical foundation'* for aspiring auditors. However, one of the interviewees noted that:

> *"… most of the skills are not in academic development. Some universities are making efforts to incorporate skills development into their degrees, some are not. Some don't see the need. But most of the skills are developed through real life on-the-job training or experience."* PB002

This means that more work is expected of the universities to provide the foundational exposure to fraud and forensic accounting related topics to support the mindset-skillsets agenda for undergraduates in accounting-related fields. Kramer et al. (2017) found that practitioners placed more value on experiential learning for forensic accounting education than on classroom or theoretical learning. The authors identified internship as one of the key methods to develop experiential learning among undergraduates in accounting related fields. Unlike Kramer et al. (2017), this study did not specifically reveal undergraduate internship as a method of on-the-job training. A possible explanation could be that the participants tended to focus more on capturing the various entry pathways into the auditing profession rather than simply focusing on graduates from accounting-related fields.

Siriwardane et al. (2014) found that entrants into the auditing profession require the foundational knowledge and skills development which university education offers. They indicated the importance of on-the-job training in developing key skills, knowledge, and discipline-related attitudes for new entrants into the auditing profession. However, this study extends that on-the-job training for auditors should not be limited to areas of technical knowledge and expertise. On-the-job training in fraud detection and forensic accounting mindset-skillsets would strengthen auditors' technical expertise to improve the quality of audits. One of the participants commented that:

"I would say either it is put as one of the courses that you need to do as the very first basic courses or for the audit firms, it is incorporated into the learning modules that new joiners have to do before they get on the job, or they start to get allocated to engagements." XA004

On-the-job training for auditors could be implemented through cross-training programmes, exposing auditors to different areas of forensic accounting relevant to develop their fraud detection mindset and application of the skillsets. Additionally, auditors may be temporarily assigned to forensic accounting departments, offering them short-term secondment opportunities to develop their practical understanding of forensic accounting practices. FA003 puts it this way:

"… you've got to second them to where the skills are for a period of time in their training, so they learn how the other part of the business sees things. … the answer lies in if you want your auditors to be more grounded and rounded and know what they're looking for, they need to spend some time on the fraud side. They need to spend some time on other types of the activity and that needs to be built into their training at the start." FA003

While it is recognised that not all audit firms have the resources for in-house forensic accounting department, there could be opportunities for partner firm secondments or cross-trainings. One of the forensic accountants expressed that:

"… certainly, for bigger firms where there are forensic departments, maybe their audit trainees need to spend six months working in the forensic department. So, a bit like solicitors, you know. Trainees circulate around different departments. Maybe that's something that firms need to be looking to offer. … And if a firm doesn't actually have that available, then maybe trainees need to have the ability to be seconded to another firm where that can actually be provided. Because I was already qualified when I started doing forensic accounting and I basically learned on the job with the person who joined the firm ..." FA001

Resource constraints, for instance, cost implications, time, or talent retention might be a barrier to achieving cross-training or secondment. Perhaps a more pertinent discussion

would be for the profession to determine the value they place on upskilling auditors to improve the quality of audits for financial markets' stability. Awolowo (2019) argued that cost and time may not be a factor if the upskilling is mandated as an educational agenda. While these issues and arguments are recognised, further discussions on resource constraints would digress from the primary focus of the study.

Mentoring attachment is another form of on-the-job training facilitating auditors' development in forensic accounting mindset and skillsets application. This would mean that auditors are paired with experienced forensic accountants or auditors experienced in detecting financial statement fraud within a firm. Mentoring attachment may encourage an environment where a mindset shift, and practical application of forensic accounting skillsets, can be directly imparted and honed. One of the auditors and forensic accountants stated that:

> *"… they [auditors] need to see it role modelled at its very best. So, they need to be part of meetings with more senior individuals in the organisation, watching them and debriefing after those meetings."* XA007

> *"There's no reason why you can't have somebody experienced working with somebody as their mentor and ensuring that they've got the right skill set."* FA003

FA003, referring to an experience with his mentor stated that:

> *"… he was obsessed with fraud. Everywhere he looked he just found it and he took me along with him on the first job I did with him, and we found fraud straight away. And that just got me hooked on [laughs] what is fraud. … he just saw the whole world that way and that taught me to see things that way. So, thanks to him, I got that kind of grounding very early on from somebody who was cynical, worldly wise, …could see it when his own boss couldn't see it. And then … I realised I'd become that person [laughs]."* FA003

Interventions to integrate a forensic accounting mindset and the skillsets into auditors' education and professional development should include fraud training in the professional examination schemes. In other words, to cultivate auditors' education and professional development in forensic accounting mindset and skillsets, there should be comprehensive

fraud-related training embedded within the professional qualification programmes. Within the UK environment and arguably across many nations, one must possess a relevant professional qualification to become a practising auditor (Siriwardane et al., 2014). For instance, certified public accountant qualification in the US or chartered accountant qualification in the UK. This means that the professional examination schemes are expedient for anyone intending to be an auditor. Several participants expressed this view, saying:

> *"I think for me the catchment areas should be when they join the firm. That formal chartered accounting training should … make it compulsory. And at the moment also there's a lot of courses where you've got electives. You can't elective yourself out of forensic accounting [laughs]"* XA001

> *"… I think it's something that probably needs to be built in more into the institute exams, the professional exams that people take."* XA007

> *"I think you'd have to build them into the professional exam scheme, and again I would start it from the first level."* ED003

Embedding standardised forensic accounting related training, focused on fraud detection, in the professional qualification programmes is essential to upskilling auditors and enhancing audit quality. With the professional examinations serving as a focal point in auditors' career development, this strategy would ensure that new professionals are equipped with the necessary forensic accounting skillsets and mindset from the outset of their careers. All the external auditors interviewed agreed on this point, remarking that:

> *"… the most practical way in order to equip those professionals to have the same skill sets is to make sure that the learning and development programmes offered by audit institutions or audit firms also include forensic accounting topics. … then in the process of gaining qualification, ACA, ICAEW, things like that, it's also important to perhaps revisit the subject or revisit the papers or exam topics to incorporate elements that would tackle forensic accounting."* XA002

> *"If it's part of the like ICAEW courses, that would be helpful because I mean, you can't be in audit without being a member of the professional body anyway. So, if*

it's something you definitely have to do, that would be good, and it would be much better if it was earlier in your career." XA004

To ensure that the auditing profession remains relevant and adapts to the challenges posed by failed audits, it is essential to implement a comprehensive update in the educational curricula. Accounting undergraduate curricula needs to evolve, developing programmes and integrating forensic accounting materials to develop auditors mindset in fraud detection and the application of the forensic accounting skillsets. Auditing firms must be willing to expose auditors to on-the-job trainings in fraud detection. This can entail the firms providing opportunities for cross-trainings and mentoring attachments for auditors to be exposed to forensic accounting practices in an active learning environment. The professional qualifying bodies are central to achieving the much needed upgrade in auditing education and training. Integrating fraud-related trainings in the professional examination schemes would equip auditors across all entry points into the profession with the mindset and skillsets to identify and address misrepresentations and fraudulent activities.

For these modalities to be effectively incorporated into the education and training of auditors, a collective effort is required. This effort would include participation from the concerned entities - regulatory bodies, auditing professionals, academic educators, and professional accounting institutions. Collaboration among these entities is essential for achieving significant advancements in audit practices. This implies that their joint effort is key to enhancing the overall quality of audits and directing consistent improvements in auditors' competency to detect fraud.

5.3 Techniques to embed the mindset-skillsets in auditors' training and learning

The previous section looked at the modalities for incorporating the forensic accounting mindset-skillsets agenda into auditors' education and professional development training. This section discusses the second theme in the integration agenda, 'Techniques for training and learning'. The components of the techniques based on the study's results which were already covered in Chapter Four will be examined. This section will

demonstrate the importance of practical learning activities for auditors to cultivate the concept of a forensic accounting mindset-skillsets relationship and apply the forensic accounting skillsets in practice.

The theme ‘Techniques of training and learning’ expands the modalities discussed in the preceding section (Section 5.2). The techniques encompass a range of practical applications to equip auditors with the necessary hands-on exposure in a controlled environment. Developing practical knowledge of how the forensic accounting mindset-skillsets can be applied in a safe environment would strengthen auditors' confidence in applying their fraud detection mindset-skillsets in the field. One effective technique for learning is to incorporate practical cases into educational and training activities. A number of participants emphasised the importance of practical cases in bridging the gap between theory and real-world situations. The forensic accountants and auditors expressed similar views, stating:

> *“Maybe more of the focus needs to be on practical examples. I mean, it's so much easier to explain something if you can actually say, well in this situation I was at a company that did this, and this is what I found. … I suppose giving them more experience of the sort of things that they might actually come across ...”* FA001

> *“… if you want to get the people doing the practical work to change, you need to be less disassociated and have that connection between the practise and the theory ...”* FA003

> *“… if we can develop training programmes or training materials or modules that are based off real life situations or real life cases, then we can use those ... real life examples in training our professionals, in making sure that they are up to date with the necessary skills when actual issues arise ...”* XA002

Reflecting on the use of actual cases of accounting scandal and failed audits in training and learning activities, XA002 expressed that:

> *“… it makes people interested if everything is based on what exactly happened; if it's not just theoretical, if it's actually from real life situations or scenarios that they can relate to, or that they have seen in the papers ...”* XA002

The reference to actual cases in this context is different from Dellaportas and Hassall's (2013) situational 'out-of-classroom' learning. In their study, accounting students were taken on a prison visit to learn from the experiences of persons incarcerated for fraudulent conduct. Dellaportas and Hassan (2013) found that the experience improved students' cognitive development in understanding triggers for fraudulent practices. The authors' 'out-of-classroom' teaching and learning technique did not appear in my findings. However, this study's finding on practical or real life examples aligns with a real-world learning strategy. This means that adopting real-world learning techniques could aid auditors in acquiring a fraud detection mindset and in effectively applying forensic accounting skillsets in their professional practice.

The use of actual fraud and failed audits cases can stimulate debates in a classroom or training environment. This may facilitate the development of intellectual reasoning and psychological observation skills and a fraud detection mindset. Examining forensic accounting practitioners and academic educators, Alshurafat et al. (2020) explored the usefulness and effectiveness of various teaching techniques employed in forensic accounting pedagogy in Australia. Their research indicated that practice-based learning, particularly experiential methods, effectively stimulates students' appreciation of real-world situations. This study's findings align with Alshurafat et al. (2020), emphasising the value of incorporating real-world situations to provide learners with relatable context. This would equip auditors with the essential forensic accounting mindset-skillsets, enabling them to understand the complexities of fraud detection in a practical and accessible manner.

A variety of training and learning techniques are essential in developing auditors' comprehension of the interplay between real-world occurrences and established theoretical and professional principles. The techniques can help bridge the gap between practical experiences in fraud detection and academic knowledge. This may ensure that auditors can effectively apply their technical knowledge in auditing, with the acquired forensic accounting mindset-skillsets, to navigate the real-world complexities of financial statement fraud. The auditors interviewed highlighted the value of scenario simulations to exposing the realities of financial statement fraud and demonstrating how forensic

accounting mindset-skillsets can be applied to detect misrepresentations. Two of the auditors pointed out that:

> *"… one would be the scenario building, incorporating scenarios into the syllabus."* XA006

> *"… if there is like a trend that has been noticed across different industries around how fraud is perpetrated, … multiple scenarios like that can be incorporated into training modules for people to be aware of such, and also to let them know that there's a possibility that it doesn't come in this way ..."* XA004

Participants referred to 'scenario simulation' interchangeably with 'case studies', suggesting they view the concepts as closely related. This indicates a perceived overlap in how these techniques are understood and applied. For instance, one of the auditors stated that:

> *"… You need to give them exercises where you say, 'this is the scenario, do it'. And then you assess them based on that. Sitting in class listening to someone explain to you that you're a part of it is brilliant. You can even put e-learning, that's all good. But at some point, you need to make it practical for people through case studies, I think. A lot of case studies [laughs] …"* XA001

Incorporating real-world scenarios into auditors' practise-based learning can help them acquire and retain a forensic accounting mindset and apply the skillsets. This technique can also stimulate reflective debates on fraud detection and professional judgement. Engaging in debates can be instrumental for auditors to ponder on the application of their skillsets in an audit assignment. Reflecting on this, one auditor in a senior partner position said:

> *"… if you have an individual who's been at a school where perhaps they have a debating society, that individual will always have better questioning skills and better articulation skills ..."* XA007

Like debates, group discussions can be an effective technique complementing other techniques revealed in this study. The participants' views suggest that group discussions

may provide auditors with a dynamic platform for exchanging ideas, enabling a collaborative environment. This interaction not only broadens their collective understanding, but it can also spark a range of plausible and implausible solutions. Highlighting the value of group discussions two participants noted that:

> *"… getting group discussions together where you can really test people's critical thinking skills ..."* PB001

> *"… You know if you participate in something, discussion, let me put it that way, you are likely to remember than if you just get the videos …"* XA003

XA003's comment on videos does not imply that videos or audiovisuals are not effective in facilitating teaching and learning. The participant expressed the view that:

> *"… you can do more of audiovisuals, of videos, case studies …"* XA003

The implication here is that videos and audiovisual materials should serve a purpose beyond solely providing information. They should be designed to encourage and facilitate group discussions and debates, thereby enhancing auditors' collective learning. Engaging in such focused discussions could encourage the exchange of ideas that may strengthen auditors critical awareness of corporate fraud complexities. With this, auditors can hone their forensic accounting mindset-skillsets application to improve audit quality.

Additionally, engaging in debates and group discussions can boost auditors' openness to cultivate new skills and a fraud detection mindset necessary for evaluating the context of client assumptions and detecting misrepresentations. For instance, the professional body specialists interviewed expressed that:

> *"… Having a big case study at the end should enable some examination of critical thinking skills ..."* PB001

> *"… they have to go through a series of scenarios where they are actively questioning, and they video their performance in the questioning. You know, have they got the information they need, have they set it out in a way which is appropriate for, you know, whatever the needs are ..."* PB002

In reference to a suitable technique for developing emotional intelligence, one of the auditors holding a partner position remarked:

> "… you can only do that by trying it and creating sort of scenarios, real life scenarios, where people have a chance to practise ..." XA007

The participants' views align with Elsayed and Hassan (2024), who found that audit simulations in undergraduate assessments effectively promotes critical thinking, questioning and cognitive awareness skills. In effect, using scenarios or case studies can stimulate the cultivation of intellectual reasoning and psychological observation skills. By developing these skillsets, auditors can sharpen their ability to ask pertinent questions, which in turn boosts their competency in identifying misrepresentations. As such, auditors can be better equipped to evaluate the significance of clients' assumptions in their financial reporting. According to one participant,

> *"… if you have an individual who's been at a school where perhaps they have a debating society, that individual will always have better questioning skills and better articulation skills ..."* XA007

Mock or mini plays are another practical technique complementing scenario simulations and case studies. By incorporating these dramatised portrayals, it is possible to add depth and practicality to theoretical learning experiences. One participant likened the use of mock plays to skill development practices commonly employed in the medical field, highlighting their role in reinforcing learning. In PB002's words,

> *"… they will be put into situations with either actors who are acting as patients or live patients where they have to gather the knowledge that they need to solve the problem ..."* PB002

Scenario simulations and mock or mini plays serve as valuable tools for auditors to assess how effectively they apply the forensic accounting mindset-skillsets in a practical client interaction setting. For instance, one of the auditors implied that mock or mini plays aid the development of psychological observation skills. The auditor expressed the view that:

> *"… for a new joiner where you're probably bombarded with terminologies and things that you've not heard of before, a play would stick. … a play or just you know, scenario playing would help with helping those kinds of things stick for new joiners, so they know how and when to pick contents that may be considered unusual by an auditor, but not by any other person ..."* XA004

Mock or mini plays and scenario simulations create a dynamic environment where auditors can explore the practical application of their forensic accounting mindset and skillsets. Also, these techniques can enable auditors to refine their ability to leverage the concept of forensic accounting mindset-skillsets effectively in actual audit field work. Consequently, they can draw from the real-life events to inform and refine audit practices, thereby enhancing the quality of audits.

Chiang et al. (2021) and Elsayed and Hassan (2024) alluded to the orthodox approach prevalent in auditing education. The authors found that incorporating practical learning techniques promotes much-needed diversification into prevailing auditing and accounting teaching norms. In contrast to the prevailing norm in auditing education, this study revealed techniques that Alshurafat et al. (2020) recognised as effective teaching and learning tools for forensic accounting pedagogy. Incorporating the same techniques to deliver forensic accounting and fraud-related topics in auditing education and professional training signifies a proven channel for auditors to acquire the forensic accounting mindset-skillsets.

5.3.1 Supportive environment to facilitate the deployment of techniques of learning and training

Notwithstanding, it is important to create a supportive learning environment at all levels of educational and professional training, for these techniques to be effective in developing auditors' forensic accounting mindset-skillsets. For instance, developing multiple and plausible risk scenarios during an audit brainstorming session would require auditors to consider and embrace diverse reasoning perspectives. This means that auditors should be encouraged to confidently air their opinions to hone their intellectual reasoning skills.

As such, a supportive environment is essential to promote a comfortable learning atmosphere, allowing auditors acquire, refine, and renew these skillsets with greater ease. Referring to a firm environment, one of the auditors expressed that:

> *"But then the atmosphere which you create in the classroom, like you make everybody feel like you can ask any questions, there's no such thing as a stupid question. I think that just helps people to be very comfortable and then they get to learn. It's a very more effective method in my opinion."* XA006

While the scope of this study does not necessarily include firm culture, training and learning environments must support learners to freely express their views. In other words, a supportive environment should be part of a learning, unlearning and relearning disposition for learners to embrace new ideas that can break-through existing norms and practices. To achieve a mindset shift, this open environment is expedient for auditors already in practice to be comfortable and receptive to upskilling initiatives.

5.4 Contents for the mindset-skillsets agenda in auditors' education and training

This section completes the findings on the emergent themes from the study on integrating forensic accounting mindset and the skillsets into auditors' education, trainings, and career development programmes. The discussion focuses on the 'Contents for a mindset-skillsets curriculum'. This theme combined with the two previous themes (Modalities and Techniques) will be utilised to develop a comprehensive educational and training programme that can be adopted for auditors' undergraduate and professional development training curricula. The integration programme thus fulfils the second research question of this study: *how and at what stage(s) of auditors education can these skillsets be introduced into auditors' undergraduate and continuous development programmes?*

The final theme 'contents for mindset-skillsets agenda' serves as the unifying element that brings together the 'modalities' and 'techniques' themes. It represents the essence of the integration programme for auditors' forensic accounting mindset-skillsets development. The 'contents for mindset-skillsets agenda' encapsulates topics which the

study's interviewees consider significant to equipping auditors with the forensic accounting mindset-skillsets. The topics should not be seen as exhaustive; instead, they represent the participants' views at a point in time. As such, these topics can be taken as indicative contents, setting the foundation for further development to cater for the ever-evolving landscape of financial statement fraud.

The topics have been classified into four elements, according to their connection to the forensic accounting skillset pillars presented in Chapter 4.3.4.1 and discussed in Section 5.1 above. The four elements are: Emotional intelligence practises for auditors, Psychology of fraud and fraudulent behaviours, Fraud investigation techniques, and Reasoning approaches to detecting misrepresentations. Like the forensic accounting skillset pillars, the elements are connected, each complementing the others to strengthen the development of the fundamental forensic accounting skillsets and a fraud detection mindset. In other words, the educational and training programme proposed in this study is to cultivate the forensic accounting mindset-skillsets relationship (MSR) concept. Each of the topic elements is presented in the following subsections.

5.4.1 Emotional intelligence practices for auditors

The first element of the 'contents for mindset-skillsets agenda' is 'emotional intelligence practises for auditors'. Auditors need a solid understanding of emotional intelligence to navigate the complexities of detecting financial statement misrepresentation. This would aid them in accurately interpreting data, asking the right questions, and engaging effectively with client management and staff. Beyond numbers and document verification, integrating emotional intelligence into auditors' educational and training curricula can make auditors more attuned to the subtle indicators of fraud that may surface during an audit. This view was expressed by one of the auditors interviewed:

> *"… I think auditors need to have high emotional intelligence … You need to be able to read the nonverbal language and nonverbal signs, to sense when somebody is very comfortable with the responses they're giving you, sense when they are uneasy about the responses that they're giving you ..."* XA007

With a heightened sensitivity to subtle signs and nuances, auditors can better grasp the underlying significance of a client's financial assumptions more comprehensively. This means that emotional intelligence may extend auditors independent thinking to arrive at their judgement of the accuracy, completeness, and correctness of financial reports. One of the educators and forensic accountant interviewed commented that:

> *"… a lot is about educating and training auditors … we're always looking for the anomaly or the thing that doesn't fit the test, but you don't always connect that to, it's a fraud, or it's the potential for fraud."* ED003

> *"… if you want someone to be better at spotting fraud, they've got to be trained to spot signs that fraud might be getting on. … the fundamental issue is your willingness to accept that fraud may be going on within your client. … it's about perception of risk more generally. … it's basically that we always underestimate the possibility or even the likelihood that someone is doing something that they shouldn't be doing. … we underestimate when people are behaving in an untrustworthy manner."* FA002

Emotional intelligence encompasses a broad spectrum of subjects, including interpersonal skills, self-awareness, and decision-making. However, topics covered under 'emotional intelligence practises for auditors' needs to be tailored towards enhancing an auditor's ability to collaborate effectively. The findings indicate that emotional intelligence can help auditors navigate complexities during an audit, especially when unusual patterns are identified. In such situations, emotional intelligence can strengthen an auditor's ability to follow-through a line of inquiry to ascertain the true context of client's assumptions in reported financial estimates. This is consistent with Yang et al. (2018) who found that emotional intelligence play a vital role in improving auditors' propensity to probe anomalous transactions irrespective of complexities or challenges encountered.

In effect, auditors can achieve a heightened level of detail orientation, ensuring their thoroughness in gathering evidence. Additionally, incorporating emotional intelligence into auditors' educational and training programmes can assist auditors in achieving an

accurate understanding and interpretation of information received from client organisations. Explaining emotional intelligence, one of the audit partners stated that:

> *"… if somebody is not telling you the truth, ... then you can ask the same thing in two different ways. Like when I'm talking, I get more results - especially if I'm not clear on an issue - when I make my questions open ended. If you ask direct, the client will usually say yes, no. But you're just [saying] ... 'tell me everything'. Then he has to talk. I start to write and say look, I'm just asking, you know, I want to know how you do these things. ... I tell the benefit to him. I say, you know, 'if I understand your system then I will ask you less questions'. I'm not even giving you the impression that I'm looking at some fraud indicators. I'm just trying to say, 'I just want to understand your system, I just want to document it ... just to relieve your stress'. Because if you don't do that, some may even leave their seats. There are ways clients can frustrate you if they want to. So, that's what I mean; that you need to read people's behaviour ..."* XA003

The issue of unfavourable client behaviour and its implications to audit quality reflects Carlisle et al.'s (2023) claims. The authors argued that clients often exert influence that can hinder auditors' ability to gather evidence and verify assumptions used in financial estimates. This highlights the value of incorporating emotional intelligence practices into auditors' education and training, as it can support their development of the forensic accounting skillset pillars - questioning, conscientious, intellectual reasoning, and psychological observation skills. With the contents tailored to a fraud detection learning outcome, it also shows that auditors can develop and refresh the forensic accounting mindset-skillsets (MSR) concept.

This does not mean that auditors do not collaborate or are not being trained in communication skills, for instance. However, where syllabi are designed towards fraud knowledge and to develop forensic accounting mindset and skillsets, the teaching and professional training context is directed towards the subject's curricula objectives. One of the auditors emphasised that:

> *"… But our training programmes now … they teach you a lot of things on communication. But the thing is that there is no point designing courses that are not relevant to the issues you want to solve ..."* XA003

XA003's statement further underscores the importance of the modalities discussed earlier in Chapter Six in that for a mindset shift to be achieved, auditing curricula must include materials and terminologies in forensic accounting and fraud detection. By incorporating emotional intelligence into auditors' education and professional development, they can improve their competency in detecting misrepresentations while strengthening the overall quality of the audit process.

While this study evidences the importance of emotional intelligence to equipping auditors with the forensic accounting mindset-skillsets (i.e., MSR concept), the evidence appears to contradict Samagaio et al. (2024). Perhaps, this is due to the context of Samagaio et al.'s (2024) application of emotional intelligence. Incorporating emotional intelligence into auditors' forensic accounting educational and training is not to diminish auditors' objectivity in the field. Instead, the evidence points to the fact that emotional intelligence can promote the development of a fraud detection mindset, and support how auditors employ the forensic accounting MSR concept in practice.

Emotional intelligence can aid auditors in accurately interpreting data, asking the right questions, and facilitate effective engagements with clients' management and staff. This means that auditors would be better equipped to understand complex information, identify anomalies, and pose pertinent questions to uncover hidden contexts that can be indicative of fraud. Samagaio et al. (2024), in the context of Portugal, found that emotional intelligence does not influence audit quality. In contrast, this study revealed that emotional intelligence would improve audit quality by building auditors' forensic accounting mindset and skillsets.

5.4.2 Psychology of fraud and fraudulent behaviours

The 'psychology of fraud and fraudulent behaviours' is the second element of the 'contents for mindset-skillsets agenda'. By examining the psychological aspects of fraud

and fraudulent behaviours, auditors can develop their psychological observation skills, thereby strengthening their understanding of the underlying forces that drive corporate fraud. This would involve exploring the mindset and motivations behind financial statement fraud, including client power dynamics, which can significantly aid auditors in recognising such behaviours when on an audit assignment. As highlighted by XA004,

> *"… it's basically depending on their ability to pick out any outlier or any mismatch between what is being audited and what is being explained by management. Or there are some behaviours by management that may be indicative of them trying to cover up something or them being biased in a particular direction ..."* XA004

The evidence by XA004 above reflects Daoust and Malsch (2020) who found that clients can exert their cognitive authority and social capital to influence the level of information or evidence disclosed to auditors. As such, incorporating the psychology of fraud and fraudulent behaviours into auditors' educational and training curricula can improve auditors' sensitivity to subtle psychological dimensions that can arise in an audit exercise. By educating auditors on these psychological dimensions, auditors might acquire a more comprehensive awareness of fraud risks beyond their technical knowledge, which may lead to more effective detection of misrepresentations. One of the auditors commented that auditors require:

> *"… the understanding of where fraud might occur in a business, the understanding of what the incentive might be for a fraud - so, the fraud triangle is something that's talked about a lot ..."* XA007

With the persisting issues of corporate accounting scandals, negligence, and failed audits, retaining the status quo in auditors' education and professional development would not achieve the desired improvement in audit quality. We cannot continue to train auditors in denial of the realities of real world situations. An auditor at a senior manager level stated that auditors require:

> *"… understanding the psychology of fraudsters. I think when you're doing like accounting or auditing there's so much of numbers and so much of concepts, but really there's no psychology to the fraudsters. There's no psychology to the person*

that you will be dealing with when you are out there in the field and doing like actual field work. So, it is important to be introduced to that topic because then you will improve your professional scepticism …" XA002

Professional scepticism without a fraud detection mindset may not shift the dial on the current state of audit quality. As it is, investigations into several audit failures (for instance, London Capital and Finance (LCF) and Carillion) have shown that auditors did not apply necessary professional scepticism in performing the audits (FRC, 2024; Makortoff, 2024). As such, understanding the psychology of fraud and the behaviours associated with it is critical in developing auditors' curiosity, alertness, and sensitivity to fraud.

Auditors need to develop a psychological disposition to fraud possibilities to recognise its patterns and implications. They need to be knowledgeable about the motivations behind fraud in general, with a specific focus on financial statement fraud. In learning the motives and mechanisms of corporate fraud, auditors can acquire a keen sense for detecting anomalies and misrepresentations that can be indicative of fraud. Thus, incorporating topics on the psychology of fraud and fraudulent behaviours would contribute to a fraud detection mindset. In turn, this would support the application of the forensic accounting skillsets in audit practices.

This is not about changing auditors' legal mandate. Instead, it is about improving their competence to deliver on the mandate. Thus, extending the curricula at the undergraduate level for accounting related fields, and all other entry points into the profession, would also prove beneficial to redefining the presumption of an auditor's profile. This finding supports Peytcheva's (2014) assertion that students and fresh trainee auditors are more likely to exhibit higher cognitive performance during audit tests. This is in contrast to seasoned auditors who may have developed a conventional auditing mindset. One of the educators highlighting the conventional auditor's mindset, expressed that:

"… the classic auditor has not got that psychological out, that mindset that I was talking about. If you think about the stereotypical accountant who is wanting to go to … work and do the day job and go home, they are not the kind of people to become detectives. … I'm not trying to knock all auditors I'm just talking

generalistically; they tend to want to do their job, and they want to complete a job and move on to the next job because they're booked to go somewhere else the week after to do a different audit. … That's the way they think ..." ED001

It is important to challenge established norms and move beyond conventional stereotypes for auditors to fully engage with, and benefit from, the upskilling programme. This is part of the mindset shift agenda to advance the quality of audits. However, it does not mean that auditors are expected to become psychologists or fraud examiners or investigators. Equipping auditors with such knowledge could expand their capacity to consider a wider range of plausible and implausible scenarios when assessing fraud risks in planning or executing an audit. This would mean that auditors can employ a fraud detection mindset in evaluating any unusual transaction or the underlying intent of omitted transactions. Consequently, auditors may become more adept at connecting seemingly isolated events across different accounts tested, enabling them to comprehend the broader context and assess the underlying assertions made by a client.

Additionally, incorporating topics on 'psychology of fraud and fraudulent behaviours' into auditors' educational and training programmes would enable them to cultivate all other skillsets in the MSR concept. From the onset of their educational and professional development, this inclusion can strengthen their intellectual reasoning, conscientious, and questioning skillsets. As a result, auditors can achieve a more grounded approach to navigate and respond to the complexities of financial statement fraud. One of the participants stated that:

"… So why weren't people reporting this fraud or responding to it in any other way? Well, the answer must be something psychological because they've got the information, they're just not doing anything with it [laughs]. … Because the attitude, mindsets, culture, however you want to describe it, of a forensic accountant is that they're going to keep looking at the evidence till they find what is wrong ..."

FA002

Educating auditors on financial statement fraud schemes can improve their awareness of and response to fraud warning signs. A clear case is seen in KPMG's failed response to the warning signs in the Carillion scandal (FRC, 2024). This goes beyond the letter of

auditors' technical knowledge, such as their knowledge of revenue or cost recognition requirements. The forensic accountants interviewed highlighted this point, saying:

> *"… If you want auditors to be better at spotting fraud schemes, you've got to train them to recognise those fraud schemes ..."* FA002

> *"… I have worked with people who are highly intelligent, but they just couldn't see what it was all about ..."* FA003

The knowledge of fraud schemes can aid auditors in assessing the veracity of client management's assertions on financial estimates. Thus, topics covered on the psychology of fraud would include fraud schemes to support auditors' learning on how frauds can occur in real-world situations and the significance of their response to the market economy.

5.4.3 Fraud investigation techniques

The third element of the 'contents for mindset-skillsets agenda' is fraud investigation techniques. Topics to be introduced on fraud investigation techniques will focus on the practical aspects of the content to improve auditors' effectiveness in the field. This would ensure that theoretical knowledge on forensic accounting or financial statement fraud can be translated into actionable insights during audits.

As part of the audit process, auditors are required to obtain adequate evidence from the organisations they audit to confirm the truthfulness of their clients' financial statements. To arrive at their professional judgement, they must be able to ascertain that the financial transactions and records accurately reflect the company's actual financial position. Auditors must be able to assure shareholders that the financial statements are devoid of material misstatements, including those indicative of fraud. Thus, gathering appropriate and adequate evidence is pertinent to auditors' ability to establish the basis of their opinion. One of the auditors in a senior manager role, reflecting on relevant topics for inclusion in auditors' educational and professional training curricula, pointed out that:

> *"… One is about gathering evidence, I think. Gathering evidence because auditing is all about making sure that you have sufficient and appropriate audit evidence.*

… and if the topic that you're introduced to in your forensic accounting subject, for example, is all about gathering evidence, then it definitely is relevant to the practice of auditing ..." XA002

Incorporating evidence gathering from a forensic accounting perspective would aid auditors' understanding of the Auditing Standards, particularly regarding the appropriateness and adequacy of audit evidence. Auditors often assess the credibility of financial transactions based on information provided by clients or the assumptions underlying financial statement estimates. Their reliance on client information underscores the critical need for auditors to obtain appropriate and adequate evidence to comfortably establish their inclined reasoning. This means that auditors need to move beyond confirmatory evidence to discover contextual issues that could expose the import of clients' rationale. In effect, introducing evidence gathering practices as part of topics on fraud investigation techniques would develop auditors intellectual reasoning skills. This view was expressed by the forensic accountants interviewed, saying:

"… This professional judgement I think it comes from two interrelated places. One is it depends on your inherent thinking skill or analytical skill if you want to put it that way. I mean, just how good are you intellectually at processing evidence, analysing that evidence, and structuring a conclusion. … Now, as with many such skills, you get better at it as you do it [laughs] ..." FA002

The interpretation of audit evidence can significantly influence an auditor's final judgement on the truth and fairness of a financial statement. This is evident in accounting scandal cases, such as the Carillion case. Emphasising the need for auditors to be persistent and thorough in gathering robust audit evidence, one of the participants commented that:

"… I suppose it's getting more robust evidence for things. If you're prepared to follow through on anything that doesn't make sense, rather than just skimming over issues and moving on to the next thing, I think you've got a better chance of knowing that the work that you've done … is going to stand up to scrutiny ..."

FA001

This is not about 'rubber stamping' a client's basis of financial estimates. It is not about seeking out evidence to confirm the client organisation's discretion. Instead, it is about training auditors to question information and connect the dots to understand the bigger picture. This implies that incorporating evidence gathering practices in auditors' forensic accounting education can contribute to equipping them with conscientious skills. Such practical content can aid in cultivating a fraud detection mindset and be beneficial in demonstrating auditors' thoroughness in forming their professional opinion on financial statements. Ultimately, issues of inadequacy of appropriate evidence that result in audit failures can be remedied, thus strengthening the integrity and quality of audits.

An essential aspect of obtaining appropriate evidence is probing and corroborating the evidence to ensure its accuracy and reliability. Auditors must be able to confirm the validity of evidence obtained from client organisations. This aspect of confirming evidence has featured in some of the prominent accounting scandals publicised in the media (for instance, Wirecard). As such, incorporating evidence corroboration as part of the contents on fraud investigation techniques would strengthen auditors' competence in establishing the reliability of information obtained from client entities. This view was expressed by a few participants, with one of the forensic accountants stating that:

> *"… You need to corroborate evidence, and that's something that auditors are poor at. … the fact of the matter is that the external auditors were doing phase one, which is ask the question ... But they weren't doing phase two because nobody had taught them that you need a second way of corroborating that evidence. It's no good relying on one source because you don't know if that source is compromised. And that's the problem. So, it [i]s that kind of issue that I think you need to get into people's training. That it's looking beyond the first thing, it's seeing the broader picture of the numbers, and seeing if something doesn't make sense, well then something is wrong ...."* FA003

Training auditors to probe and corroborate evidence would be beneficial for auditors' mindset shift and in developing their psychological observation skills. This could be of particular importance because of the tendency for auditors to accept information from client entities at face value, sometimes without sufficient scrutiny (Brewster et al., 2019).

A contributory factor to this can be the fact that extended audit tenures can lead to ascribed trusts between auditors and client organisations (Wilson et al., 2018). Such ascribed trust, perhaps borne out of a relationship built over time, can impede auditors' objectivity and independence (Aven et al., 2021; Boone et al., 2008). This can limit their predisposition to verify the validity of evidence obtained. Eventually, auditors might seek to merely confirm evidence obtained rather than evaluate or welcome any contradictory information. Commenting on auditors' tendency to only seek evidence to support a conclusion, one of the forensic accountants stated that:

> *"… An issue with that mindset is that it encourages a sort of confirmation bias, that you're just looking for the evidence that gets you to yes. … you are susceptible to overlooking everything else. That's not actually criticism of auditors as such. It's an observation … [chuckles]. We are all prone to this confirmation bias ..."* FA002

Another factor that limits the predisposition of auditors to verify the validity of audit evidence obtained is the issue of information authority or *"source credibility bias"* (Brewster et al., 2019, p. 44). This issue was captured in FA002's comment that:

> *"… It is relevant because it comes back to this point that auditors are actually getting a lot of their information from people within the business that they're auditing. And they're actually getting a lot of that information from people within positions of authority within the corporation … They need to understand that one of their cognitive weaknesses is that they will give a greater weight to an explanation that's come from someone in a position of authority within the organisation, rather than someone at a more junior level and that is fundamental to their decision making. Unless you educate them in that way, they will not know that ..."* FA002

Carlisle et al. also highlight the issue of information authority (2023). To address the limiting factors, the findings reveal that it would be essential to integrate topics on probing and evidence corroboration into auditors' forensic accounting education and professional development programmes. Additionally, enhancing auditors' effectiveness in evidence collection requires them to cultivate a keen attention to details. Further reflecting on their experience, FA002 expressed the view that:

"… Yes, you should educate auditors on fraud schemes. That's only half of what you need to do. I think you need to also train them on these cognitive pitfalls … because if someone's trying to conceal the fraud or conceal an insolvent situation, they're doing that through personal motivation. … it's like watching a detective series on TV, isn't it? You've got to [laughs] take into account the mental functioning of the people that you're trying to investigate because that's fundamentally affecting the information that they're giving to you. And if you just look at it as pure fact, you're missing significant parts of the entire picture it seems to me. Because it's also about not only what the information you're being given is, but who's giving you that information? How they're giving it to you, why they're giving it to you, …. So, how would I summarise it, there needs to be a better education on the human side … for the auditor, that affects how they would interact with people … it should affect their view of the information they're being given by those people ..." FA002

This implies that by including content on fraud investigation techniques, auditors are able to cultivate a full scope of the forensic accounting skillsets pillars plus a fraud detection mindset. Thus, embedding these topics progressively into auditing education and professional training programmes might positively impact the trajectory of auditors' competency in detecting misrepresentations.

Carlisle et al. (2023) found that clients tend to exert certain powers that can stifle auditors' efforts in collecting evidence to verify client assumptions regarding financial statement estimates. Such power dynamics may lead auditors to avoid authoritative figures, seek corroboration from less knowledgeable client staff, or outrightly 'tick the checklist box' without seeking evidence. Rather than relying on tactics that can result in negligent audits, this study asserts that educating auditors on evidence gathering and effective evidence verification can refine their approach in practice. Consequently, the propensity for audit negligence on account of inadequate evidence can be overcome, thereby improving the overall audit quality.

The goal is to equip auditors with a mindset to detect fraud, and the fundamental skillsets comprised in the forensic accounting MSR concept. By incorporating fraud investigation

techniques such as practices in evidence gathering, probing, and corroborating evidence, and detail attentiveness, auditors can achieve a shift to a fraud detection mindset. This shift will be pivotal in boosting their efficacy in financial statement audits, which will contribute to enhancing audit quality. Consequently, auditors can provide a holistic comfort to shareholders and bolster confidence in the market economy. With this, auditors can revive and sustain the relevance of their role to socio-economic stability.

5.4.4 Reasoning approaches to detecting misrepresentations

The fourth element of the 'contents for mindset-skillsets agenda' is 'reasoning approaches to detecting misrepresentations'. Topics to be covered within this element will focus on building auditors' understanding of the importance of open-mindedness and the diverse reasoning dimensions in identifying irregularities within financial statements. Open-mindedness, along with creative and critical thinking in forensic accounting context, can enable auditors to go beyond conventional analysis and detect subtle inconsistencies that might otherwise be overlooked. One of the professional body specialists expressed that:

> *"… I'd like the idea of teaching people to be sort of philosophers and think about evidence philosophically. … I think some critical thinking only develops through discussion, conversation, and challenge. … For example, learning how to do double entry, bookkeeping, and so on, and then applying that with a critical thinking mind. … if you know you're going to get evaluated on your critical thinking skills, instrumentally, that will probably make a difference ..."* PB001

The participant's reference to 'philosophers' or 'philosophically' was focused on a need for open-minded contemplation and an intellectual thought process. By adopting academic and professional training syllabi where logic, creative, critical, and analytical thinking can be embedded, auditors can significantly cultivate their intellectual reasoning skillsets. According to one participant,

> *"… It's important to be creative and that means … that an auditor must explore other ways of solving issues. But the most important aspect of being creative is tailoring the approach to the problem rather than, you know, using boilerplates*

methodologies or steps in order to address certain issues or problems in the corporate world ..." XA002

This does not suggest that there is no element of critical or creative thinking, for instance, in the conventional auditing modules. The focus here is on further developing these skills, along with a fraud detection mindset, with emphasis on improving auditors' performance in detecting misrepresentations. Additionally, incorporating topics on 'reasoning approaches to detecting misrepresentations' would also allow auditors to develop other forensic accounting skillsets pillars - for instance, psychological observation skills. For auditors to be able to contemplate multiple thinking dimensions to solving problems encountered in the field, they would need to cultivate their psychological observation skills in parallel. One of the interviewees shared their perspective on this, stating that:

"… you've got to train people how to think more critically. Part of that is understanding the sort of thinking errors that we are prone to make as human beings. … The big part of it, in my view, is understanding what the limitations are in your own thinking processes [laughs] ..." FA002

This shows that cultivating intellectual reasoning skills, together with psychological observation skills, would not only benefit auditors' understanding of their clients and the complexities of interpreting their rationale and financial assumptions. In addition, auditors would be able to question their own judgements in assessing supporting or contradictory evidence obtained from clients. These arguments support Griffith et al. (2021) in that when auditors exhibit higher intellectual cognition thinking, they more readily entertain thought processes that contradict clients' assumptions of financial estimates. As such, integrating topics on 'reasoning approaches to detecting misrepresentations' would contribute towards equipping auditors with the forensic accounting mindset and skillsets, to advance the quality of their professional judgement.

In sum, the 'contents for mindset-skillsets agenda' brings together indicative topics to equip auditors with the MSR concept. Each element of the contents represent a part of a whole. At the same time, each element works in tandem with the other elements to achieve a comprehensive curriculum on forensic accounting tailored to develop auditors in two dimensions. The first is a specific knowledge of corporate fraud and fundamental

forensic accounting skillsets. The second is to achieve a shift from the classic stereotype depicting auditors (and accountants in general) to a fraud-detecting mindset. Similar to Griffith et al.'s (2021) proposition for tailored interventions, this study's proposed educational and training programme addresses the specific issue of failing audits arising from auditors' underwhelming performance in detecting misrepresentations in financial statements.

Overall, the integration framework – modalities, techniques, and contents - represents the educational and training programme proposed to integrate the forensic accounting MSR concept into auditors' educational and continuous professional development. Key stakeholders in the audit quality discourse must demonstrate a readiness to embrace a mindset shift for a meaningful transformation in auditing education and professional development to take root. This view was highlighted by one of the forensic accountants who expressed that:

> *"… But I think we are asking for a fundamental shift, aren't we? Because auditing and accountancy more general has for a long time, been perceived as sort of technical activity. It's this body of dry knowledge that … accountants strangely decide they want to commit their life to. And they are seen as dry … technicians. So, I think it's partly about shifting the understanding of audit onto the human side, the psychological side and the judgmental side of auditing ..."* FA002

The value-add to audit quality should take precedence over any institutional bottlenecks that can impede the deployment of a fraud-conscious academic and professional training curricula. The significance of a fraud detection mindset and application of forensic accounting skillsets to improving audit quality far outweighs any implementation technicalities. Commenting on possible difficulties to implementing the forensic accounting agenda in auditors' education and training, one of the audit partners interviewed stated that:

> *"… I think there are still aspects of the profession who believe that the ability to deal with numbers is the most important thing … And actually, I think the world has moved on from that now. So, I think there is an element where we probably want*

… the standard setters from a training perspective to understand how it's important and create space in the curriculum for it ..." XA007

Redeveloping courses and modules is a standard aspect of academic reviews, ensuring curricula remain relevant and effective. Equally important is understanding market expectations for academic and professional syllabi to produce market-ready graduates and professionals. If the market shapes syllabi content, it is worth considering the perspectives of financial statement users, particularly shareholders. Whether individual or institutional, shareholders are greatly impacted by failed audits. Therefore, audit practices and educational frameworks should prioritise their protection and comfort by focusing the profession's attention and efforts on ensuring audits fulfil their statutory purpose. Keeping this perspective at the forefront of efforts to improve audit quality can substantially impact the adoption of the programme outlined in Chapter Six.

5.5 Summary

This chapter discussed the study's findings on the key skillsets required to enhance auditors' fraud detection competency in statutory audits and address the failing quality of audits in the UK. Additionally, the chapter discusses the findings on how the forensic accounting mindset-skillsets concept can be integrated into auditors education and professional development programmes. The three themes encompassing the integration framework are: Modalities for the integration, Techniques of training and learning, and Contents for a mindset-skillsets agenda. The integration framework depicts the study's outcome on how to actualise the forensic accounting mindset-skillsets development agenda for auditors.

A significant output of the study is the creation of four forensic accounting skillset pillars: questioning, conscientious, intellectual reasoning, and psychological observation skills. Each skillset pillar represents a cluster of connected skills. Therefore, the concept of a skillset pillar implies that while each skill within the group is unique, they all contribute towards a unified goal. As such, each pillar is a comprehensive unit of skillsets.

Taking client information at face value compromises the quality and reliability of audit reports. Questioning skills enable auditors to gather substantive evidence about the true context of client organisations' assumptions. This means that auditors can more effectively assess the validity of a financial transaction's underlying assumptions as reported by a client's management. The accuracy, correctness, and completeness of financial statements are crucial to auditors' judgement of the truth and fairness of the financial reports. Thus, employing conscientious skills means that auditors can be meticulous in their approach and apply their intuition in an audit exercise to ensure the financial reports are accurate and fair.

Intellectual reasoning skills enhances auditors' ability to reason logically, critically, and creatively, to navigate complex financial information effectively and make fact-informed judgements. This skillset pillar can support auditors' anticipation of less obvious fraud risks during brainstorming. As such, auditors can more effectively evaluate the potential for discrepancies within financial records. This could improve their capacity to either substantiate suspicions of irregularities or verify the integrity of the client organisation's financial practices. Beyond technical competence, auditors must develop psychological observation skills to interpret behavioural cues and cognitive influences that may signal fraud. This skillset enables them can enable them to move beyond financial data, tailoring communication and questioning techniques to uncover irregularities and assess the credibility of client management's assumptions.

Based on the distinctive nature of each skill within the skillset pillars, these skills are non-interchangeable. They each hold a function that another cannot produce. Instead, they complement one another to ensure auditors can detect red flags and uncover the true context of the assumptions that client organisations have applied in their financial reports. In addition, the skillset pillars overlap and reinforce one another. For instance, psychological observation skills and conscientious skills (like attention to details) can enhance the effectiveness of how auditors apply their technical competence. Both skillsets can then strengthen how auditors employ the intellectual reasoning skills (e.g., analytical skills) and the questioning skills during an audit exercise.

The forensic accounting skillsets pillars play a crucial role in how forensic accountants confront the challenges of identifying fraud in practice. This shows that auditors need to be equipped with these skillsets to improve their performance in fraud detection or identifying misrepresentations. This is not to say that auditors are completely unaware of, or do not possess some of, these skillsets. Findings from prior studies indicate that some of these skills are generic. Yet, forensic accountants are more effective in applying the skills to uncover fraudulent practices.

A distinguishing element contributing to a forensic accountant's success in applying the skillsets to uncover fraudulent financial activities in practice is the element of a fraud detection mindset. As such, auditors need to cultivate a mindset that is specifically focused on detecting misrepresentations. There needs to be a change in their inherent ideology of being 'watchdogs' and not 'bloodhounds'. As 'watchdogs', auditors are entrusted with promoting confidence in the financial markets. Where auditors cannot detect red flags or ascertain the underlying importance of client organisations' assumptions, they cannot uphold their independent obligation to shareholders and the financial markets. As one participant stated, the intention is not to make auditors 'bloodhounds' as forensic accountants appear to be portrayed. Instead, the intent is to make auditors 'better watchdogs'.

Auditors must engage a fraud detection mindset for the skillsets to be effectively employed in an audit assignment. By combining a mindset and the necessary skillsets to detect fraud with their technical expertise, auditors can significantly enhance their effectiveness in safeguarding the financial markets. The argument for a mindset shift is not about deviating from the legal framework of statutory audits. Rather, within the existing scope and legal framework, auditors have the latitude to augment their competency in uncovering misrepresentations or fraud in financial statements. Thus, combining a fraud detection mindset with the forensic accounting skillset pillars would ensure auditors fully comprehend, and respond to, every feasible and implausible options while interpreting client data. The need for this combined solution led to the creation of the study's forensic accounting mindset-skillset relationship (MSR) concept.

This study has revealed the interconnectedness of a fraud detection mindset to auditors' use of the forensic accounting skillsets in practice. Consequently, the forensic accounting mindset-skillsets relationship (MSR) concept becomes a comprehensive approach to address the issue of audit negligence and enhance the quality of statutory audits in the UK. Thus, the forensic accounting skillset pillars, the mindset shift, and the forensic accounting mindset-skillsets relationship fulfils the first research question of this study: what are the forensic accounting skillsets needed to fill auditors' fraud detection competency gap?

Additionally, this chapter covered the three themes encompassing the integration framework are: Modalities for the integration, Techniques of training and learning, and Contents for a mindset-skillsets agenda. To achieve a holistic and sustainable advancement in audit quality, the integration programme must be seen as a fundamental component of auditors' educational and career development strategy. The forensic accounting mindset-skillsets agenda needs to be incorporated from the onset of auditors' educational and professional development training. The integration programme must take into account all entry points to ensure a comprehensive inclusion of all entrants in the profession. Thus, the integration programme should be incorporated from the onset of undergraduate and professional studies, and audit firm training curricula.

The modalities to integrate the forensic accounting mindset-skillsets agenda into auditors educational and professional training programmes entail developing a structure to embed the agenda into existing auditing curricula. To achieve this upgrade, the modalities include designing syllabi on forensic accounting, specific to fraud detection, for auditors to cultivate the forensic accounting mindset and the fundamental skillsets. In other words, auditors' educational and professional development syllabi need to be expanded to accommodate the inclusion of topics and contents on fraud and forensic accounting.

Standardised fraud training should be introduced and built on progressively throughout the educational and professional development of auditors. This does not imply that auditors are expected to become fraud investigators. Instead, evidence suggests that cultivating the mindset to detect fraud would improve auditors' overall competence in employing the fundamental skillsets essential to detecting misrepresentations when in the

field. With this, auditors can provide a more grounded assurance of the integrity of financial statements to the investing public.

For auditors to cultivate a mindset to detect fraud, they must be exposed to educational and professional training programmes that would facilitate their development in this area. In effect, developing standardised trainings on fraud would mean that materials on fraud detection mindset and the forensic accounting skillsets, collectively described as the MSR concept, are introduced in auditing syllabi. This would also include dedicated programmes and resources on fraud detection, which would create more awareness about the essentiality of MSR concept to successful audit outcomes. In addition, introducing forensic accounting terminologies and fraud detection nuances into auditing syllabi can significantly support auditors' awareness and openness to the possibility of fraudulent activities during audits.

Audit firms can adopt several interventions to support auditors' on-boarding and career development in forensic accounting, specifically to support their fraud detection competency. For one, auditors need to be exposed to on-the-job trainings in fraud detection to develop the forensic accounting MSR concept. By this, auditors can have a rounded understanding of the complexities that may arise during an audit, and what it entails to tackle such complexities from a forensic accounting viewpoint. This means that on-the-job trainings does not have to be limited to technical training exposures for auditors. Audit firms can cross-train auditors to develop their fraud detection mindset and the application of the essential forensic accounting skillsets already discussed in the preceding chapter. Firms could also adopt short-term secondment programmes or mentoring attachments for auditors to develop a hands-on understanding of forensic accounting practices relevant to nurture their fraud detection mindset and skillsets.

Undeniably, audit firms do not possess the same level of financial capacity, size, or structure. This means that implementing the different options to on-the-job training may not be uniformly achievable across the various tiers of audit firms. For instance, the top four audit firms may be able to implement cross-training or short-term secondment more widely than lower-tiered firms. This should not be considered as an impediment to the programme. Lower-tiered firms could build capacity by pursuing cross-training or

secondment opportunities with affiliate firms where synergies exist. The upskilling agenda should take precedence over possible implementations challenges such as, talent retention and resource limitations, emphasising its vital role to sustaining auditors' relevance to financial market stability.

As part of the interventions, forensic accounting trainings, specific to fraud detection, should also be built into the professional qualification examination programmes run by the professional body institutions. The professional examinations are prominent milestones in auditors' professional development. As such, this strategy would ensure that new professionals can cultivate the forensic accounting MSR concept from the start of their careers. Including materials, nuances and terminologies in fraud and forensic accounting in the syllabi, would be a more deliberate strategy to foster a mindset shift towards fraud detection. Ultimately, auditors can engage in more active learning of the MSR concept to develop their competency in identifying misrepresentations indicative of fraud and thus improve the quality of audits.

There are several techniques that can be adopted in auditors' training and learning schemes to facilitate their cultivation of the MSR concept. These techniques are avenues to provide auditors with practical exposure that can bolster their comprehension and development of the forensic accounting mindset and skillsets. For instance, actual cases of failed audits, application of real-world situations, scenario simulations, and case studies. These techniques tend to present learners with applicable context which can foster perceptual arguments in group discussions.

In addition, the use of mock or mini plays can deepen auditors' theoretical understanding. Similarly, the use of audiovisual aids or videos can be effective in generating debates in a classroom or training environment. Consequently, auditors have the opportunity to cultivate their understanding of the complexities of detecting misrepresentations in an applied manner, within a practice environment. In all, these techniques will afford auditors the opportunity to acknowledge their psychological dispositions to real-world complexities through the interaction of their theoretical knowledge, professional principles, and real-world arguments.

These techniques can be instrumental to auditors in cultivating their questioning, conscientious, intellectual reasoning, and psychological observations skillsets. Together with a fraud detection mindset, auditors can be better equipped to assess the justifications provided by clients for their financial estimations. Ultimately, auditors can combine the practise-focused learning on fraud and forensic accounting with their technical expertise to improve their performance in the area of identifying misrepresentations, including those indicative of fraud.

The ‘contents for educational and training programmes’ represent the indicative topics to be included in auditors fraud-related forensic accounting curricula. The contents discussed are by no means exhaustive. Instead, they serve as the perceptions gleaned from the participants at a specific moment. The contents, emotional intelligence practises for auditors, psychology of fraud and fraudulent behaviours, fraud investigation techniques, and reasoning approaches to detecting misrepresentations, align with the forensic accounting skillset pillars. This means that the contents taken together can interrelate to support auditors’ development of a fraud detection mindset and forensic accounting skillsets pillars.

Emotional intelligence practices for auditors can support their cultivation of a mindset suited to detecting misrepresentations, including fraud. Evidence suggests that when auditors employ emotional intelligence, they are able to interpret data, ask the right questions, and effectively engage with clients’ management and staff more accurately. This means that incorporating emotional intelligence practises into auditors’ educational and professional training curricula would support their understanding of fraud risk factors and the underlying warning signals of misrepresentation in practice.

The topics on emotional intelligence practices needs to be tailored to achieve the aim of equipping auditors with the forensic accounting mindset-skillsets. Emotional intelligence does not jeopardise auditors independence or objectively. Instead, training auditors in emotional intelligence practices can strengthen the deployment of their skillsets to understand the significance of the underlying assumptions in clients’ financial estimations. In effect, auditors can provide a rounded comfort on the accuracy, completeness and correctness of financial statements audited through their professional judgement.

Contents on psychology of fraud and fraudulent behaviours would involve exploring the psychological dimensions and motivations behind financial statement fraud. This would include understanding the influence of client power dynamics. By exposing auditors to such training, auditors can be better equipped to recognise such behaviours in clients when on an audit assignment.

This does not mean that auditors are expected to be trained as psychologists. Instead, training auditors to understand behavioural or cognitive dimensions to fraud should be seen as empowering auditors. The reality of corporate accounting scandals, and auditors' negligence exposed when audits fail, highlights the importance of upskilling auditors in this area. This reality dictates that auditors must be equipped to identify and address possible deceptive practices that can impede their capability to ascertain the true context of clients' financial assumptions.

Fraud investigation techniques should be incorporated into auditors' educational and professional development programmes. Topics on fraud investigation techniques would support auditors' awareness and understanding of practical applications that can improve their effectiveness during audits. In audits, gathering appropriate and adequate evidence is expedient to establish the basis of auditors' judgement on the integrity of financial statements. Incorporating evidence corroboration as part of content on fraud investigation techniques can boost auditors competence in determining the adequacy and reliability of client information. Thus, including topics on fraud investigation techniques can support their cultivation of the MSR concept thereby contributing towards improving the quality of audits.

Introducing topics on reasoning approaches to detecting misrepresentations can aid auditors' understanding of the importance of open-mindedness to developing diverse reasoning to tackle complex situations in audits. With this, auditors can apply multifaceted reasoning approaches to evaluate fraud risks, assess the consistency or contradictory nature of client information or spot irregular transactions that could indicate fraud. This does not imply that auditors are not already exposed to trainings in some form of thinking such as critical thinking. The emphasis here is on building auditors mindset, and

equipping them with the skillsets, targeted towards improving their performance in detecting misrepresentations that could be indicative of fraud.

The modalities, techniques and contents discussed represent the educational and training programme proposed to integrate the forensic accounting MSR concept into auditors' educational, professional, and continuous development trainings. The following chapter discusses the conceptual outputs devised throughout this study. It also introduces the forensic accounting education and continuous development training programme designed to equip auditors to effectively detect financial statement misrepresentations.

Chapter Six: Conceptual development and auditors' education and continuous learning programme

Chapter Five presented and discussed the findings of this study. This chapter consolidates the discussions with more emphasis on the conceptual development that establishes the fulfilment of the research objectives. It integrates the study's findings into a coherent narrative highlighting the central analytical conclusions that underpin the research. This consolidation is essential to delivering the holistic approach proposed for this study.

6.1 The interrelationship of the forensic accounting skillset pillars

This study has identified the forensic accounting skillsets auditors need to enhance their fraud detection competence. An analysis of these skills and the context of the participants' perception indicates that each skill is unique and tends to play a distinct role in the effectiveness of forensic accountants in uncovering fraud. This implies that each skill cannot be substituted. As such, auditors require each of the skills to improve their chances of recognising red flags indicative of fraud and uncovering misrepresentations in financial statements.

While each skill is distinct, this study has established the interconnected nature of each distinct skill. This means that the skills interact complementarily based on their similarities. The similarities of the skills led to creating the forensic accounting skillset pillars – questioning, conscientious, intellectual reasoning, and psychological observation skills. Then again, the skillset pillars overlap and reinforce each other. For instance, an auditor's technical competence should inform the application of intellectual reasoning skills during audits. Meanwhile, psychological observation skills and conscientious skills, like attention to detail, enhance both the effectiveness and how auditors employ the questioning skills.

Further, skills with similarities such as critical thinking and creative thinking within the intellectual reasoning skills pillar, synergise to provide a comprehensive approach. Both skills balance analytical rigour with problem-solving skills to ascertain the true context of

client management's financial assumptions. Combining this interaction with an understanding of human behaviour, auditors may be better able to provide a comprehensive assessment of client management information that could indicate irregularities. Recognising these interconnections means auditors can develop a holistic competence in detecting misrepresentations in financial statements.

Ultimately, auditors can achieve competence, trustworthiness, and credibility in detecting misrepresentations, including those indicative of fraud, thereby enhancing the quality of audits. Therefore, the skillset pillars underscore the value of a well-rounded skills portfolio, where each skill contributes to a more effective and comfort-driven audit process. The forensic accounting interrelationship map illustrates the interconnection of the skills across the four pillars. A visual presentation of the interrelationship of the skillsets is presented in Figure 6.1 below.

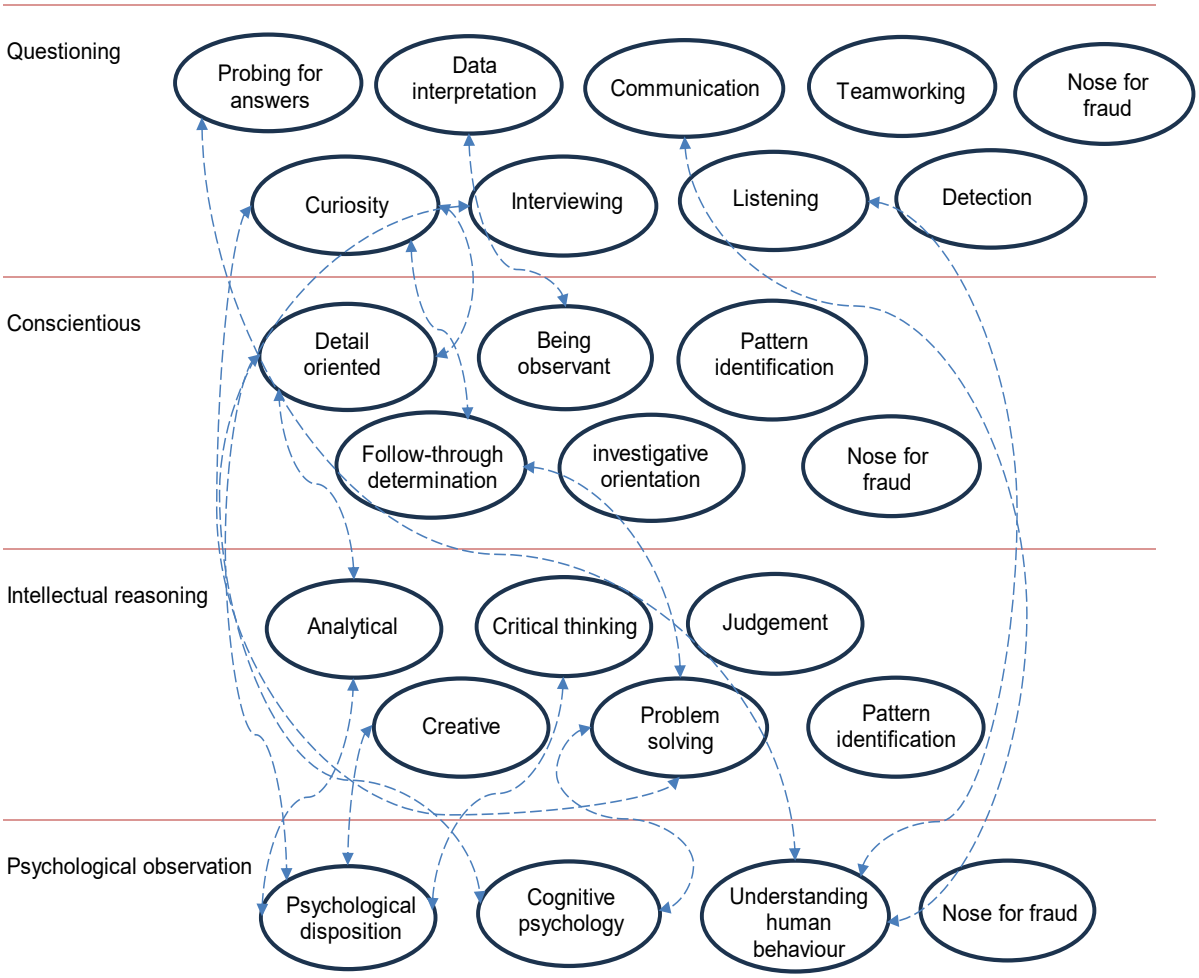


Figure 6.1: Forensic accounting skillset pillars interrelationship map
Source: Author's creation

6.2 The forensic accounting mindset-skillsets relationship (MSR) rhombus concept

This study has revealed the interconnection of a fraud detection mindset to auditors' use of the forensic accounting skillsets in practice. It also highlights the need to integrate these two distinct concepts as one unified, holistic concept and approach to enhance audit quality.

Combining mindset and skillset as a single construct to improve audit quality led to the creation of the forensic accounting mindset-skillset relationship (MSR) rhombus concept presented in Figure 6.2 below. This is a significant outcome of the study in that prior studies have examined auditors' need for forensic accounting skillsets as a single focus

(see Hegazy et al., 2017; Plumlee et al., 2015; Lal Bhasin, 2013 and DiGabriele, 2008). Similarly, other studies have investigated the importance of a mindset change or the effect of a different thinking approach on how auditors assess fraud risks or management information (for instance, Austin et al., 2020; Griffith et al., 2015). Then again, the Brydon (2019) report, following the Carillion scandal, recommended an upgrade in auditors' mindset and skillset to improve their performance in fraud detection.

The interrelation of a fraud detection mindset to the forensic accounting skillset pillars is illustrated in the diagram below (Figure 6.2). This represents the concept of forensic accounting mindset-skillsets relationship (MSR). The concept is depicted in form of a rhombus.

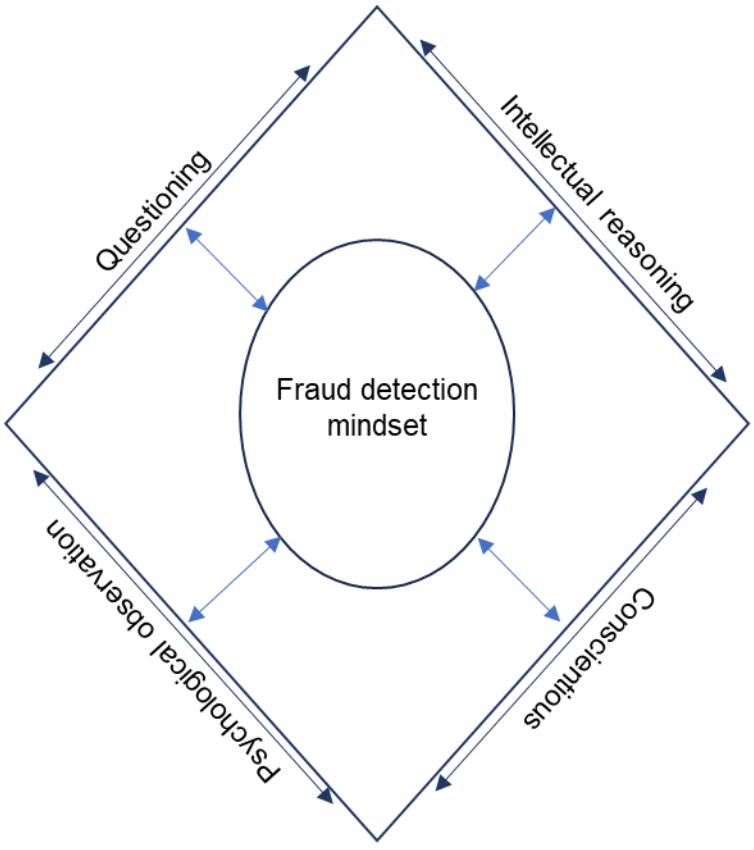


Figure 6.2: Forensic accounting mindset-skillsets relationship rhombus (MSR)
Source: Author's creation

Combining a mindset to detect misrepresentations or fraud with the forensic accounting skillsets pillars becomes a comprehensive approach to address the issue of audit negligence, which undermines the quality of statutory audits. This connection between a forensic accounting mindset and skillsets, is crucial in resolving the competency gap that appears to persist in the discourses on auditors' performance in financial statement audits. As such, auditors need to embrace and internalise the mindset-skillset relationship culture to ensure the continued relevance of their professional judgement to the market economy. This study has established that the forensic accounting mindset-skillsets relationship (MSR) concept represents a comprehensive approach to advance the quality of statutory audits in the UK.

6.3 Auditors' education and continuous learning programme

This study proposes a forensic accounting education and training programme to integrate the forensic accounting MSR concept into auditors' education and continuous professional development training. The integration framework (comprising modalities, techniques, and contents), discussed in Chapter Five (sections 5.2 to 5.4), constitutes the essential component of the integration agenda.

Prior studies have suggested an upgrade in auditors' education and training with forensic accounting skillsets (see Awolowo, 2019; Lee & Welker, 2019; Kramer et al., 2017) to enhance their capability to detect misrepresentations in financial statements. Others, such as Hamilton and Smith (2021), argue for auditors to be trained in fraud techniques and fraud sensitivity. Taking a three-fold approach (see Table 6.1 below) ensures that all entrants into the auditing profession are included in the upskilling programme. The approach targets potential auditors at the undergraduate level, direct entrants from non-accounting related degree backgrounds, and those enrolled on apprenticeship programmes.

Table 6.1: Threefold pathways for entrants into the auditing profession

Stages to incorporate the forensic accounting MSR concept	Graduates in auditing and accounting related field: progressively from first year of undergraduate studies, reinforced through trainee programme with audit firms and the professional qualification examinations. Graduates in non-accounting related field: progressively from first year of trainee programme with audit firms, reinforced through the professional qualification examinations. Entrants on apprenticeship pathway: progressively from first year of trainee programme with audit firms, reinforced through the professional qualification examinations.

Source: Author's output

Furthermore, incorporating the MSR concept into professional qualification examinations and audit firms' continuous career development training would ensure that existing auditors at various career experience levels are not overlooked in the upskilling agenda. This means that introducing the programme across auditing educational and career development platforms would ensure that existing and future auditors are equipped with the forensic accounting mindset and skillsets. This reflects Mintchik et al.'s (2021) proposition that fraud and forensic accounting contents must be included into auditors' education and training programmes to develop a sceptical mindset towards detecting misrepresentations. Ultimately, the programme developed in this study can lead to a sustainable comfort in auditors' competency to deliver high-quality audits, proactively preventing audit failures and ensuring retrospective accountability. A summary of the integration programme is presented in Table 6.2 below.

Table 6.2: Auditors' forensic accounting mindset-skillset education and continuous development programme

Modalities for integrating the forensic accounting mindset-skillsets: Structure to embed the forensic accounting mindset-skillsets into auditors' education and professional training	**Techniques for training and learning:** **Channels for practical applications to equip auditors with hands-on exposure to develop the forensic accounting mindset-skillsets**	**Contents for educational and training programmes:** **Indicative topics for auditing curricula development on fraud related forensic accounting programme**
Design syllabi on forensic accounting specific to fraud detection for mindset and skillsets development Standardise fraud trainings to build progressively on each educational and professional training milestone Introduce materials on forensic mindset and the skillsets (MSR) concept in auditing syllabi Incorporate forensic accounting terminologies in syllabi and curricula contents Include dedicated programmes and resources on fraud detection	Incorporate actual (real life) cases of failed audits in training and learning activities Application of real-world situations Scenario simulations, case studies Mock or mini plays (dramatised learning activities) Group discussions Debates Use of audiovisual aids, videos	<u>Emotional intelligence practises for auditors</u>: to support an understanding of fraud risks factors and indicators; identifying anomalies. Supports the development of a fraud detection mindset, and the four forensic accounting skillsets pillars. <u>Psychology of fraud and fraudulent behaviours:</u> to support auditors understanding of the dynamics of corporate fraud, fraud schemes, human behaviours and cognitive dimensions to fraud, and the mindset and motivations behind financial statement fraud. Supports the development of a fraud detection mindset, and the four forensic accounting skillsets pillars. <u>Fraud investigation techniques</u>: to support an understanding of practical applications to improve

Interventions through: On-the-job trainings in fraud detection to develop the forensic accounting mindset-skillsets Cross-training auditors on forensic accounting areas relevant to fraud detection Short-term secondment programmes Mentoring attachment with forensic accountants Forensic accounting trainings, specific to fraud detection built into professional examinations	auditors effectiveness in the field - such as evidence gathering, probing, verifying and corroborating evidence and attention to details. Supports the development of a fraud detection mindset, and the four forensic accounting skillsets pillars. <u>Reasoning approaches to detecting misrepresentations</u>: to support an understanding of the importance of open-mindedness to develop a multiple reasoning dimensions to evaluating fraud risks, spotting anomalies or inconsistent information. Supports the development of a fraud detection mindset, intellectual reasoning , psychological observation skills and the other forensic accounting skillsets pillars

Source: Author's output

Some may argue that auditors' educational and professional training curricula are already dense with technical content, leaving no room to implement the MSR concept to develop auditors' fraud detection competency. As a profession, we must critically consider the broader implications of retaining the status quo.

The profession's regulator (FRC) is central to accomplishing the adoption of the forensic accounting education and professional development programme into audit practice. The FRC can set the tone, to establish the necessity for audit firms, the professional institutions, and educators to embrace and effect the integration programme across board. Similarly, the professional institutes and audit firms can play an important role in propagating the significance of upskilling auditors to acquire a fraud detection mindset and the forensic accounting skillset pillars.

This is where incorporating the MSR concept into the professional examinations come in. Assessing would-be and professional auditors on fraud related forensic accounting topics, including materials and terminologies on forensic accounting in auditing resources can drive a shift in their mindset. With this mindset shift, auditors can embrace the upskilling agenda in a concerted effort to change the current narrative on audit quality. It would influence how the auditing ecosystem embraces the MSR concept for adoption into auditors' undergraduate and professional development training curricula.

This is not about changing auditors' legal mandate. It is about improving their competence to deliver on the mandate. Thus, extending the curricula, across all pathways into the audit profession, would prove beneficial to developing auditors' competency in detecting financial statement misrepresentations, including those indicative of fraud.

6.4 Summary

This chapter consolidates the key findings of the study, drawing together the core insights and interpretations presented in earlier chapters. The mindset-skillsets relationship rhombus (MSR) drives the contents of the curriculum. The skillsets that are included in the mindset-skillsets relation rhombus (MSR) may already be familiar within the auditing environment. However, the main focus is on developing a fraud detection mindset. This means that auditors shift to a fraud detection mindset is essential to improving audit quality.

The curriculum aims to help auditors develop and adopt this mindset and apply it to drive the deployment of the skillsets in their work. In addition, the chapter shows the connection between the forensic accounting MSR concept and auditors' educational and continuous learning programme. This connects the two concepts developed in the study, representing significant contributions of the study to education and audit practice. The next chapter completes this study, providing a synthesis of the overall conclusions, the research contributions, limitations, and areas for further studies. Consequently, this study extends prior studies by revealing how the forensic accounting mindset and skillsets together can be embedded into auditors' education and training programmes. This fulfils

the second aspect of the research focus, assuring a more rounded comfort in auditors' potential to improve audit quality.

Chapter Seven: Conclusions, Contributions and Recommendation

7.1 Conclusions

This thesis builds on Awolowo's (2019) work by exploring how forensic accounting skillsets can be integrated into the UK statutory audits and auditors' education to address their competency gaps in fraud detection. Drawing on Jenkins et al. (2018), evidence from the US suggests that deploying forensic experts during audits improves fraud-related brainstorming and the design of fraud-testing procedures, thereby improving audit quality. However, this study has shifted focus from collaboration with forensic experts to equipping auditors directly with forensic accountants' cognitive authority in detecting fraud. By this, auditors can be better positioned to fulfil their statutory responsibilities under the revised ISA (UK) 240, ensuring financial statements are free from material misstatements, whether due to error or fraud.

Auditors play a vital role in bridging the agency problems between shareholders and organisations' governance board and their management (Awolowo, 2019). By this position, equipping auditors with the fundamental skillsets and mindset to detect financial statement misrepresentations can mitigate audit failures. This can provide holistic comfort to stakeholders in the audit ecosystem, including shareholders, regulatory bodies, directors, and auditors themselves. Unlike Jenkins et al. (2018), this study extends beyond suggesting comfort in audit engagement by augmenting auditors' traditional skills with forensic experts' unique skillsets in fraud detection. This study argued for auditors' re-education with the integration of forensic accounting mindset-skillsets relationship (MSR) concept in their education and continuous training programmes.

The overall goal has been to develop an actionable educational and continuous training programme to improve auditors' skills in evaluating audit evidence and client management information more effectively. Consequently, auditors can be better equipped to detect misrepresentations, including fraudulent practices, in financial statements. This led to the research questions addressed in the study:

a) What are the key forensic accounting skillsets needed to fill auditors' fraud detection competency gap?

b) How and at what stage(s) of auditors' education can these skillsets be introduced into auditors' undergraduate and continuous development programmes?

These questions were explored through the lens of Kolcaba and Kolcaba's (1991) comfort theory. Fletcher et al.'s (2021) agency diamond model was used to identify the key stakeholders affected by reputational implications in the event of audit failures or when low quality audits are discovered. These stakeholders, auditors, regulators, directors, and shareholders are regarded as the beneficiaries of comfort in the forensic accounting mindset-skillset agenda. This interplay between comfort theory and the agency diamond was developed into a theoretical model for the study.

The findings were obtained from semi-structured interviews with educators, forensic accountants, professional body specialists, and external auditors. A summary of the findings for each research question is presented below:

Research question 1: *What are the key forensic accounting skillsets needed to fill auditors' fraud detection competency gap?*

The findings revealed four distinct yet interrelated forensic accounting skillsets pillars: questioning, conscientious, intellectual reasoning, and psychological observation skills. This led to the creation of the forensic accounting skillset pillars, an original contribution of the study. The first pillar, questioning skills, can enable auditors to more accurately evaluate the validity of the assumptions underpinning financial transactions made by client management. This pillar comprises probing, curiosity, interviewing, communication, and listening skills. With these skills, auditors can obtain substantive evidence regarding the actual context of client organisations' financial assumptions.

The second pillar, conscientious skills, can enable auditors demonstrate thoroughness and persistence in their assessment of client organisations' financial activities during audit testing. This pillar encompasses detail orientation, investigative, follow-through determination, and pattern-identification skills. With this skillset pillar, auditors can adopt a meticulous approach and be intuitive during audit procedures to assure on the accuracy, correctness, and completeness of financial reports. The third pillar, intellectual reasoning skills can build auditors' capacity to effectively interpret complex financial information and

make informed judgements. The pillar comprises critical and creative thinking, analytical, problem solving, and pattern-identification skills. Intellectual reasoning skills can improve auditors' ability to confirm suspicions of irregularities or validate client organisations' financial integrity.

The fourth pillar, psychological observation skills, can allow auditors to consider human behavioural cues, alongside numerical information, to identify misrepresentations that could indicate fraud. This pillar includes cognitive psychology, understanding human behaviour, nose for fraud and cognitive psychology skills. Employing psychological observation skills, auditors can tailor their questioning strategies, taking into account the subtle behaviours of client personnel. This can allow them to effectively evaluate the validity of financial assumptions made by the client.

Each pillar is distinctive in that they represent a comprehensive unit of connected skills. Yet, each pillar interacts with interconnections to individual skills within the pillars and across all four pillars, contributing to a unified goal of detecting misrepresentations that could lead to audit failures. The interrelatedness of the skillsets led to the creation of forensic accounting skillsets interrelationship map.

A further finding was that a fraud detection mindset is expedient for the forensic accounting skillsets to be effectively employed in financial statement audits. Therefore, a fraud detection mindset is central to the forensic accounting skillsets agenda, to improve audit quality. This led to the creation of the forensic accounting mindset-skillsets relationship (MSR) rhombus concept.

Research question 2: *How and at what stage(s) of auditors' education can these skillsets be introduced into auditors' undergraduate and continuous development programmes?*

The findings revealed that auditors need to be exposed to the forensic accounting mindset-skillsets relationship (MSR) concept from the onset of their educational and professional development journey. What is considered as onset might vary depending on the pathway taken by a prospecting entrant. Therefore, the educational and professional development training programme should be incorporated from the onset of undergraduate and professional studies, and audit firm training curricula.

The study revealed a comprehensive educational and continuous development training programme for auditors that can be adopted in practice regardless of entry pathway and career level. The forensic accounting mindset-skillsets education and continuous development programme comprises of three elements: the modalities for integrating the MSR concept, several techniques for training and learning, and indicative contents for curricula development in fraud-related forensic accounting topics for auditors. The modalities for integrating the MSR concept establishes a structure to embed the MSR concept into existing auditing curricula in academic and professional studies, and audit practice training packages.

For example, expanding auditors' syllabi to include standardised fraud trainings and introduce forensic accounting terminologies. The modalities could also involve creating more awareness for auditors in this area by including dedicated programmes and resources on the essentiality of the MSR concept to achieving successful audit outcomes. These modalities are to extend auditors existing curricula, so there is an active consciousness towards their mandate and responsibilities for fraud detection, to achieve high quality audits.

The techniques for auditors' training and learning of the MSR concept are tailored to equip auditors with practical exposure to cultivate a forensic accounting mindset and the skillset pillars. The findings revealed that the use of actual failed cases in group discussions, mock plays or audiovisual aids can be effective in generating debates that can facilitate auditors' cultivation of intellectual reasoning and psychological observation skillsets. Such engagements can ultimately lead to a mindset shift that prepares auditors to navigate the complexities of financial statement audits.

The findings revealed contents for inclusion in auditors academic and professional curricula to improve auditors fraud detection competency. The contents are emotional intelligence practices, psychology of fraud and fraudulent behaviours, fraud investigation techniques, and reasoning approaches to detecting misrepresentations. The contents created for auditors' forensic accounting MSR education and training programmes are indicative but by no means exhaustive topics. Together, these contents can support auditors' understanding of underlying fraud signs, complexities of human behaviour and

fraud schemes, and the motivations behind financial statement fraud. Additionally, auditors can better appropriate their professional judgement by more skilfully assessing the adequacy and veracity of audit evidence and critically evaluating client management assumptions.

The findings in research question one informed the classification of curricula contents developed to answer research question two. In all, the study revealed a comprehensive package capable of delivering sustainable comfort to shareholders and other stakeholders in the audit ecosystem. Ultimately, the emphasis is to change the current narrative on audit quality, by improving their performance in detecting fraudulent misrepresentations.

7.2 Theoretical implications

This study's results have been objectively interpreted and discussed through the lens of Kolcaba and Kolcaba's (1991) Comfort Theory (see Chapter Two). This section examines the implications of the key outcomes for auditing practice and education. The first section will present a consideration of the MSR concept in the theory of comfort. This will be followed by a consideration of the implications of the educational and career development training programme for generating comfort for auditors, shareholders, regulators, and other stakeholders.

7.2.1 Comfort theory through the lens of the MSR concept

The MSR concept embodies the fundamental forensic accounting skillset pillars and a fraud detection mindset that can deliver auditors' competency in detecting misrepresentations in financial statement audits. In creating the forensic accounting skillsets pillars the study provides auditors and other practitioners with a structure to identify and define the skillset developmental needs of auditors. Together with the skillset pillars, the MSR concept illustrates that auditors must adopt a mindset shift from the traditional 'watchdog' disposition. Auditors must cultivate a fraud detection mindset to effectively apply the forensic accounting skillsets (represented in the skillset pillars) in

practice. The forensic accounting skillsets and a fraud detection mindset are expedient for auditors to advance the quality of audits. As such, the MSR concept can be seen as a solution to deliver comfort 'at all levels' to auditors, shareholders, regulators, and other users of financial statements.

Developing the MSR concept, therefore, supports Kolcaba and Kolcaba's (1991) theory of comfort. The study's evidence indicates that equipping auditors with the forensic accounting mindset-skillsets can deliver all the comfort elements to auditors, shareholders, and other actors of Fletcher et al.'s (2021) agency diamond. For instance, auditors can be comforted with the *'state element* of ease and contentment' in knowing that they are rightly equipped to identify misrepresentations. With the MSR concept, they can be comfortable in interpreting the underlying significance of assumptions taken by client organisations in determining financial estimations reported in financial statements. This state of ease or '*peace of mind'* in auditors' competency to detect errors or fraudulent irregularities is shared with shareholders, regulators, directors, and financial markets. As such, auditors can uphold their agentive responsibility.

Additionally, this implies that the relief element can be achieved, as any existing unease or discomfort from failed audits can be eliminated. For instance, auditors can confidently anticipate audit inspections by regulators without fear of a poor quality finding resulting from inadequate audit evidence. Similarly, with the forensic accounting mindset-skillsets, auditors can overcome the recurring issues of inadequate audit evidence and questionable client justifications, as seen in the Carillion case (see FRC, 2024). By applying the MSR concept, auditors can proactively avert audit failures. This proactive prevention of failed audits enables them to enjoy the '*relief element of comfort'*, leading to improved audit quality.

Subsequently, shareholders would receive *'comfort as a relief'* knowing that auditors have been upskilled to improve their competency in gathering and corroborating evidence and detecting misrepresentations. This would imply that the unease of prior audit failings, which may have led to financial losses for shareholders, can be eliminated. In other words, equipping auditors with skillsets and a mindset to detect misrepresentations can deliver a sense of relief to shareholders. The relief therefore eliminates any previous

discomfort to shareholders, about auditors' capacity to ascertain the truthfulness of financial statements which may have led to past audit failures.

Auditors can also achieve the '*renewal element of comfort*' through the MSR concept. This would entail maintaining a continuous awareness of the need to refresh and strengthen their deployment of the forensic accounting skillsets and mindset in practice, thereby consistently enhancing audit quality. The practicality of this goes beyond a theoretical rhetoric. Achieving the *renewal element of comfort* dictates a step change in auditors' educational and professional development training programmes. This step change is not only for existing auditors in firm practice. For the MSR concept to deliver holistic comfort, it should be attainable by auditors already in practice, those in training, and aspiring undergraduates. In other words, the '*renewal element of comfort'* is definite in auditors' forensic accounting MSR concept educational and career development training programme developed in this study.

7.2.2 The Comfort of MSR concept to auditors' educational and continuous development training programme

Integrating the forensic accounting MSR concept into auditors' training programmes, their educational and continuous development, can improve their capability to identify and report financial statement misrepresentations that may indicate fraud. This integration may deliver comfort in all elements defined by Kolcaba and Kolcaba (1991). Auditors achieve a state of comfort by acquiring the forensic accounting skillsets and a fraud detection mindset. In addition, the comfort attained can be refreshed and strengthened through the progressive academic, professional and career development training programmes. Renewing comfort requires a commitment to continuous training through tailored curriculum development in forensic accounting skillsets and mindset, relevant to addressing the landscape and complexities of financial statement fraud.

This implies that for auditors to consistently advance audit quality, there should be a structure that supports their acquisition, understanding and deployment of the forensic accounting MSR concept. Hence, the process of attaining a renewed sense of comfort can ensure auditors remain proficient in gathering and corroborating evidence or

identifying the true context of client organisations' financial estimates. Also, it ensures that auditors remain effective and relevant to their agentive responsibility to independently assure shareholders of the credibility of financial statements.

In effect, the study's evidence implies that auditors can be comfortable with the quality of audits by cultivating the forensic accounting skillset pillars as part of their educational and professional training. However, for the comfort to be holistic to auditors, shareholders, regulators, directors, and the wider society, auditors must also cultivate a mindset to detect fraud. Cultivating the forensic accounting skillsets and a mindset to detect fraud allows auditors to develop a "cognitive authority" (Jenkins et al., 2018, p.1788) in identifying unusual patterns. This 'cognitive authority' can be seen as similar to the expertise forensic accountants have in detecting fraud. Thus, empowering auditors to uncover misrepresentations can guarantee that they are in a position to deliver comfort as a *state, relief, and renewal* in fulfilment of their engagement mandate.

This does not suggest that one element of comfort is dependent on or replaces the other. Instead, each element is mutually independent but can be duly represented and applied to any client organisation's audit complexity. In other words, with the MSR concept, auditors can achieve comfort as a *state, relief, and renewal* on one client audit, different from another, based on their individual complexities. The forensic accounting MSR concept and its integration into auditors' educational and professional training programmes addresses the comfort needs of auditors, shareholders, and other agency diamond actors.

The solution presented in this study is a fusion of forensic accounting skillsets and a fraud detection mindset to advance the quality of audits. It is not one or the other. Similarly, the educational programme incorporates both as a single agenda ingrained as the forensic accounting MSR concept and represented in the form of a rhombus (see Figure 6.2). This single agenda is shown in how the contents of the integration programme connect with the forensic accounting skillset pillars developed in the study. Additionally, it is shown in how developing a fraud detection mindset is woven into the underlying context of the indicative curriculum contents. Hence, subjects on emotional intelligence, psychology of fraud and fraudulent behaviours, fraud investigation techniques, and reasoning

approaches, all constitute avenues to ensure auditors are competent and comfortable to detect misrepresentations in financial statement audits.

A fraud detection mindset sits at the heart of how auditors can effectively deploy the forensic accounting skillsets (represented by the pillars) in practice. To be comfortable with auditors' competency and improve audit quality, the forensic accounting skillsets and mindset should be integrated into their education and training programmes. Evidently, without the forensic accounting MSR concept, the status quo persists, and audit quality remains unchanged. Figure 7.1 below illustrates this implication.

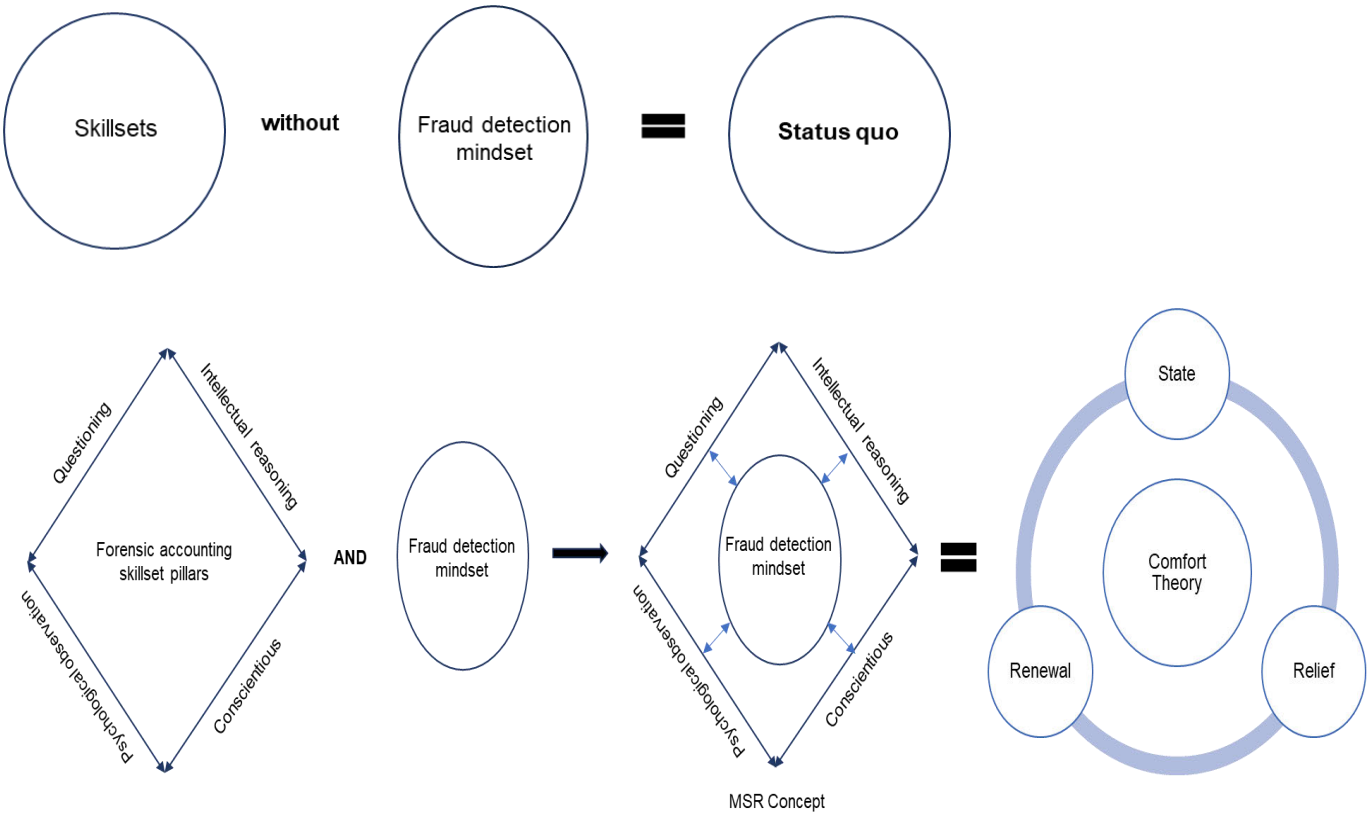


Figure 7.1 Theoretical implication of the forensic accounting MSR concept
Source: Author's creation

Combining the mindset and skillset development in the integration programme presents what Boudiab and Kolcaba (2015) describe as *"… a holistic approach"* … that *"underpins best practices …"* (p.278) in financial statement audits complexities. This shows that to enhance audit quality, comfort will be derived from the combination of the forensic

accounting skillsets and the mindset to detect fraud (i.e., the MSR concept). In effect, the integration programme can help auditors, shareholders, and others in the audit ecosystem be comfortable in auditors' competency to uncover and report misrepresentations in financial statement audits. The diagram in Figure 7.2 below depicts this implication.

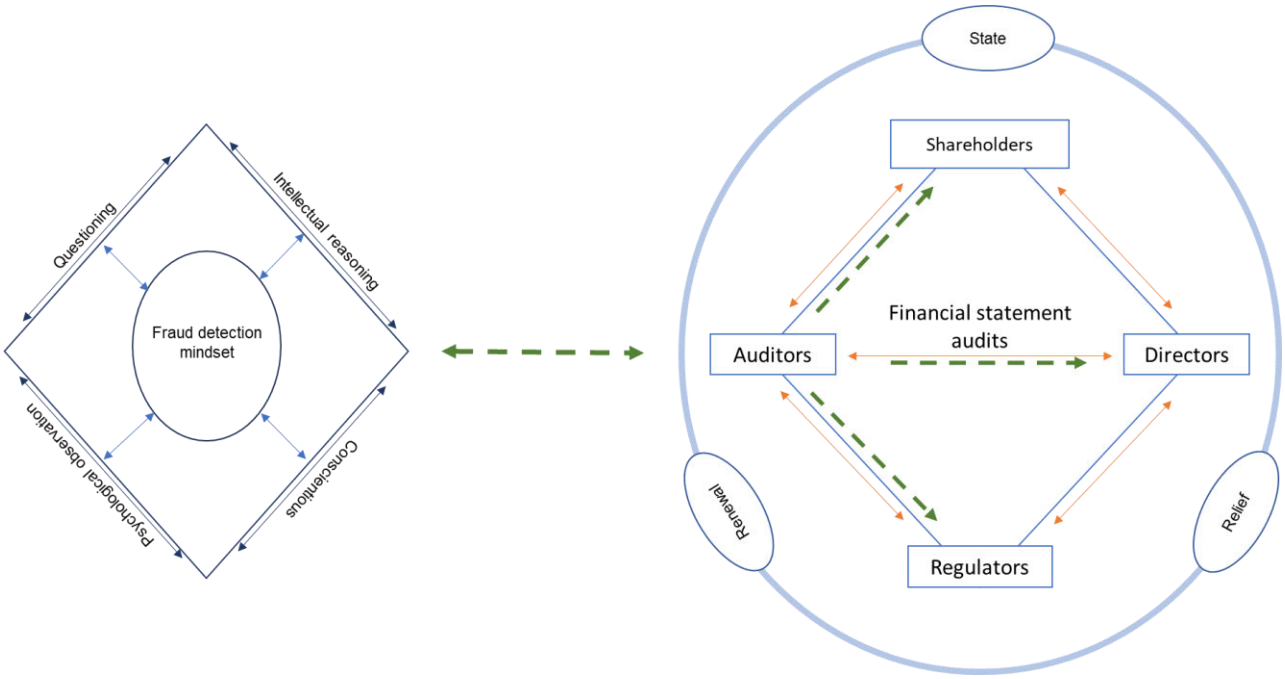


Figure 7.2 Implication of the forensic accounting MSR concept to comfort theory and agency diamond model

Source: Author's creation

Establishing a *'holistic approach'* also informed the development of the forensic accounting integration triangle (refer to Figure 4.12). In essence, the modalities for intervention, techniques to training and learning, and indicative curriculum contents, are all geared towards delivering sustainable and holistic comfort. It means that the solution proffered in this study considers the 'what' to advance the quality of audits. Further, the solution considers the 'how', 'where', 'when', and the 'why' of the integration agenda.

Shareholders seek to derive comfort from auditors' independent and professional evaluation of the reliability of financial statements presented by directors. The onus for auditors to be rightly equipped to deliver their professional judgement, after considering

all relevant evidence supporting a client's reported financial information, lies with the profession. Therefore, it is expected that auditors' educational and professional development curricula appropriately covers all subjects to ensure auditors' comfort and preparedness for their responsibilities as defined by regulations (see ISA (UK) 240).

The persistent pattern of audit failures highlights auditors' competency gap in the area of detecting misrepresentations within financial statements. For the auditing profession to change the narrative and its reputational consequences, the MSR concept needs to become part of auditing curricula. The integration programme designed in this study is suitable for all levels of education and career development - university, firm graduate training and apprenticeships, and professional qualification levels. Covering all entry points into the profession guarantees that all interest groups within the auditing ecosystem can be comfortable that all auditors will be equipped to detect misstatements. Additionally, covering all entry points into the profession can ensure that existing, aspiring, and future auditors contribute to the sustainability of the profession's relevance to the market economy. Consequently, the integration programme can meet diverse educational needs, progressively, at different levels of auditors' academic and professional development.

In all, the outcome of this study supports the theory of comfort. Auditors can attain the state, relief, and renewal elements of comfort when they are rightly equipped to identify and probe misrepresentations in financial information. This means that auditors can attain comfort as a state, relief, and renewal when they are trained to recognise misrepresentations, including those indicative of fraud. Furthermore, shareholders and other key stakeholders in the audit quality discourse can also be comfortable with auditors' professional judgement of client organisations' financial statements. Hence, comfort is not only from the perspective of auditors. It also considers the perspective and comfort needs of shareholders, regulators, and directors in relation to auditors' agency responsibilities defined in ISA (UK) 240. The MSR concept and the education and continuous development training programme therefore delivers on the theory of comfort.

Also, the MSR concept and the integration programme deliver as a comprehensive solution to address the gap in auditors' educational and career development training.

Developing a fraud detection mindset sit at the core of how auditors can deploy the forensic accounting skillsets in practice. It is not one or the other. As such, integrating the MSR concept into auditors' education and trainings through the curriculum proposition presents a comprehensive approach to improving the quality of audits. This holistic approach could ensure that auditors are comfortable to deal with complexities that may undermine the quality of audits in practice.

Ensuring that every avenue into the auditing profession is covered in the integration programme may guarantee that the auditing ecosystem are comfortable that misstatements will be effectively detected. It is the responsibility of the auditing profession to ensure that auditors are adequately equipped to exercise their professional judgement on the credibility of financial statements. The onus, therefore, lies with the profession – including regulators, professional bodies, and auditors – to ensure that auditors can comfortably fulfil and deliver on their role to shareholders. In effect, for the auditing profession to reinforce the relevance of auditors to the market economy, the MSR concept should be adopted incorporated into auditing educational and professional development curricula. The following section will discuss the specific contributions of the study.

7.3 Contributions

This study makes valuable contributions to the education and professional practice of auditing. It significantly contributes to the sparse knowledge on integrating forensic accounting mindset and skillsets to auditors' educational and continuous professional trainings. Additionally, the study contributes to existing domain theories and to the diversification of philosophical perspectives in the discipline area. These contributions are outlined in this section.

7.3.1 Auditors' forensic accounting educational and continuous development programme

A significant contribution of this study is the auditors' forensic accounting educational and continuous development programme. This programme, developed for auditors' forensic

accounting educational and continuous development, unpacks the integration triangle in more granular terms. It provides a detailed account of what constitutes modalities, itemises the techniques to operationalise teaching and learning, and covers the indicative topics for curricula content. No study has produced a specific programme to embed forensic accounting skillsets and mindset into auditors' education and professional development.

The closest research to this found in the literature is the work of Mintchik et al. (2021). However, the authors focused solely on mindset development, under four classifications, for accountants in general. Even so, Mintchik et al.'s (2021) educational programme merely proposed that forensic and anti-fraud awareness courses be included in accounting education with no indication of specific contents. This study has offered indicative topics (emotional intelligence practices, psychology of fraud and fraudulent behaviours, fraud investigation techniques, and reasoning approaches to detecting misrepresentations) for auditors to embed the MSR concept in their learning. The educational and continuous development programme in forensic accounting is a novel contribution with significant value to academic institutions, audit firms, and the profession's institutional bodies.

With this, academic institutions can progressively develop fit-for-purpose courses or modules on each of the four topics for inclusion in auditing undergraduate syllabi throughout their degree programme. Likewise, the profession's institutional bodies and training centres can enhance their training schedules to reflect a more rounded offering. With this, auditors can be equipped to detect fraudulent misrepresentations that can undermine audit quality. Some of the evidence in this study highlights the gap in audit trainees' capacity to understand and probe audit evidence more successfully when on the field. It means that auditors, while undergoing professional qualification training, can develop the MSR concept. This presents a step-change in auditors' competency development.

Furthermore, the programme offers significant benefits for audit firms by providing a more rounded approach to auditors' continuous development programmes that cuts across auditing career hierarchy. It can serve as a valuable tool to structure their continuous

development and certification programmes to ensure a focus on auditors' attainment and renewal of the acquired fraud detection competency. As such, the programme contributes to professional practice by providing the tool to drive curricula reviews for continuous professional development. Consequently, with the educational and continuous training programme, public confidence in the auditing profession can be restored and the reputation of auditors can be preserved for future generations.

7.3.2 Forensic accounting mindset-skillset relationship (MSR) rhombus

The MSR concept is another significant output of this study. The study set out to investigate the skillsets fundamental to improve auditors' performance in uncovering misrepresentations that are suggestive of fraud, and how the skillsets can be incorporated into auditors education and career training. Thus, the initial focus was on forensic accounting skills. However, the insights obtained from the participants of this study revealed the overarching necessity for a mindset shift for auditors to be adept at identifying fraudulent misrepresentations. This unexpected insight informed the addition of the mindset to detect fraud as an additional theme. This led to the creation of the MSR concept, depicted as a rhombus, and displayed in Chapter Six (Figure 6.2).

The MSR concept represents the interconnection of a fraud detection mindset to how the forensic accounting skillset pillars can be deployed to enable auditors to detect fraudulent misrepresentations. In other words, having a mindset to detect fraud sits at the core of how auditors can develop the ability to recognise warning signs of fraudulent practices, and uncover fraudulent misrepresentations. Studies on audits and financial statement fraud tend to address skillsets separate from mindset. This study is the first of its kind to show the relationship between the two. That is, it shows the interdependence of the skillset pillars on a fraud detection mindset and a mindset to detect fraud on the forensic accounting skillsets.

For auditors to effectively interpret and understand the true significance of their clients' financial assumptions, they must cultivate a fraud detection mindset. This means that the status quo disposition of being 'watchdogs' is incapable of moving auditors towards a

change in the quality of audits. In essence, by cultivating a fraud detection mindset, auditors can be equipped to become what a participant calls “better watchdogs”. The forensic accounting MSR concept can effectively bridge the gap in auditors’ competency to recognise and address fraudulent misrepresentations in financial statement audits. It is valuable at various stages of auditors’ professional development, including undergraduates, graduate trainees, apprentices, and seasoned auditors.

The MSR concept is therefore a novel creation of this study with significant contributions to academic literature, education and professional training, and audit practice. It holds significant implications regarding how auditors and the profession’s practitioners respond to the recently updated Standard ISA (UK) 240. Educators and professional institutions should adopt the MSR concept as an underlying concept in auditors’ forensic accounting educational and continuous learning programme.

7.3.3 Forensic accounting skillset pillars and interrelationship mapping

The forensic accounting skillset pillars is a novel creation of this study. This study elevates existing knowledge by classifying the skillsets based on their relationship to a central theme. This led to the creation of the four forensic accounting skillset pillars: questioning, conscientious, intellectual reasoning, and psychological observation skillsets. This is a novel perspective to how forensic accounting skillsets are presented within the existing body of knowledge. Each skillset pillar consists of related skills that rally around the same purpose. For instance, based on the researcher’s understanding of the interviewees’ perceptions, probing, communication, and interviewing skills are classified within the questioning skillset pillar.

Prior studies on forensic accounting skillsets provide basic itemisation of the skills essential to forensic accounting. For instance, DiGabriele (2008) listed skills in the order of significance revealed in their study. Lal Bhasin (2013) followed a similar approach. In fact, other studies on skills requirements in the accounting field merely listed the skills in categories and subclassifications (for instance, Tsiligiris & Bowyer, 2021). Specific to prior studies in forensic accounting, the skills tend to be listed in order of ranking based on essentiality (see Hegazy et al., 2017).

Except for Hegazy et al. (2017), these studies are not focused on the UK context. So, the perception of auditors, educators, forensic accountants, and professional body specialists on the forensic accounting skillsets that are considered fundamental to fraud detection in the UK environment does not appear to have been previously researched. This study has gone further than previous studies by identifying the forensic accounting skillsets considered fundamental within the UK environment.

Moreover, prior studies merely ranking the skills revealed in their research suggest that one skill is more important than another. In classifying the skills around a central purpose or theme, this study considered each skill to be individually essential, collectively complementary, and non-exchangeable. No study has been known to produce such classifications. This makes the forensic accounting skillset pillars a significant contribution to the body of knowledge. Indeed, it is also a significant contribution to audit practice and for education purposes. The skillset pillars may simplify how skills acquisition is viewed. It can also support in identifying curriculum gaps and how training and learning are structured.

Another significant contribution of the skillset pillars is the interrelation of skills within and across pillars. This means that the pillars themselves are interconnected and non-exchangeable. The relationship across pillars led to the forensic accounting skillset interrelationship map (presented in Chapter 6) developed in this study. Again, no previous studies have conceptualised the connections between forensic accounting skillsets.

Evidence in existing literature points to the fact that skills identified as fundamental to forensic accountants are not exclusive to the profession (Tsiligiris & Bowyer, 2021). However, the interrelationship map can support practitioners' understanding of why the current skills examined in auditing professional examinations or lauded in auditing education are insufficient to detect misrepresentations. For instance, possessing questioning skillsets without psychological observation skillsets may undermine auditors understanding of subtle nuances that may indicate untruthfulness when corroborating audit evidence. The interrelationship map adds significant value to extant knowledge, audit practice, and educators.

7.3.4 Holistic solution: MSR comfort orbit to agency diamond actors

Another significant contribution of this study is the development of the forensic accounting MSR comfort orbit around the actors the agency diamond model. This forensic accounting MSR comfort orbit is valuable to prevailing theories in forensic accounting and audit quality research. It symbolises a central and comprehensive solution, where theory meets practice to advance the quality of financial statement audits in real terms. In other words, it embodies the convergence of academic theories and hands-on conceptual application to sustainably elevate audit quality.

The model is of great value to future research. Future research in audit quality and auditing education can apply this model to test the effect of the forensic accounting MSR education and training on audit quality. This can be valuable in validating the renewal element of comfort theory on the agency diamond actors. Also, researchers can explore the impact of the forensic accounting MSR education and professional development training on auditors' cognition of fraudulent misrepresentations post-implementation. The MSR orbit around the agency diamond is an important contribution to extending knowledge in auditing education, audit quality, and forensic accounting research.

Prior to this study, knowledge on a comprehensive and fit-for-purpose educational and training programme was limited. Moreover, there is no known study to have developed a conceptual convergence of forensic accounting mindset-skillsets to theory in this manner. In effect, this contribution holds important value to the academia and auditing professional development trainers. Auditors, educators, professional trainers, and regulators can adopt the forensic accounting MSR comfort orbit around the agency diamond model in scholarly, anti-fraud trainings and audit quality improvement practices.

7.3.5 Integration triangle – curriculum development framework

The integration triangle serves as a curriculum development framework to incorporate the forensic accounting MSR concept into auditors' education, training, and career development programmes. The integration triangle encompasses the modalities to integration, the techniques for training and learning, and the curriculum content for

auditors' forensic accounting mindset-skillsets development. The central agenda of incorporating forensic accounting into auditors' education and continuous training programmes is to equip auditors with fit-for-purpose skillsets and a mindset to detect fraudulent misrepresentations. Thus, the integration framework will be valuable to educators, the profession's institutional bodies, and audit practice training divisions.

Educators involved in curriculum planning for audit related undergraduate courses can utilise the framework to design forensic accounting modules focused on fraud detection. The profession's qualifying examinations are pivotal to audit practice, irrespective of an individual's entry point into the profession. Hence, the profession's institutional bodies (like ICAEW) can evaluate their curricula and embed the modalities, techniques, and curriculum content to communicate the relevance of this inclusion to audit practice. For instance, having clear forensic accounting or anti-fraud terminologies included in professional examination syllabi can set the tone for a mindset shift that can draw auditors' attention.

In addition, the integration triangle can contribute to how audit firms support the continuous development of practising auditors in the area of detecting misrepresentations. It is an original contribution in that it resolves the issue of 'how' to accomplish the upskilling agenda on forensic accounting mindset-skillsets for auditors. The detailed programme delivers on this agenda without overwhelming the legal duties of auditors to the shareholders on their organisations' financial accountability. Nevertheless, it represents a holistic strategy to provide comfort to shareholders, auditors, and other key stakeholders. With this, audit firms can design tailored interventions or trainings in form of reinforcement campaigns or address competency needs to add value to the quality of audits.

7.3.6 Comfort theory in forensic accounting and auditing education studies

The theory of comfort (Kolcaba & Kolcaba, 1991) was first developed in and for nursing related research. However, several auditing studies adopted comfort theory to underpin their research. For instance, Carrington and Catasús (2007), Commerford et al. (2016),

Jenkins et al. (2018), and Sarens et al. (2009). Consequently, this study extends knowledge on the theoretical currency of comfort theory in auditing and forensic accounting research.

Interpreting the study findings through the lens of comfort theory was beneficial in capturing the essence of a comprehensive solution to advance the quality of audits. It informed the sense-making of the skillsets, the curriculum development, and the key concepts created as the study output. Boudiab and Kolcaba (2015) described comfort as a comprehensive approach to addressing the complexities of care from the perspective of patients, their families and nursing care members. As such, comfort theory provided a backdrop for understanding and addressing the comfort needs of the stakeholders featured in the agency diamond model (Fletcher et al., 2021). That is, auditors, regulators, shareholders, and company directors. This led to the theoretical framework model, connecting comfort theory to the agency diamond model. This all-round perspective informed the holistic approach adopted in this study.

The whole essence of the study is geared towards equipping auditors to reshape the narrative on their competence and mindset to uncover misrepresentations in financial statements. Ultimately, improving audit quality is in the interest of all stakeholders within the auditing ecosystem and the wider society. This overarching concern for financial market stability and the role auditors are mandated to play in this regard underpins the need for all parties to be comfortable with auditors being equipped to detect fraud. Thus, this study contributes to knowledge by expanding the adoption of comfort theory in auditing and forensic accounting research fields.

7.3.7 Neo-empiricism in forensic accounting, financial statement fraud, and auditing research

This study extends the reach of neo-empiricism philosophical perspective in forensic accounting, financial statement fraud, and auditing research. Studies in the accounting, auditing and forensic accounting fields appear to be dominated by a positivist philosophical orientation. Adopting a neo-empiricist philosophical perspective responds

to calls for diversification from the mainstream positivist orientation in auditing, forensic accounting, and organisational fraud studies (see Locke & Lowe, 2008). The diversification is a valuable contribution because it provides depth and scope to the predominant breadth of forensic accounting and audit quality research knowledge. This is of particular importance considering that (1) research in forensic accounting mindset and skillsets is still limited, and (2) there is little known about a comprehensive educational programme to address auditors' competency gap in detecting fraudulent misrepresentations.

The reality of financial statement fraud, audit failures and their implication on a nation's financial market stability warrants an objective consideration. Yet, these realities are perceived and experienced by different social actors in diverse contexts. Therefore, it is expedient to understand these social actors' perceptions and proffer a relatable, useful, and sustainable solution to drive a change in audit quality.

A neo-empiricist philosophical orientation provided the platform to explore the subjective views of auditors, educators, forensic accountants, and professional body specialists, while objectively interpreting their perceptions and intersubjectivity. Moreover, an objective interpretation of interviewees' perceptions upholds the tenet of objectivity that defines the accounting profession (Awolowo, 2019). Awolowo (2019) appears to have led the diversification of research in forensic accounting to a neo-empiricist theoretical orientation. This study, therefore, contributes to the diversification by extending Awolowo's (2019) argument that neo-empiricism can lead to knowledge that is objectively derived in forensic accounting research.

7.3.8 Contributions to existing knowledge

Overall, this study makes significant contributions to existing body of knowledge. There is sparse research undertaken on the need for the integration of forensic accounting skillsets and mindset in auditors' education and continuous training as a solution to audit failures in the UK. Several studies have focused more broadly on identifying forensic accounting skills (for instance, DiGabriele, 2008; Lal Bhasin, 2013) or techniques (see Goh et al., 2021; Rezaee & Crumbley, 2007). Some others have examined the role of

auditors' mindset on their performance (see Griffith et al., 2015; Mintchik et al., 2021). Several studies have examined forensic accounting education (for instance, Carpenter et al., 2011; Hegazy et al., 2017; Ramamoorti, 2008). Also, studies exist on how forensic experts participate as part of audit teams (for instance, Brazel et al., 2010; Jenkins et al., 2018).

These studies have investigated aspects of the topic area, but as single constructs. Furthermore, a significant number of these studies are situated beyond the context of the UK. No known empirical study that has explored how forensic accounting skillsets and mindset can be incorporated into auditors' education to enhance audit quality in the UK. The closest work on forensic accounting skills was Awolowo's (2019) study, where the author proposed the forensic accounting system as a solution to minimise financial statement fraud. Therefore, this study makes valuable contributions to existing literature on forensic accounting skillsets and mindset, audit quality, auditors' education, and financial statement fraud.

Additionally, the study fills a gap in the literature on the blending of forensic accounting skillsets and mindset into statutory audit programmes and auditors' education and continuous professional training (see Chan & Song, 2021; Hamilton & Smith, 2021; Kramer et al., 2017; Lee & Welker, 2019). Further, it responds to the educational aspect of Awolowo's (2019) forensic accounting system. Awolowo's (2019) work has highlighted the need for forensic accounting in accounting education for auditors to acquire knowledge of fraud warning signs to detect financial statement fraud. However, the author did not elaborate on how the integration can be achieved in auditors' education and training. The findings of this study make a significant addition to Awolowo's (2019) study, contributing to the body of knowledge in auditing education.

In all, auditors, regulators, professional bodies, educators, and other practitioners in the audit ecosystem have a role to play in ensuring these contributions become a part of audit practice in the UK. The recent announcement of the UK government going forward with establishing a new regulatory authority to replace the FRC (FRC, 2024) makes these contributions even more relevant as a reset for audit quality in practice. Ultimately, these contributions can be instrumental in reshaping the narrative on auditors' role and their

relevance to financial market stability in the interest of shareholders and, more generally, the market economy. Figure 7.3 illustrates a snapshot of the contributions related to theory, practice, and methodology.

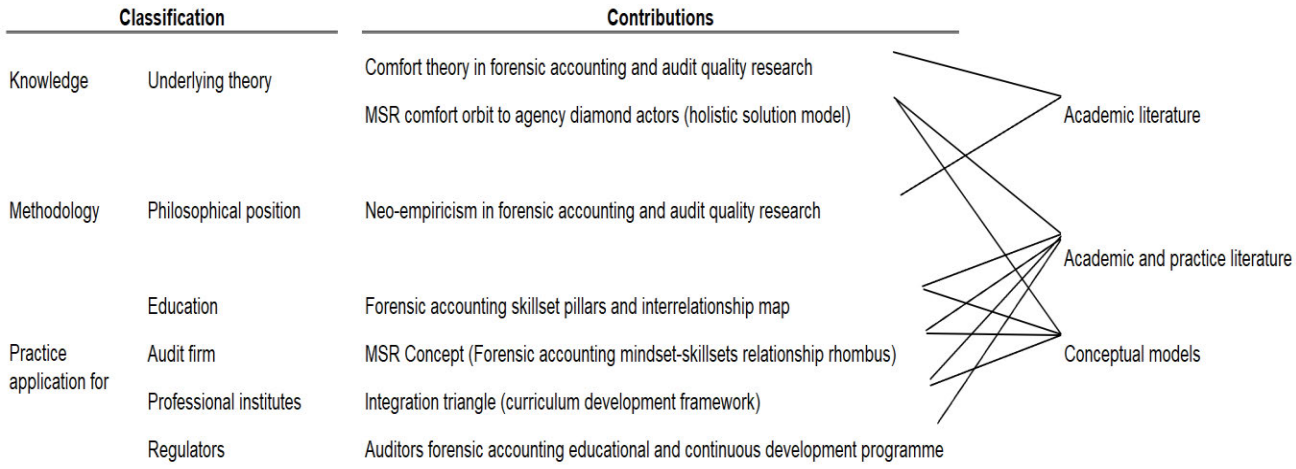


Figure 7.3: Contribution mapping
Source: Author's output

7.4 Limitations

This study adopted a qualitative design using semi-structured interviews to obtain insights from educators, forensic accountants, professional body specialists, and external auditors. The results have been analysed according to the researcher's objective interpretations. While the depth and richness of the interviewees' perceptions have been invaluable to the findings and contributions of the study, replicating these results may be challenging in other contexts, if not impossible. To mitigate this possibility, a comprehensive description of the methodological decisions and procedures followed to collect data, and the analytical steps have been detailed in this thesis. Including contextual information about the participants facilitates transferability in the absence of exact replicability. Further, to strengthen the credibility of the findings, evidence of the participants' words has been presented in this thesis.

Fifteen participants were interviewed in this study. Other researchers may question the sample size on the grounds of generalisability or robustness. However, the researcher

achieved data saturation with the interviewed participants. Moreover, the number of participants had no effect on the theoretical developments of the study due to the rich descriptions provided by the participants.

7.5 Areas for further research

To extend this study, future research can adopt a positivist theoretical perspective, adopting a quantitative design to test the applicability of comfort theory to the forensic accounting MSR concept. A quantitative design can also be adopted to test the interrelationship of the forensic accounting skillsets pillars and their effectiveness in complementing a fraud detection mindset to improve audit quality.

This study has been conducted in the UK. Future studies can look at another region. Future researchers can adopt the same research design, through a neo-empiricist philosophical assumption, to explore the educational and professional development training programme created in this study to develop comparative fraud-related curricula for auditors to improve their fraud detection competency. This study has not examined professional scepticism as a construct. Future research can deconstruct professional scepticism to identify the gaps in the construct and the implications to the current state of audit quality.

In conclusion, this study makes profound contributions, offering actionable solutions that can impact audit practice. The forensic accounting MSR concept, combined with and educational and continuous professional training programmes, can provide a comprehensive framework that significantly mitigate audit failures. This programme not only addresses auditors' competency gaps in fraud detection but also provides holistic comfort to stakeholders in the audit value chain. The adoption of the forensic accounting educational and professional training programme will pave the way for a more robust and reliable audit process, ensuring financial statements are free from material misstatement. This is a pivotal step in re-establishing trust in the audit profession and its relevance in the financial reporting system for future generations.

7.6 Researcher's reflexivity

In conducting this study, the researcher's professional background as a controller and compliance manager played a pivotal role in shaping the research process. This experience provided a robust foundation for understanding the contextual realities faced by the study's interviewees. The researcher's familiarity with the field enabled me to connect meaningfully with participants' perspectives, enhancing the depth and relevance of the data collected.

The researcher's professional journey has been marked by considerable involvement in fraud investigations, which sharpened her ability to critically analyse and reflect on professional practice. These experiences not only fuelled the motivation to pursue this research but also informed the appropriateness of a qualitative methodology grounded in objectivity and contextual interpretation. Notably, the emergence of "mindset" as a core component of forensic accounting competence resonated with the researcher's own professional observations and framed a key theme in the study.

By acknowledging this positionality, the researcher recognise that their perspectives inevitably influenced the research. However, this reflexive awareness contributed to a more nuanced and transparent analysis of the data, thereby strengthening the credibility and insightfulness of the findings.

A master's programme in forensic accounting significantly broadened the researcher's understanding of the pervasive nature of corporate accounting scandals. It revealed the persistent deficiencies in auditors' competency to detect financial statement fraud and underscored the damaging implications of poor audit quality on the profession's integrity. During the master's programme, the researcher investigated the influence of internal auditors' experience on their fraud detection ability. The findings were eye-opening, highlighting the critical role that forensic accounting skillsets and mindset education can play in the development of audit professionals.

This trajectory motivated the researcher's study into how auditors can be more effectively equipped to identify fraudulent misrepresentations in financial statements. Having the opportunity to evaluate factors to enhance both internal and external auditors'

effectiveness in fraud detection provides a comprehensive dimension to the solutions proposed in this study. The integration program is essential for the holistic development of accounting professionals and, more broadly, to safeguarding the stability of financial markets.

Over the past three and a half years, this research journey has been one of resilience, self-discovery, and intellectual growth. The insights gained have renewed the researcher's confidence that meaningful change is achievable both in professional practice and in the pedagogical landscape of forensic accounting and audit reform. They support the repositioning of accounting and auditing education to confront the persistent challenges of audit failure.

References

Abdelhak, E. E., Elamer, A. A., AlHares, A., & McLaughlin, C. (2019). Auditors' ethical reasoning in developing countries: the case of Egypt. *Humanomics, 35*(4), 558-583. doi:https://doi.org/10.1108/IJOES-02-2019-0041

Abdollahi, A., Rezaei Pitenoei, Y., & Safari Gerayli, M. (2020). Auditor's report, auditor's size and value relevance of accounting information. *Journal of Applied Accounting Research, 21*(4), 721-739. Retrieved from https://doi.org/10.1108/JAAR-11-2019-0153

ACFE. (2024). *Occupational Fraud 2024: A Report to the Nations*. Association of Certified Fraud Examiners, Inc. Retrieved from https://www.acfe.com/-/media/files/acfe/pdfs/rttn/2024/2024-report-to-the-nations.pdf

Adu, P. (2023, April 20). NVivo for Beginners: How to Code Qualitative Data with Ease. Retrieved from https://www.youtube.com/watch?v=fI-kSSHjWxM&t=3s

Aguinis, H., & Solarino, A. M. (2019). Transparency and replicability in qualitative research: The case of interviews with elite informants. *Strategic Management Journal, 40*(8), 1291-1315. Retrieved from https://doi.org/10.1002/smj.3015

Ahmad, M., & Wilkins, S. (2024). Purposive sampling in qualitative research: a framework for the entire journey. *Quality & Quantity*. Retrieved from https://doi.org/10.1007/s11135-024-02022-5

Alam, M. K. (2021). A systematic qualitative case study: questions, data collection, NVivo analysis and saturation. *Qualitative research in organizations and management, 16*(1), 1-31. doi:https://doi.org/10.1108/QROM-09-2019-1825

Alareeni, B. A. (2019). The associations between audit firm attributes and audit quality-specific indicators: A meta-analysis. *Managerial Auditing Journal, 34*(1), 6-43. Retrieved from https://doi.org/10.1108/MAJ-05-2017-1559

Alberti, S. (2021, August 26). *Audit reform urgently needed to remedy "glacial" progress*. Retrieved from AccountancyAge: https://www.accountancyage.com/2021/08/26/audit-reform-urgently-needed-to-remedy-glacial-progress/

Alshurafat, H., Beattie, C., Jones, G., & Sands, J. (2020). Perceptions of the usefulness of various teaching methods in forensic accounting education. *Accounting education (London, England), 29*(2), 177-204. Retrieved from https://doi.org/10.1080/09639284.2020.1719425

Aobdia, D. (2019). Do practitioner assessments agree with academic proxies for audit quality? Evidence from PCAOB and internal inspections. *Journal of Accounting & Economics, 67*(1), 144-174. doi:https://doi.org/10.1016/j.jacceco.2018.09.001

Arseneault, R., Deal, N. M., & Helms Mills, J. (2021). Accounting for management and organizational history: strategies and conceptions. *Journal of management history, 27*(2), 288-308. doi:10.1108/JMH-08-2020-0049

Asare, S. K., & Wright, A. M. (2018). Field evidence about auditors' experiences in consulting with forensic specialists. *Behavioral Research in Accounting, 30*(1), 1-25. Retrieved from https://doi.org/10.2308/bria-51787

Austin, A. A., Hammersley, J. S., & Ricci, M. A. (2020). Improving Auditors' Consideration of Evidence Contradicting Management's Estimate Assumptions. *Contemporary accounting research, 37*(2), 696-716. Retrieved from https://doi.org/10.1111/1911-3846.12540

Aven, B., Morse, L., & Iorio, A. (2021). The valley of trust: The effect of relational strength on monitoring quality. *Organizational Behavior and Human Decision Processes, 166*, 179-193. Retrieved from https://doi.org/10.1016/j.obhdp.2019.07.004

Awolowo, I. (2019). Financial Statement Fraud: The Need for a Paradigm Shift to Forensic Accounting. doi:https://doi.org/10.7190/shu-thesis-00230

Baker, S. E., & Edwards, R. (2012). *How many qualitative interviews is enough?* National Center for Research Methods. Retrieved June 20, 2021, from http://eprints.ncrm.ac.uk/2273/4/how_many_interviews.pdf

Ball, R. (2009). Market and Political/Regulatory Perspectives on the Recent Accounting Scandals. *Journal of Accounting Research, 47*(2), 277-323. doi:https://doi.org/10.1111/j.1475-679X.2009.00325.x

Bamber, E. M., & Iyer, V. M. (2007). Auditors' Identification with Their Clients and Its Effect on Auditors' Objectivity. *Auditing: A Journal of Practice and Theory, 26*(2), 1-24. doi:https://doi.org/10.2308/aud.2007.26.2.1

Bazeley, P. (2020). *Qualitative data analysis. 14 : Practical strategies* (2nd ed.). SAGE Publications.

Beattie, V., Fearnley, S., & Hines, T. (2013). Perceptions of factors affecting audit quality in the post-SOX UK regulatory environment. *Accounting and Business Research, 43*(1), 56-81. doi:https://doi.org/10.1080/00014788.2012.703079

Berglund, N. R., Eshleman, J. D., & Guo, P. (2018). Auditor Size and Going Concern Reporting. *Auditing : a Journal of Practice and Theory, 37*(2), 1-25. doi:https://doi.org/10.2308/ajpt-51786

Bergner, J., Marquardt, B. B., & Mohapatra, P. (2020). The auditor reputation cycle: A synthesis of the literature. *International Journal of Auditing, 24*(2), 292-319. Retrieved from https://doi.org/10.1111/ijau.12193

Berndt, A. E. (2020). Sampling Methods. *Journal of human lactation, 36*(2), 224-226. Retrieved from https://doi.org/10.1177/0890334420906850

Blaikie, N. W. (2007). *Approaches to social enquiry : advancing knowledge* (2nd ed.). Cambridge: Polity.

Blaikie, N., & Priest, J. (2019). *Designing social research : the logic of anticipation*. Polity Press. Retrieved April 12, 2022

Boone, J. P., Khurana, I. K., & Raman, K. K. (2008). Audit Firm Tenure and the Equity Risk Premium. *Journal of Accounting, Auditing and Finance, 23*(1), 115-140. doi:https://doi.org/10.1177/0148558X0802300107

Boritz, J. E., Kochetova, N. V., Robinson, L. A., & Wong, C. (2020). Auditors' and specialists' views about the use of specialists during an audit. *Behavioral Research in Accounting, 32*(2), 15-40. Retrieved from https://doi.org/10.2308/BRIA-19-064

Boudiab, L. D., & Kolcaba, K. (2015). Comfort Theory: Unraveling the Complexities of Veterans' Health Care Needs. *Advances in nursing science, 38*(4), 270-278. Retrieved from https://doi.org/10.1097/ANS.0000000000000089

Bratten, B., Causholli, M., & Omer, T. C. (2019). Audit Firm Tenure, Bank Complexity, and Financial Reporting Quality. *Contemporary Accounting Research, 36*(1), 295-325. doi:https://doi.org/10.1111/1911-3846.12427

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative research in psychology, 3*(2), 77-101. doi:10.1191/1478088706qp063oa

Braun, V., & Clarke, V. (2021). To saturate or not to saturate? Questioning data saturation as a useful concept for thematic analysis and sample-size rationales. *Qualitative Research in Sport, Exercise and Health, 13*(2), 201-216. doi:10.1080/2159676X.2019.1704846

Brewster, B. E., Butler, J. B., & Watkins, A. L. (2019). Eliminating biases that jeopardize audit quality. *Journal of Accountancy, 228*(2), 42-47.

Brinkmann, S., & Kvale, S. (2018). *Doing Interviews* (2nd ed.). SAGE Publications Ltd. doi:https://dx.doi.org/10.4135/9781529716665

Brivot, M., Roussy, M., & Mayer, M. (2018). Conventions of Audit Quality: The Perspective of Public and Private Company Audit Partners. *Auditing: A Journal of Practice and Theory, 37*(2), 51-71. doi:https://doi.org/10.2308/ajpt-51772

Broberg, P., Tagesson, T., Argento, D., Gyllengahm, N., & Mårtensson, O. (2017). Explaining the influence of time budget pressure on audit quality in Sweden. *The œJournal of management and governance, 21*, 331-350. Retrieved from https://doi.org/10.1007/s10997-016-9346-4

Brody, R. G., Gupta, G., & Salter, S. B. (2020). The influence of emotional intelligence on auditor performance. *Accounting and Management Information Systems, 19*(3), 543-565. Retrieved from https://doi.org/10.24818/jamis.2020.03005

Brook, P. (2023). *Company audits: issues and proposed reforms (8385).* House of Commons Library Research Briefing. Retrieved December 19, 2023, from https://researchbriefings.files.parliament.uk/documents/CBP-8385/CBP-8385.pdf

Brooks, L. Z., Gill, S., Wong-On-Wong, B., & Yu, M. D. (2022). Does audit firm tenure enhance firm value? Closing the expectation gap through corporate social responsibility. *Managerial*

Auditing Journal, 37(8), 1113-1145. Retrieved from https://doi.org/10.1108/MAJ-11-2020-2902

Brown, V. L., Gissel, J. L., & Gordon Neely, D. (2016). Audit quality indicators: perceptions of junior-level auditors. *Managerial Auditing Journal, 31*(8/9), 949-980. doi: https://doi.org/10.1108/MAJ-01-2016-1300

Brydon, D. (2019). *Report of the Independent Review into the Quality and Effectiveness of Audit*. London. Retrieved June 1, 2021, from https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/852960/brydon-review-final-report.pdf

Buchanan, J. L., & Piercey, D. M. (2021). How Simple Changes to Language and Tick Marks Can Curtail the Ghost Ticking of Audit Procedures. *Auditing : a journal of practice and theory, 40*(4), 53-77. Retrieved from https://doi.org/10.2308/AJPT-19-032

Cahan, S. F., Chen, C., & Wang, R. (2021). Does Media Exposure Affect Financial Reporting Quality Through Auditors? *Journal of Accounting, Auditing and Finance, 36*(4), 750-775. Retrieved from https://doi.org/10.1177/0148558X20936083

Carcello, J. V., & Nagy, A. (2004). Audit Firm Tenure and Fraudulent Financial Reporting. *Auditing: Sarasota, 23*(2), 55-69. doi:https://doi.org/10.2308/aud.2004.23.2.55

Carcello, J. V., Hermanson, D. R., Neal, T. L., & Riley Jr, R. A. (2002). Board Characteristics and Audit Fees. *Contemporary Accounting Research, 19*(3), 365-384. doi:https://doi.org/10.1506/CHWK-GMQ0-MLKE-K03V

Carlisle, M., Gimbar, C., & Jenkins, J. G. (2023). Auditor-Client Interactions—An Exploration of Power Dynamics during Audit Evidence Collection. *Auditing : a journal of practice and theory, 42*(1), 27-51. Retrieved from https://doi.org/10.2308/AJPT-2020-130

Carpenter, T. D., Durtschi, C., & Gaynor, L. M. (2011). The Incremental Benefits of a Forensic Accounting Course on Skepticism and Fraud-Related Judgments. *Issues in Accounting Education, 26*(1), 1-21. Retrieved from https://doi.org/10.2308/iace.2011.26.1.1

Carrington, T., & Catasús, B. (2007). Auditing Stories about Discomfort: Becoming Comfortable with Comfort Theory. *European Accounting Review, 16*(1), 35-58. doi:10.1080/09638180701265846

Cassell, C. A., Giroux, G., Myers, L. A., & Omer, T. C. (2013). The Emergence of Second-Tier Auditors in the US: Evidence from Investor Perceptions of Financial Reporting Credibility. *Journal of Business Finance & Accounting, 40*(3-4), 350-372. doi:https://doi.org/10.1111/jbfa.12016

Chan, S. H., & Song, Q. (2021). Insight into the process of responsibility judgment of an audit failure. *International journal of accounting and information management, 29*(1), 67-90. doi:https://doi.org/10.1108/IJAIM-06-2020-0083

Chandler, R., & Edwards, J. R. (1996). Recurring issues in auditing: back to the future? *Accounting, Auditing & Accountability, 9*(2), 4-29. doi:10.1108/09513579610116330

Chaney, P. K., & Philipich, K. L. (2002). Shredded Reputation: The Cost of Audit Failure. *Journal of Accounting Research, 40*(4), 1221-1245. doi:https://doi.org/10.1111/1475-679X.00087

Chen, H., Feng, Y., Kou, A., & Liu, S. (2024). Does audit quality affect auditors' career development? Evidence from Chinese audit firms' demise. *Managerial Auditing Journal, 39*(4), 419-441. doi:10.1108/MAJ-11-2023-4134

Chen, J. Z., Elemes, A., & Lobo, G. J. (2023). David versus Goliath: The Relation between Auditor Size and Audit Quality for U.K. Private Firms. *The European Accounting Review, 32*(2), 447-480. Retrieved from https://doi.org/10.1080/09638180.2021.1986090

Cheynel, E., & Zhou, F. S. (2024). Auditor Tenure and Misreporting: Evidence from a Dynamic Oligopoly Game. *Management Science, 70*(8), 5557-5585. Retrieved from https://doi.org/10.1287/mnsc.2023.4944

Chiang, C., Wells, P. K., & Xu, G. (2021). How does experiential learning encourage active learning in auditing education? *Journal of Accounting Education, 54*, 100713-. Retrieved from https://doi.org/10.1016/j.jaccedu.2020.100713

Chong, G. (2013). Detecting Fraud: What Are Auditors' Responsibilities? *The Journal of Corporate Accounting & Finance, 24*(2), 47-53. doi: https://doi.org/10.1002/jcaf.21829

Christensen, B. E., Glover, S. M., Omer, T. C., & Shelley, M. K. (2016). Understanding Audit Quality:Insights from Audit Professionals and Investors*. *Contemporary Accounting Research, 33*(4), 1648–1684. doi:10.1111/1911-3846.12212

Chua, W. F. (2019). Radical developments in accounting thought? Reflections on positivism, the impact of rankings and research diversity. *Behavioral Research in Accounting, 31*(1), 3-20. Retrieved from https://doi.org/10.2308/bria-52377

Chui, L., Curtis, M. B., & Pike, B. J. (2022). How Does an Audit or a Forensic Perspective Influence Auditors' Fraud-Risk Assessment and Subsequent Risk Response? *Auditing : A Journal of Practice and Theory, 41*(4), 57-83. Retrieved from https://doi.org/10.2308/AJPT-19-125

Clark, T., Foster, L., Sloan, L., & Bryman, A. (2021). *Bryman's social research methods*. (Sixth ed.). Oxford: Oxford University Press.

Coffee, J. C. (2019). Why do auditors fail? What might work? What won't? *Accounting and Business Research, 49*(5), 540-561. doi:10.1080/00014788.2019.1611715

Commerford, B. P., Hermanson, D. R., Houston, R. W., & Peters, M. F. (2016). Real Earnings Management: A Threat to Auditor Comfort? *Auditing : a Journal of Practice and Theory, 35*(4), 39-56. Retrieved from https://doi.org/10.2308/ajpt-51405

Coram, P., Ng, J., & Woodliff, D. (2003). A survey of time budget pressure and reduced audit quality among Australian auditors. *Australian Accounting Review, 13*(1), 38-44.

Corten, M., Steijvers, T., & Lybaert, N. (2018). Auditor choice in private firms: a stakeholders perspective. *Managerial Auditing Journal, 33*(2), 146-170. Retrieved from https://doi.org/10.1108/MAJ-03-2017-1535

Coule, T. (2013). Theories of knowledge and focus groups in organization and management research. *Qualitative Research in Organizations and Management: An International Journal, 8*(2), 148-162. doi:10.1108/QROM-09-2011-1006

Cressey, D. R. (1950). The Criminal Violation of Financial Trust. *American Sociological Review, 15*(6), 738-743. Retrieved June 7, 2021, from https://www-jstor-org.hallam.idm.oclc.org/stable/2086606?sid=primo&origin=crossref&seq=1#metadata_info_tab_contents

Daoust, L., & Malsch, B. (2020). When the Client Is a Former Auditor: Auditees' Expert Knowledge and Social Capital as Threats to Staff Auditors' Operational Independence. *Contemporary accounting research, 37*(3), 1333-1369. Retrieved from https://doi.org/10.1111/1911-3846.12582

Darabi, F. (2016). *Investigating a University Business School and Industry Collaboration: A General Analytical Inductive Qualitative Research Case*. SAGE Publications. doi:https://dx.doi.org/10.4135/97814462730501559595958

Dart, E., & Chandler, R. (2013). Client employment of previous auditors: shareholders' views on auditor independence. *Accounting and Business Research, 43*(3), 205-224. doi:https://doi.org/10.1080/00014788.2012.707968

Davis, C., Farrell, R., & Ogilby, S. (2009). *Characteristics and Skills of the Forensic Accountant*. AICPA | FVS Section. Retrieved November 2, 2024, from http://thefraudgroupllc.com/tools/library/documents/forensic.pdf

Deakin, H., & Wakefield, K. (2014). Skype interviewing: reflections of two PhD researchers. *Qualitative research : QR, 14*(5), 603-616. doi:https://doi.org/10.1177/1468794113488126

DeAngelo, L. E. (1981). Auditor size and audit quality. *Journal of Accounting & Economics, 3*(3), 183-199. doi:https://doi.org/10.1016/0165-4101(81)90002-1

Dechow, P. M., Ge, W., Larson, C. R., & Sloan, R. G. (2011). Predicting Material Accounting Misstatements. *Contemporary accounting research, 28*(1), 17-82. doi:10.1111/j.1911-3846.2010.01041.x

DeFond, M., & Zhang, J. (2014). A review of archival auditing research. *Journal of Accounting & Economics, 58*(2-3), 275-326. doi:https://doi.org/10.1016/j.jacceco.2014.09.002

DeFond, M., Li, Z., Wong, T., & Wu, K. (2024). Competence vs. Independence: Auditors' connections with members of their clients' business community. *Journal of Accounting and Economics, 78*(1), 101702. Retrieved from https://doi.org/10.1016/j.jacceco.2024.101702

Dellaportas, S., & Hassall, T. (2013). Experiential learning in accounting education: A prison visit. *The British Accounting Review, 45*(1), 24-36. Retrieved from https://doi.org/10.1016/j.bar.2012.12.005

Denzin, N. K., & Lincoln, Y. S. (Eds.). (2018). *The SAGE Handbook of Qualitative Research* (Fifth ed.). California: Sage.

Department for Business, Energy & Industrial Strategy (BEIS). (2021). *Restoring trust in audit and corporate governance*. OGL. Retrieved from https://www.gov.uk/government/publications/restoring-trust-in-audit-and-corporate-governance

Detzen, D., & Gold, A. (2021). The different shades of audit quality: A review of the academic literature. *MAB ('s-Gravenhage. Online), 95*(1/2), 5-15. doi:https://doi.org/10.5117/mab.95.60608

Devaya, M. (2025, February 10). *KPMG hit with lion's share of accounting-related enforcement in UK*. Retrieved from Global Investigations Review (GIR): https://globalinvestigationsreview.com/article/kpmg-hit-lions-share-of-accounting-related-enforcement-in-uk

DiGabriele, J. (2008). An Empirical Investigation of the Relevant Skills of Forensic Accountants. *Journal of Education for Business, 83*(6), 331-338. Retrieved from https://doi.org/10.3200/JOEB.83.6.331-338

DiGabriele, J. A., & Huber, W. D. (2015). Topics and Methods in Forensic Accounting Research. *Accounting Research Journal, 28*(1), 98-114. doi:10.1108/ARJ-08-2014-0071

Dirsmith, M. W., Covaleski, M. A., & Samuel, S. (2015). On Being Professional in the 21st Century: An Empirically Informed Essay. *Auditing : a journal of practice and theory, 34*(2), 167-200. Retrieved from https://doi.org/10.2308/ajpt-50698

Dodge, J. (2015). Indication and inference: reflections on the challenge of mixing paradigms in the Narrative Policy Framework. *Critical Policy Studies, 9*(3), 361-367. doi:https://doi.org/10.1080/19460171.2015.1075735

Donelson, D. C., Kartapanis, A., McInnis, J., & Yust, C. G. (2021). Measuring Accounting Fraud and Irregularities Using Public and Private Enforcement. *The Accounting review, 96*(6), 183-213. Retrieved from https://doi.org/10.2308/TAR-2018-0592

Dove, G. (2010). An additional heterogeneity hypothesis. *The Behavioral and Brain Sciences, 33*(2-3), 209-210. Retrieved from https://doi.org/10.1017/S0140525X10000348

Doxey, M. M., Hatfield, R. C., Rippy, J. A., & Peel, R. K. (2020). Asymmetric Investor Materiality and the Effects of Disclosure. *Auditing: A Journal of Practice and Theory, 39*(2), 27-50. doi: https://doi.org/10.2308/ajpt-18-032

Duberley, J., Johnson, P., & Cassell, C. (2012). Philosophies Underpinning Qualitative Research. In G. Symon, & C. Cassell, *Qualitative organizational research core methods and current challenges* (pp. 15-34). SAGE Publications.

Dunne, N. J., Brennan, N. M., & Kirwan, C. E. (2021). Impression management and Big Four auditors: Scrutiny at a public inquiry. *Accounting, Organizations and Society, 88*, 101170. doi: https://doi.org/10.1016/j.aos.2020.101170

Dworkin, S. L. (2012). Sample Size Policy for Qualitative Studies using In-Depth Interviews. *Archives of Sexual Behaviour, 41*, 319-1320. doi:10.1007/s10508-012-0016-6

Dwyer, K.-A. M., Brennan, N. M., & Kirwan, C. E. (2024). Disclosure of auditor risk assessments in expanded audit reports. *Journal of Applied Accounting Research, 25*(1), 1-23. Retrieved from https://doi.org/10.1108/JAAR-07-2022-0181

Edgley, C., Jones, M. J., & Atkins, J. (2015). The adoption of the materiality concept in social and environmental reporting assurance: A field study approach. *The British Accounting Review, 47*(1), 1-18. doi:https://doi.org/10.1016/j.bar.2014.11.001

Eilifsen, A., & Messier, W. F. (2015). Materiality Guidance of the Major Public Accounting Firms. *Auditing: A Journal of Practice and Theory, 34*(2), 3-26. doi:https://doi.org/10.2308/ajpt-50882

Elsayed, N., & Hassan, M. K. (2024). Audit simulation and learning styles: Enhancing students' experiential learning and performance at a MENA university. *International journal of auditing*. Retrieved from https://doi.org/10.1111/ijau.12345

Farber, D. B. (2005). Restoring Trust after Fraud: Does Corporate Governance Matter? *The Accounting Review, 80*(2), 539-561. doi:https://doi.org/10.2139/ssrn.485403

Feng, N. C. (2020). Individual auditor characteristics and audit quality: evidence from nonprofits in the US. *Journal of public budgeting, accounting & financial management, 32*(4), 551-575. Retrieved from https://doi.org/10.1108/JPBAFM-10-2019-0157

Financial Reporting Council (FRC). (2008). *The Audit Quality Framework (February 2008).* London: The Financial Reporting Council 2008. Retrieved from https://www.frc.org.uk/getattachment/46582304-32b1-43bb-b614-90318b295f28/The-Audit-Quality-Framework-Feb-2008.pdf

Financial Reporting Council (FRC). (2022). *ISA (UK) 320 (Revised June 2016): Materiality in planning and performing an audit.* London: The Financial Reporting Council. Retrieved from https://www.frc.org.uk/getattachment/163782e0-f168-4992-9cd3-c22dee7ce22f/ISA-(UK)-320_Revised-June-2016_Updated-May-2022.pdf

Fletcher, N., Awolowo, F., & Garrow, N. (2021). Fraud Detection and Prevention: A Review of the Latest Developments in U.K. Audit. *Journal of Modern Accounting and Auditing, 17*(1), 1-13. doi:https://doi.org/10.17265/1548-6583/2021.01.001

Foley, S. (2024, May 6). *Why don't auditors find fraud?* Retrieved from Financial Times: https://www.ft.com/content/9f16dc90-ea79-4abf-92f9-2391b2b73ced

Francis, J. (2004). What do we know about audit quality? *The British Accounting Review, 36*(4), 345-368. doi:10.1016/j.bar.2004.09.003

Francis, J. R., Michas, P. N., & Yu, M. D. (2013). Office Size of Big 4 Auditors and Client Restatements. *Contemporary Accounting Research, 30*(4), 1626-1661. doi:ttps://doi.org/10.1111/1911-3846.12011

FRC. (2021, July 14). *Challenger firms increase their share of the FTSE 250 audit market*. Retrieved from Financial Reporting Council: https://www.frc.org.uk/news/july-2021/challenger-firms-increase-their-share-of-the-ftse

FRC. (2021, July 23). *FRC Annual Audit Quality Inspection Results 2020/21*. Retrieved from Financial Reporting Council: https://www.frc.org.uk/news/july-2021/frc-annual-audit-quality-inspection-results-2020-2

FRC. (2023). *Audit market and competition developments – a snapshot.* Financial Reporting Council. Retrieved October 3, 2024, from https://media.frc.org.uk/documents/Audit_market_and_competition_developments_-_a_snapshot.pdf

FRC. (2024). *Annual Enforcement Review 2024.* London: The Financial Reporting Council Limited. Retrieved from https://media.frc.org.uk/documents/Annual_Enforcement_Review_2024_PrjyJ48.pdf

FRC. (2024). *Annual Review of Audit Quality.* London: Financial Reporting Council Limited. Retrieved from https://media.frc.org.uk/documents/Annual_Review_of_Audit_Quality_2024_7yhxTsi.pdf

FRC. (2024, March 22). *Audit Quality Review (overview)*. Retrieved from Financial Reporting Council: https://www.frc.org.uk/library/supervision/audit-quality-review/audit-quality-review-overview/

Fredriksson, A., Kiran, A., & Niemi, L. (2020). Reputation Capital of Directorships and Demand for Audit Quality. *The European Accounting Review, 29*(5), 901-926. Retrieved from https://doi.org/10.1080/09638180.2020.1724550

Fuerman, R. D., & Kraten, M. (2009). The Big 4 Audit Report: Should the Public Perceive It as a Label of Quality? *Accounting and the Public Interest, 9*(1), 148-165. doi:https://doi.org/10.2308/api.2009.9.1.148

Gabriel, Y. (2015). Reflexivity and beyond – a plea for imagination in qualitative research methodology. *Qualitative research in organizations and management, 10*(4), 332-336. doi:https://doi.org/10.1108/QROM-07-2015-1305

Gaspar, J. P., Methasani, R., & Schweitzer, M. E. (2022). Emotional Intelligence and Deception: A Theoretical Model and Propositions. *Journal of Business Ethics, 177*(3), 567-584. Retrieved from https://doi.org/10.1007/s10551-021-04738-y

Gaynor, L. M., Kelton, A. S., Mercer, M., & Yohn, T. L. (2016). Understanding the Relation between Financial Reporting Quality and Audit Quality. *Auditing: A Journal of Practice and Theory, 35*(4), 1-22. doi:https://doi.org/10.2308/ajpt-51453

Geddes, A., Parker, C., & Scott, S. (2018). When the snowball fails to roll and the use of 'horizontal' networking in qualitative social research. *International Journal of Social Research Methodology, 21*(3), 347-358. Retrieved from https://doi.org/10.1080/13645579.2017.1406219

Ghafoor, A., Zainudin, R., & Mahdzan, N. S. (2018). Factors Eliciting Corporate Fraud in Emerging Markets: Case of Firms Subject to Enforcement Actions in Malaysia. *Journal of Business Ethics, 160*(2), 587-608. doi:https://doi.org/10.1007/s10551-018-3877-3

Ghafran, C., & O'Sullivan, N. (2017). The impact of audit committee expertise on audit quality: Evidence from UK audit fees. *The British Accounting Review, 49*(6), 578-593. doi:https://doi.org/10.1016/j.bar.2017.09.008

Gill, J., Johnson, P., & Clark, M. (2010). *Research methods for managers* (4th ed.). Sage.

Gioia, D. A., Corley, K. G., & Hamilton, A. L. (2013). Seeking Qualitative Rigor in Inductive Research: Notes on the Gioia Methodology. *Organizational research methods, 16*(1), 15-31. doi:https://doi.org/10.1177/1094428112452151

Goddard, A. R., & Masters, C. (2000). Audit committees, Cadbury Code and audit fees: an empirical analysis of UK companies. *Managerial Auditing Journal, 15*(7), 358-371. doi:https://doi.org/10.1108/02686900010344638

Goodwin-Stewart, J., & Kent, P. (2006). Relation between external audit fees, audit committee characteristics and internal audit. *Accounting and Finance (Parkville), 46*(3), 387-404. doi:https://doi.org/10.1111/j.1467-629X.2006.00174.x

Griffith, E. E., Hammersley, J. S., Kadous, K., & Young, D. (2015). Auditor Mindsets and Audits of Complex Estimates. *Journal of Accounting Research, 53*(1), 49-77. doi:10.1111/1475-679X.12066

Griffith, E. E., Kadous, K., & Young, D. (2021). Improving Complex Audit Judgments: A Framework and Evidence. *Contemporary Accounting Research, 38*(3), 2071-2104. Retrieved from https://doi.org/10.1111/1911-3846.12658

Guan, Y., Su, L. (., Wu, D., & Yang, Z. (2016). Do school ties between auditors and client executives influence audit outcomes? *Journal of Accounting & Economics, 61*(2-3), 506-525. Retrieved from https://doi.org/10.1016/j.jacceco.2015.09.003

Guba, E. G. (1981). Criteria for assessing the trustworthiness of naturalistic inquiries. *Educational Communication & Technology, 29*(2), 75-91. Retrieved from https://doi.org/10.1007/BF02766777

Guénin-Paracini, H., Malsch, B., & Paillé, A. M. (2014). Fear and risk in the audit process. *Accounting, Organizations and Society, 39*(4), 264-288. doi:https://doi.org/10.1016/j.aos.2014.02.001

Gul, F. A., Fung, S. Y., & Jaggi, B. (2009). Earnings quality: Some evidence on the role of auditor tenure and auditors' industry expertise. *Journal of Accounting & Economics, 47*(3), 265-287. doi:https://doi.org/10.1016/j.jacceco.2009.03.001

Gul, F. A., Wu, D., & Yang, Z. (2013). Do Individual Auditors Affect Audit Quality? Evidence from Archival Data. *The Accounting Review, 88*(6), 1993-2023. doi: https://doi.org/10.2308/accr-50536

Gyorkos, A. (2021, May 4). *Accounting giants continue to dominate the market despite pandemic*. Retrieved from International Accounting Bulletin: https://www.internationalaccountingbulletin.com/news/accounting-giants/

Hale, K., & Truelson, J. M. (2023). Client Acquisition Following an Auditor's Unethical Behavior: An Examination of Reputational Consequences Following KPMG's "Steal the Exam" Scandal. *Accounting Horizons, 37*(2), 85-104. Retrieved from https://doi.org/10.2308/HORIZONS-2021-086

Hamilton, E. L., & Smith, J. L. (2021). Error or Fraud? The Effect of Omissions on Management's Fraud Strategies and Auditors' Evaluations of Identified Misstatements. *The Accounting review, 96*(1), 225-249. doi:10.2308/tar-2017-0355

Hansen, J. C., Lisic, L. L., Seidel, T. A., & Wilkins, M. S. (2021). Audit Committee Accounting Expertise and the Mitigation of Strategic Auditor Behavior. *The Accounting Review, 96*(4), 289-314. Retrieved from https://doi.org/10.2308/TAR-2018-0101

Hattersley, R. (2024, July 25). *Firms hit with £48.2m sanctions for audit failures*. Retrieved from AccountingWEB: https://www.accountingweb.co.uk/business/financial-reporting/firms-hit-with-ps482m-sanctions-for-audit-failures

He, X., Pittman, J. A., Rui, O. M., & Wu, D. (2017). Do Social Ties between External Auditors and Audit Committee Members Affect Audit Quality? *The Accounting Review, 92*(5), 61-87. Retrieved from https://doi.org/10.2308/accr-51696

Hegazy, S., Sangster, A., & Kotb, A. (2017). Mapping forensic accounting in the UK. *Journal of international accounting, auditing & taxation, 28*, 43-56. Retrieved from https://doi.org/10.1016/j.intaccaudtax.2016.12.004

Hennink, M., & Kaiser, B. N. (2022). Sample sizes for saturation in qualitative research: A systematic review of empirical tests. *Social Science and Medicine (1982), 292*, 114523. Retrieved from https://doi.org/10.1016/j.socscimed.2021.114523

Hogan, C. E., Rezaee, Z., Riley, R. A., & Velury, U. K. (2008). Financial Statement Fraud: Insights from the Academic Literature. *Auditing : a journal of practice and theory, 27*(2), 231-252. doi:https://doi.org/10.2308/aud.2008.27.2.231

Holliday, A. (2007). *Doing and writing qualitative research* (2nd ed.). London: SAGE. Retrieved June 21, 2021, from https://methods-sagepub-com.hallam.idm.oclc.org/book/doing-and-writing-qualitative-research-2e/n1.xml

Holm, C., & Zaman, M. (2012). Regulating audit quality: Restoring trust and legitimacy. *Accounting Forum, 36*(1), 51-61. doi:10.1016/j.accfor.2011.11.004

Hoos, F., Saad, E. B., & Lesage, C. (2018). Why are auditors blamed when something goes wrong? Experimental evidence. *International journal of auditing, 22*(3), 422-434. doi:https://doi.org/10.1111/ijau.12126

Hutchison, A. J., Johnston, L. H., & Breckon, J. D. (2010). Using QSR-NVivo to facilitate the development of a grounded theory project: an account of a worked example. *International journal of social research methodology, 13*(4), 283-302. doi:https://doi.org/10.1080/13645570902996301

Hyatt, T. A., Prawitt, D. F., & Stubbs, K. M. (2024). Reduced audit quality acts: A review and organizational model. *International Journal of Auditing, 28*(2), 288-306. Retrieved from https://doi.org/10.1111/ijau.12331

IAASB. (2021). *Fraud and Going Concern in an Audit of Financial Statements: Discussion Paper*. International Auditing and Assurance Standards Board. Retrieved June 1, 2021, from https://www.ifac.org/system/files/publications/files/IAASB-Discussion-Paper-Fraud-Going-Concern.pdf

ICAEW Insights. (2021, April 1). Audit Quality: How to Raise the Bar. *Future of Audit*. Retrieved June 1, 2021, from https://www.icaew.com/insights/viewpoints-on-the-news/2021/april-2021/audit-quality-how-to-raise-the-bar

IESBA. (2018). *Handbook of the international code of ethics for professional accountants* (2018 ed.). International Federation of Accountants. Retrieved December 14, 2020, from https://www.ifac.org/system/files/publications/files/IESBA-Handbook-Code-of-Ethics-2018.pdf

International Auditing and Assurance Standards Board (IAASB). (2014). *A Framework for Audit Quality. Key elements that create an environment for audit quality.* New York: International Federation of Accountants. Retrieved from https://www.ifac.org/system/files/publications/files/A-Framework-for-Audit-Quality-Key-Elements-that-Create-an-Environment-for-Audit-Quality-2.pdf

International Financial Reporting Standards (IFRS). (2018, October 31). *Amendment issued: IASB clarifies its definition of 'material'*. Retrieved from IFRS Foundation: https://www.ifrs.org/news-and-events/news/2018/10/iasb-clarifies-its-definition-of-material/

Izza, M. (2019). 'Why do auditors fail? What might work? What won't?': a practitioner view. *Accounting and Business Research, 49*(5), 562-564. doi:10.1080/00014788.2019.1611717

Jackson, K., & Bazeley, P. (2019). *Qualitative data analysis with NVivo* (3rd ed.). SAGE.

Jenkins, G. J., Negangard, E. M., & Oler, M. J. (2018). Getting Comfortable on Audits: Understanding Firms' Usage of Forensic Specialists. *Contemporary Accounting Research*, 1766-1797. doi:10.1111/1911-3846.12359

Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal of Financial Economics, 3*(4), 305-360. doi:10.1016/0304-405X(76)90026-X

Johnson, P., & Duberley, J. (2000). *Understanding Management Research: an introduction to epistemology.* SAGE. Retrieved November 30, 2021

Johnson, P., Buehring, A., Cassell, C., & Symon, G. (2006). Evaluating qualitative management research: Towards a contingent criteriology. *International journal of management reviews, 8*(3), 131-156. doi: 10.1111/j.1468-2370.2006.00124.x

Jolly, J. (2022, February 3). *KPMG being sued for £1.3bn over Carillion audit*. Retrieved from The Guardian: https://www.theguardian.com/business/2022/feb/03/kpmg-being-sued-for-13bn-over-carillion-audit-uk-official-receiver

Kaczynski, D., Salmona, M., & Smith, T. (2014). Qualitative research in finance. *Australian Journal of Management, 39*(1), 127-135. doi:10.1177/0312896212469611

Kesseba, K., Awolowo, I., & Clark, M. (2018). Qualitative Research Methodology: a Neo-empiricist Perspective. In B. A. (BAM), *BAM 2018 Conference Proceedings*. Retrieved from http://shura.shu.ac.uk/23100/1/contribution1054.pdf

Khaksar, J., Salehi, M., & Dashtbayaz, M. L. (2021). The relationship between political relations with audit quality and auditor industry expertise. *Journal of Public Affairs*. doi:https://doi.org/10.1002/pa.2780

Kim, I., Kong, J. H., & Yang, R. (2024). The impact of board reforms on audit fees: International evidence. *Journal of Business Finance and Accounting, 51*(1-2), 45-83. Retrieved from https://doi.org/10.1111/jbfa.12685

Knechel, W. (2022). Who stands for audit? A commentary on the 'Brydon report'. *International Journal of Auditing, 26*(1), 27-31. doi:https://doi.org/10.1111/ijau.12265

Knechel, W. R., & Vanstraelen, A. (2007). The Relationship between Auditor Tenure and Audit Quality Implied by Going Concern Opinions. *Auditing: A Journal of Practice and Theory, 26*(1), 113-131. Retrieved JUNE 4, 2021, from https://www-proquest-com.hallam.idm.oclc.org/docview/216740895?accountid=13827&pq-origsite=primo

Knechel, W. R., Thomas, E., & Driskill, M. (2020). Understanding financial auditing from a service perspective. *Accounting, Organizations and Society, 81*, 101080. Retrieved from https://doi.org/10.1016/j.aos.2019.101080

Knechel, W., Krishnan, G., Pevzner, M., Shefchik, L., & Velury, U. (2013). Audit quality: Insights from the academic literature. *Auditing : A Journal of Practice and Theory, 32*(suppl.1), 385-421. doi: https://doi.org/10.2308/ajpt-50350

Kolcaba, K., & Kolcaba, R. J. (1991). An analysis of the concept of comfort. *Journal of Advanced Nursing, 16*(11), 1301-10. Retrieved February 12, 2022, from https://www.researchgate.net/publication/21402816_An_analysis_of_the_concept_of_comfort

Kramer, B., Seda, M., & Bobashev, G. (2017). Current opinions on forensic accounting education. *Accounting research journal, 30*(3), 249-264. doi:0.1108/ARJ-06-2015-0082

Lai, K.-W., & Gul, F. A. (2021). Do failed auditors receive lower audit fees from continuing engagements? *Review of Quantitative Finance and Accounting, 56*(3), 1159-1190. doi:https://doi.org/10.1007/s11156-020-00922-9

Lai, T.-k., Lei, A. C., & Song, F. M. (2019). The impact of corporate fraud on director-interlocked firms: Evidence from bank loans. *Journal of Business Finance & Accounting, 46*(1-2), 32-67. doi:https://doi.org/10.1111/jbfa.12362

Lal Bhasin, M. (2013). Survey of appropriate skills required by forensic accountants: empirical evidence from a developing economy. *International Journal of Accounting and Economics Studies, 1*(2). Retrieved from https://doi.org/10.14419/ijaes.v1i2.1295

Laughlin. (1995). Methodological themes Empirical research in accounting alternative approaches and a case for “middle-range” thinking. *Accounting, Auditing, & Accountability Journal, 8*(1), 63-87. doi:10.1108/09513579510146707

Laughlin, R. (2007). Critical reflections on research approaches, accounting regulation and the regulation of accounting. *The British Accounting Review, 39*(4), 271-289. doi:10.1016/j.bar.2007.08.004

Law, K. S., Wong, C.-S., Song, L. J., & Zedeck, S. (2004). The Construct and Criterion Validity of Emotional Intelligence and Its Potential Utility for Management Studies. *Journal of Applied Psychology, 89*(3), 483-496. Retrieved from https://doi.org/10.1037/0021-9010.89.3.483

Law, P. (2011). Audit regulatory reform with a refined stakeholder model to enhance corporate governance: Hong Kong evidence. *Corporate Governance, 11*(2), 123-135. Retrieved from https://doi.org/10.1108/14720701111121001

Lee, C.-C., & Welker, R. B. (2019). Do Interviewers Actually Know More about Falseness in an Inquiry Than They Communicate in a Direct Lying Assessment? *Journal of forensic accounting research, 4*(1), 3-24. Retrieved November 11, 2021

Li, L., Qi, B., Tian, G., & Zhang, G. (2017). The Contagion Effect of Low-Quality Audits at the Level of Individual Auditors. *The Accounting Review, 92*(1), 137-163. doi:https://doi.org/10.2308/accr-51407

Lo Iacono, V., Symonds, P., & Brown, D. H. (2016). Skype as a Tool for Qualitative Research Interviews. *Sociological Research Online, 21*(2), 103-117. Retrieved from https://doi.org/10.5153/sro.3952

Locke, J., & Lowe, A. (2008). Evidence and Implications of Multiple Paradigms in Accounting Knowledge Production. *The European accounting review, 17*(1), 161-191. doi:10.1080/09638180701819881

Lumineau, F., Kong, D. T., & Dries, N. (2024). A Roadmap for Navigating Phenomenon-Based Research in Management. *Journal of Management*. Retrieved from https://doi.org/10.1177/01492063241289892

Machery, E. (2006). Two Dogmas of Neo-Empiricism. *Philosophy Compass, 1*(4), 398-412. Retrieved from https://doi.org/10.1111/j.1747-9991.2006.00030.x

Marcel, J. J., & Cowen, A. P. (2014). Cleaning house or jumping ship? Understanding board upheaval following financial fraud. *Strategic Management Journal, 35*(6), 926-937. doi:https://doi.org/10.1002/smj.2126

Markelevich, A., & Rosner, R. L. (2013). Auditor Fees and Fraud Firms. *Contemporary Accounting Research, 30*(4), 1590-1625. doi:https://doi.org/10.1111/1911-3846.12013

Mayan, M. J. (2016). *Essentials of qualitative inquiry.* London: Routledge. doi:10.4324/9781315429250

McCaffrey, J., & Machery, E. (2012). Philosophical issues about concepts. *Wiley interdisciplinary reviews. Cognitive science, 3*(2), 265-279. Retrieved from https://doi.org/10.1002/wcs.1166

Mintchik, N., Ramamoorti, S., & Gramling, A. A. (2021). Mindsets as an Enhancement of 21st Century Accounting Education. *Issues in Accounting Education, 36*(4), 87-118. Retrieved from https://doi.org/10.2308/ISSUES-19-066

Moser, A., & Korstjens, I. (2018). Series: Practical guidance to qualitative research. Part 3: Sampling, data collection and analysis. *European Journal of General Practice, 24*(1), 9-18. doi:10.1080/13814788.2017.1375091

Myers, M. D. (2019). *Qualitative research in business and management* (3rd ed.). SAGE Publications.

Nicol, O. (2018). No Body to Kick, No Soul to Damn: Responsibility and Accountability for the Financial Crisis (2007-2010). *Journal of Business Ethics, 151*(1), 101-114. doi:https://doi.org/10.1007/s10551-016-3279-3

O'Dwyer, M. (2022, March 8). *KPMG fined again for audit shortcomings*. Retrieved from Financial Times: https://www.ft.com/content/c71a9ee4-15ae-4c74-9565-7ffe66cf3750

O'Shea, S. C. (2017). Characteristics and Skills Necessary in Accountancy. *International Journal of Business and Management, 13*(1). Retrieved from https://doi.org/10.5539/ijbm.v13n1p22

Ozili, P. K. (2023). Forensic accounting research around the world. *Journal of Financial Reporting and Accounting*. Retrieved from https://doi.org/10.1108/JFRA-02-2023-0106

Parker, L. D., & Northcott, D. (2016). Qualitative generalising in accounting research: concepts and strategies. *Accounting, Auditing and Accountability Journal, 29*(6), 1100-1131. Retrieved from https://doi.org/10.1108/AAAJ-04-2015-2026

Patterson, E. R., Smith, J. R., & Tiras, S. L. (2019). The Effects of Auditor Tenure on Fraud and Its Detection. *The Accounting Review, 94*(5), 297-318. doi:https://doi.org/10.2308/accr-52370

Patton, M. Q. (2015). *Qualitative research and evaluation methods : integrating theory and practice* (Fourth ed.). SAGE Publications, Inc.

Pentland, B. T. (1993). Getting comfortable with the numbers: Auditing and the micro-production of macro-order. *Accounting, organizations and society, 18*(7), 605-620. doi:10.1016/0361-3682(93)90045-8

Peytcheva, M. (2014). Professional skepticism and auditor cognitive performance in a hypothesis-testing task. *Managerial auditing journal, 29*(1), 27-49. Retrieved from https://doi.org/10.1108/MAJ-04-2013-0852

Plakoyiannaki, E., & Budhwar, P. (2021). From Convention to Alternatives: Rethinking Qualitative Research in Management Scholarship. *British Journal of Management, 32*(1), 3-6. Retrieved from https://doi.org/10.1111/1467-8551.12464

Plumlee, M., & Yohn, T. L. (2010). An Analysis of the Underlying Causes Attributed to Restatements. *Accounting Horizons, 24*(1), 41-64. doi:https://doi.org/10.2308/acch.2010.24.1.41

Plumlee, R. D., Rixom, B. A., & Rosman, A. J. (2015). Training Auditors to Perform Analytical Procedures Using Metacognitive Skills. *The Accounting Review, 90*(1), 351-369. doi:10.2308/accr-50856

Power, M. K. (2003). Auditing and the production of legitimacy. *Accounting, Organizations and Society, 28*(4), 379-394. doi:10.1016/S0361-3682(01)00047-2

Pownhall, M. (2024). Is replication possible in qualitative research? A response to Makel et al. (2022). *Educational Research and Evaluation, 29*(1-2), 104-110. Retrieved from https://doi.org/10.1080/13803611.2024.2314526

Prasad, A., & Prasad, P. (2002). The coming of age of interpretive organizational research. *Organizational Research Methods, 5*(1), 4-11. doi:10.1177/1094428102005001002

Pratt, M. G., Kaplan, S., & Whittington, R. (2020). Editorial Essay: The Tumult over Transparency: Decoupling Transparency from Replication in Establishing Trustworthy Qualitative Research. *Administrative Science Quarterly, 65*(1), 1-19. Retrieved from https://doi.org/10.1177/0001839219887663

Rajgopal, S., Srinivasan, S., & Zheng, X. (2021). Measuring audit quality. *Review of Accounting Studies, 26*(2), 559-619. doi:https://doi.org/10.1007/s11142-020-09570-9

Ramamoorti, S. (2008). The psychology and sociology of fraud: Integrating the behavioral sciences component into fraud and forensic accounting curricula. *Issues in accounting education, 23*(4), 521-533. doi:10.2308/iace.2008.23.4.521

Reid, L. C., & Carcello, J. V. (2017). Investor Reaction to the Prospect of Mandatory Audit Firm Rotation. *The Accounting Review, 92*(1), 183-211. doi:https://doi.org/10.2308/accr-51488

Repenning, N., Löhlein, L., & Schäffer, U. (2022). Emotions in Accounting: A Review to Bridge the Paradigmatic Divide. *The European Accounting Review, 31*(1), 241-267. doi:https://doi.org/10.1080/09638180.2021.1908906

Rezaee, Z. (2004). Restoring public trust in the accounting profession by developing anti-fraud education, programs, and auditing. *Managerial Auditing Journal, 19*(1), 134-148. doi:https://doi.org/10.1108/02686900410509857

Richard Baker, C., Bédard, J., & Prat dit Hauret, C. (2014). The regulation of statutory auditing: an institutional theory approach. *Managerial Auditing Journal, 29*(5), 371-394. Retrieved from https://doi.org/10.1108/MAJ-09-2013-0931

Richardson, G., Obaydin, I., & Liu, C. (2022). The effect of accounting fraud on future stock price crash risk. *Economic Modelling, 117*, 106072. Retrieved from https://doi.org/10.1016/j.econmod.2022.106072

Ridley, K., & Jones, H. (2017, May 4). British accounting watchdog investigates KPMG over Rolls-Royce audits. *Reuters*. Retrieved 10 1, 2024, from

https://www.reuters.com/article/business/british-accounting-watchdog-investigates-kpmg-over-rolls-royce-audits-idUSKBN18023D/

Robinson, O. C. (2014). Sampling in Interview-Based Qualitative Research: A Theoretical and Practical Guide. *Qualitative Research in Psychology, 11*(1), 25-41. Retrieved from https://doi.org/10.1080/14780887.2013.801543

Rose, A. M., Rose, J. M., Suh, I., & Thibodeau, J. C. (2020). Analytical Procedures: Are More Good Ideas Always Better for Audit Quality? *Behavioral Research in Accounting, 32*(1), 37-49. Retrieved from https://doi.org/10.2308/bria-52512

Roulston, K. (2018). Qualitative interviewing and epistemics. *Qualitative Research : QR, 18*(3), 322-341. Retrieved from https://doi.org/10.1177/1468794117721738

Rowe, S. P. (2019). Auditors' comfort with uncertain estimates: More evidence is not always better. *Accounting, Organizations and Society, 76*, 1-11. doi:https://doi.org/10.1016/j.aos.2019.01.002

Ruhnke, K., & Schmidt, M. (2014). The audit expectation gap: existence, causes, and the impact of changes. *Accounting and Business Research, 44*(5), 572-601. doi:https://doi.org/10.1080/00014788.2014.929519

Ryan, V. (2022, June 29). *The Big Four Continue to Dominate Auditing: Weekly Stat*. Retrieved from CFO: https://www.cfo.com/accounting-tax/auditing/2022/06/auditing-big-four-market-share-sec-registrants-accounting/

Saldaña, J. (2021). *The coding manual for qualitative researchers* (4th ed.). SAGE Publications Ltd. Retrieved April 12, 2022

Salehi, M., Fakhri Mahmoudi, M. R., & Daemi Gah, A. (2019). A meta-analysis approach for determinants of effective factors on audit quality: Evidence from emerging market. *Journal of Accounting in Emerging Economies, 9*(2), 287-312. Retrieved from https://doi.org/10.1108/JAEE-03-2018-0025

Samagaio, A., Morais Francisco, P., & Felício, T. (2024). The relationship between soft skills, stress and reduced audit quality practices. *Review of Accounting & Finance*. Retrieved from https://doi.org/10.1108/RAF-06-2023-0186

Sarens, G., De Beelde, I., & Everaett, P. (2009). Internal audit: A comfort provider to the audit committee. *The British Accounting Review, 41*(2), 90-106. Retrieved June 9, 2021, from https://www.sciencedirect.com/science/article/pii/S0890838909000067

Saunders, B., Sim, J., Kingstone, T., Baker, S., Waterfield, J., Bartlam, B., . . . Jinks, C. (2018). Saturation in qualitative research: exploring its conceptualization and operationalization. *Quality & Quantity, 52*(4), 1893-1907. Retrieved from https://doi.org/10.1007/s11135-017-0574-8

Saunders, M. N., & Townsend, K. (2016). Reporting and Justifying the Number of Interview Participants in Organization and Workplace Research. *British Journal of Management, 27*(4), 836-852. doi:https://doi.org/10.1111/1467-8551.12182

Saunders, M. N., Lewis, P., & Thornhill, A. (2015). *Research methods for business students* (7th ed.). Harlow, United Kingdon: Pearson.

Saunders, M., Lewis, P., & Thornhill, A. (2019). *Research methods for business students* (8th ed.). Pearson.

Siriwardane, H. P., Kin Hoi Hu, B., & Low, K. Y. (2014). Skills, Knowledge, and Attitudes Important for Present-Day Auditors. *International journal of auditing, 18*(3), 193-205. Retrieved from https://doi.org/10.1111/ijau.12023

Soltani, B. (2014). The Anatomy of Corporate Fraud_A Comparative Analysis of High Profile American and European Corporate Scandals. *Journal of Business Ethics, 120*(2), 251-274. doi:10.1007/s10551-013-1660-z

Stice, D., Stice, H., & White, R. (2022). The effect of individual auditor quality on audit outcomes: opening the black box of audit quality. *Managerial Auditing Journal, 37*(8), 937-966. Retrieved from https://doi.org/10.1108/MAJ-07-2021-3235

Stone, D. N., & Miller, T. C. (2012). The state of, and prospects for, forensic and fraud research that matters. *Journal of Forensic & Investigative Accounting, 4*(2), 35-76. Retrieved June 27, 2021, from http://web.nacva.com/JFIA/Issues/JFIA-2012-2_2.pdf

Storbeck, O. (2021, October 26). *EY and Wirecard: anatomy of a flawed audit*. Retrieved from Financial Times: https://www.ft.com/content/bcadbdcb-5cd7-487e-afdd-1e926831e9b7

Storbeck, O. (2022, May 2). *Adler shares plunge 45% after KPMG refuses to sign off results*. Retrieved from Financial Times: https://www.ft.com/content/ebd38553-50b6-4ab5-9e9d-8cd3d9a357ab

Sulaiman, N. A. (2017). Oversight of audit quality in the UK: insights into audit committee conduct. *Meditari Accountancy Research, 25*(3), 351-367. doi:10.1108/MEDAR-08-2016-0074

Svanberg, J., & Öhman, P. (2015). Auditors' identification with their clients: Effects on audit quality. *The British Accounting Review, 47*(4), 395-408. doi: https://doi.org/10.1016/j.bar.2014.08.003

Syal, R. (2020, January 17). *Two hospitals held up by Carillion collapse are delayed further*. Retrieved May 9, 2022, from The Guardian: https://www.theguardian.com/society/2020/jan/17/two-hospitals-held-up-by-carillion-collapse

Symon, G., Cassell, C., & Johnson, P. (2018). Evaluative Practices in Qualitative Management Research: A Critical Review. *International Journal of Management Reviews, 20*(1), 134-154. Retrieved from https://doi.org/10.1111/ijmr.12120

Thomas, D. R. (2006). A General Inductive Approach for Analyzing Qualitative Evaluation Data. *The American Journal of Evaluation, 27*(2), 237-246. doi:https://doi.org/10.1177/1098214005283748

Tillman, R. (2009). Reputations and corporate malfeasance: collusive networks in financial statement fraud. *Crime, Law, and Social Change, 51*(3-4), 365-382. doi:https://doi.org/10.1007/s10611-008-9161-1

Tracy, S. J. (2010). Qualitative Quality: Eight "Big-Tent" Criteria for Excellent Qualitative Research. *Qualitative inquiry, 16*(10), 837-851. doi: https://doi.org/10.1177/1077800410383121

Trompeter, G. M., Carpenter, T. D., Desai, N., Jones, K. L., & Riley, R. A. (2013). A synthesis of fraud-related research. *Auditing : a journal of practice and theory, 32*(1), 287-321. Retrieved from https://doi.org/10.2308/ajpt-50360

Tsiligiris, V., & Bowyer, D. (2021). Exploring the impact of 4IR on skills and personal qualities for future accountants: a proposed conceptual framework for university accounting education. *Accounting education (London, England), 30*(6), 621-649. Retrieved from https://doi.org/10.1080/09639284.2021.1938616

Tutton, E., & Seers, K. (2003). An exploration of the concept of comfort. *Journal of Clinical Nursing, 12*(5), 689-696. doi:https://doi.org/10.1046/j.1365-2702.2003.00775.x

Vanstraelen, A., & Knechel, W. (2007). The relationship between auditor tenure and audit quality implied by going concern opinions. *Auditing : a journal of practice and theory, 26*(1), 113-131. doi:https://doi.org/10.2308/aud.2007.26.1.113

Villiers, C., Dumay, J., & Maroun, W. (2019). Qualitative accounting research: dispelling myths and developing a new research agenda. *Accounting and Finance (Parkville), 59*(3), 1459-1487. Retrieved from https://doi.org/10.1111/acfi.12487

Weligodapola, M. (2019). Using a general analytical inductive qualitative research case to explore on growth of small enterprises. In *Sage Research Methods Cases Part 2*. SAGE Publications Ltd . doi:https://doi.org/10.4135/9781526487599

Wells, J. (2005). Accountants need help fighting wars on fraud. Austin: Association of Certified Fraud Examiners.

Williams, A. M., & Irurita, V. F. (2006). Emotional comfort: The patient's perspective of a therapeutic context. *International Journal of Nursing Studies, 43*(4), 405-415. doi:https://doi.org/10.1016/j.ijnurstu.2005.06.004

Wilson, A. B., McNellis, C., & Latham, C. K. (2018). Audit firm tenure, auditor familiarity, and trust: Effect on auditee whistleblowing reporting intentions. *International Journal of Auditing, 22*(2), 113-130. Retrieved from https://doi.org/10.1111/ijau.12108

Yang, L., Brink, A. G., & Wier, B. (2018). The impact of emotional intelligence on auditor judgment. *International Journal of Auditing, 22*(1), 83-97. Retrieved from https://doi.org/10.1111/ijau.12106

Yulianti, Y., Zarkasyi, M. W., Suharman, H., & Soemantri, R. (2024). Effects of professional commitment, commitment to ethics, internal locus of control and emotional intelligence on the ability to detect fraud through reduced audit quality behaviors. *Journal of Islamic*

Accounting and Business Research, 15(3), 385-401. Retrieved from https://doi.org/10.1108/JIABR-02-2021-0076

Zaman, M., Hudaib, M., & Haniffa, R. (2011). Corporate Governance Quality, Audit Fees and Non-Audit Services Fees. *Journal of Business Finance & Accounting, 38*(1-2), 165-197. doi:https://doi.org/10.1111/j.1468-5957.2010.02224.x

Zhang, T. (2023). Critical Realism: A Critical Evaluation. *Social Epistemology, 37*(1), 15-29. Retrieved from https://doi.org/10.1080/02691728.2022.2080127

Zhao, M., Li, Y., & Lu, J. (2022). The effect of audit team's emotional intelligence on reduced audit quality behavior in audit firms: Considering the mediating effect of team trust and the moderating effect of knowledge sharing. *Frontiers in Psychology, 13*, 1082889. Retrieved from https://doi.org/10.3389/fpsyg.2022.1082889

Zimmerman, A. B., Barr-Pulliam, D., Lee, J.-S., & Minutti-Meza, M. (2023). Auditors' Use of In-House Specialists. *Journal of Accounting Research, 61*(4), 1363-1418. Retrieved from https://doi.org/10.1111/1475-679X.12485

Appendices

Appendix I: Participant Information Sheet

Participant Information Sheet

Study Title

Towards advancing audit quality in the UK: A forensic accounting skillsets agenda

Invitation Statement

You are being invited to take part in an interview for research study. To decide on whether you would like to take part, it is important for you to understand the purpose of the study and what it will involve. Please take some time to carefully read the following information and discuss it with others if you wish. You may ask the researcher for any clarification or if you would like more information.

The University, in its legal capacity, carries out research as part of its responsibility to the community. All research is assessed to ensure appropriate treatment of participants and that their rights are respected. A full statement of your rights can be viewed at: www.shu.ac.uk/about-this-website/privacy-policy/privacy-notices/privacy-notice-for-research. Also, additional information is available at: www.shu.ac.uk/research/excellence/ethics-and-integrity.

This study has been approved by Sheffield Hallam University's Research Ethics Committee.

What is the purpose of this study?

The aim of this study is to explore the integration of forensic accounting skillsets into auditors' undergraduate education and continuous training programs to improve audit quality in the UK. It seeks to address the issue of how to improve the contributions of external auditors towards preventing corporation collapse resulting from financial statement frauds.

Why have I been selected?

You have been selected because you are considered a key stakeholder in the audit quality discourse by virtue of your current / recent job profile as an External Auditor, Audit Regulatory Official or Forensic Specialist/Expert.

Do I have to take part?

It is up to you to decide whether you would like to participate. If you do decide to take part, you will be asked to sign a consent form as an indication of your voluntary participation. However, you are at liberty to withdraw at any time during the interview, or decide not to answer a particular question, and without giving a reason. A decision to withdraw at any time, or a decision not to take part, will not affect your rights in any way.

What would be expected of me if I take part?

You will be required to answer a series of questions during a 45-minute interview session. The questions will take a flexible structure, so you will have the opportunity to expand on the responses

you provide. You will be expected to give as much information and perspective to the research topic as possible.

Where will the study take place and how will the content be used?

The interview will be conducted on a virtual meeting platform, which can be Zoom or Microsoft Teams. The session will be recorded, and data collected used strictly for the purpose of the study. No other use will be made of them without your written permission, and no one outside the project will be allowed access to the original recordings.

How often will I have to take part, and for how long?

A pre-interview discussion will be arranged to give an opportunity for any clarification or further information as you may require. The date and time of the interview will also be agreed during the pre-interview discussion. After the interview, you may be required to read the interview transcript. This provides you the opportunity to make any correction or additional clarification to the discussion.

What are the possible disadvantages of taking part?

There are no applicable disadvantages.

What are the possible benefits of taking part?

While there may not be direct benefits to participants, taking part in the study will provide a deeper understanding into the required forensic accounting skillsets to develop a fit-for-purpose curriculum to improve auditors' undergraduate education and continuous development training.

It is hoped that by giving your perspective as a key stakeholder, the knowledge derived will be valuable to regulatory bodies in formulating training programs. Also, educational institutions can be guided in developing academic curriculum for the next generation of external auditors, thereby contributing towards improving the quality of audits for the future.

How will my record and reported information be kept confidential?

All information collected about you for the research will be strictly confidential and carefully excluded from the research data. The collected data will be securely stored in accordance with data protection and the University's policy of a 10-year period from the study completion date. Necessary steps will be taken to keep your identity under a pseudonym in any report or publication. You will be able to obtain a copy of the pseudonymised results.

Contact for further information.

Adenike Abidoye

Doctoral Researcher, Social and Economic Research Institute (SERI), Sheffield Hallam University.

[redacted]

You should contact the Data Protection Officer if:	**You should contact the Head of Research Ethics if**
• you have a query about how your data is used by the University. • you would like to report a data security breach (e.g., if you think your personal data has been lost or disclosed inappropriately) • you would like to complain about how the University has used your personal data. DPO@shu.ac.uk	• you have concerns with how the research was undertaken or how you were treated. ethicssupport@shu.ac.uk
Postal address: Sheffield Hallam University, Howard Street, Sheffield S1 1WBT Telephone: 0114 225 5555	

Appendix II: Interview Consent Form

Interview Consent Form

Research Title: Towards advancing audit quality in the UK: A forensic accounting skillsets agenda

Please answer the following questions by adding your initials in the box provided for each question.

	Add initials here
I confirm that I have read and understand the information sheet for the study, and I have the opportunity for further clarifications about the study.	
I understand that my participation is voluntary, and I am free to withdraw at any time or decline to answer a particular question during the interview without any negative consequences.	
I agree to provide information to the researcher under the conditions of confidentiality explained in the Information Sheet.	
I understand that my identity will not be associated with the data or research materials, and I will not be recognisable in any report resulting from the research.	
I understand that the information collected from me may be stored and used in any other future research in an anonymised (or aliases) form.	
I understand that relevant sections of the information collected during the study, may be reviewed by individuals from Sheffield Hallam University.	
I agree to participate in the study under the terms set out in the Information Sheet	

Name of participant:

Participant's signature: **Date:**

Researcher: Adenike Abidoye **Date:**

Appendix III: Interview Guide

Interview Guide

Introduction

Thank you for accepting to participate in this interview. Your time is highly appreciated.

My name is Adenike Abidoye, and I am carrying out this interview as part of my PhD study at the Sheffield Hallam University.

The purpose of this study is to explore the perception of external auditors, forensic practitioners, regulators, and educators, regarding the integration of forensic accounting skillsets into audits and auditors' education, to improve audit quality in the UK. The study is important at this time, what with the recommendations from recent interventions like the Brydon Report, as we seek a step change to enhancing the contributions of audits to the market economy. Your insights on these questions are highly valued.

The interview should take no more than 45-60 minutes. However, you are free to withdraw or discontinue your participation at any time.

Your participation and the information obtained during the interview will remain anonymous. The interview will be recorded and transcribed; and the transcript will be sent to you for review and validation. This will give you the opportunity to ensure your perspectives are accurately presented.

The findings will be shared with you if you are interested in knowing the contribution of this study.

For any concern, please contact me by email: [redacted]

Kick-off questions

Interviewee:

Occupation:

Position:

Organisation:

Years of experience:

Skills relevant to fraud detection in audits

1. The Financial Reporting Council's (FRC) audit quality framework refers to the need for auditors to possess 'sufficient skills' to ensure the quality of audits.

   What would you consider as 'sufficient skill' for auditors to improve fraud detection in an audit assignment?

2. Could you propose skillsets that you consider fundamental to boost auditors' effort in fraud recognition and detection?
3. From your experience, can you share examples of scenarios where an audit lead has requested for forensic specialist support during an audit?
4. How can forensic skills contribute to an audit outcome?
5. How can auditors implement and benefit from forensic accounting skillsets in practise?

Education and continuous training

1. As a practitioner (or affiliate), how would you assess graduates into the auditing profession's readiness for fraud recognition and sensitivity?

2. How would you assess auditors' education with respect to fraud recognition and detection?

3. At what level of education would you suggest the skillsets mentioned be incorporated (introduced) into auditing curriculum?

Beyond the conventional auditing process, and considering the skillsets identified:

4. What fraud detection procedures can be incorporated into audits?
5. What fraud detection practises can be incorporated into auditors' education and training?
6. What would you consider as possible barriers to the integration of forensic accounting skillsets to auditors' education and training?

Drivers for change

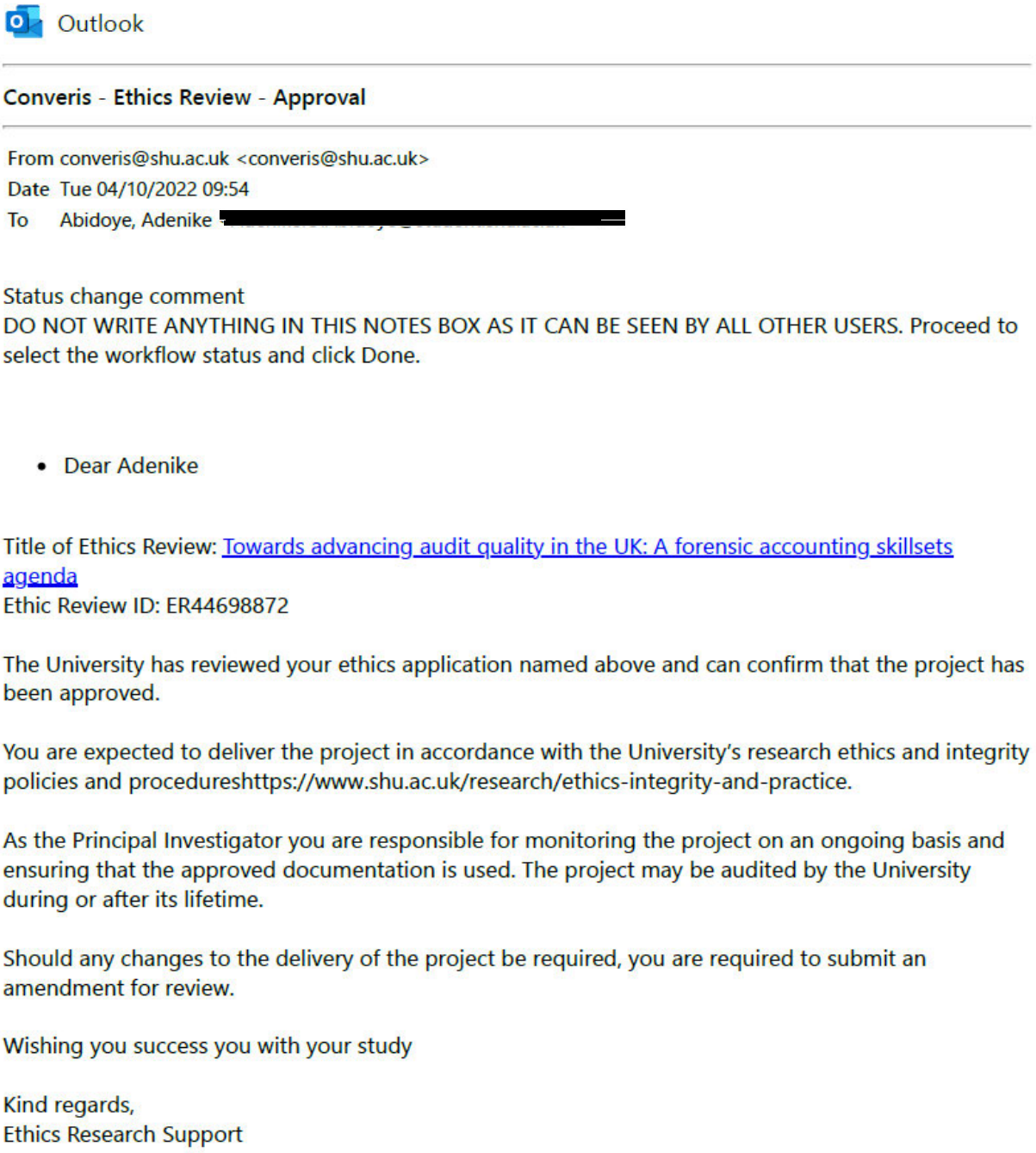
1. How can the FRC or relevant regulatory authority support in building capacity for auditors in fraud detection?
2. How can auditing professional bodies support in building capacity for auditors (undergraduates, fresh graduates, or in-practise) in fraud detection?
3. How can educators/academia collaborate with the regulatory and professional bodies to improve undergraduate readiness in relation to fraud detection skills?

Closing

1. Is there anything else you would like to add that can provide more insight for the study?

Appendix IV: Research Ethics Review Approval

Title of research study	Ethics review reference	Approval date	Thesis chapter
Towards advancing audit quality in the UK: A forensic accounting skillsets agenda	ER44698872	October 4, 2022	Chapter 3, section 3.8



Outlook

Converis - Ethics Review - Approval

From converis@shu.ac.uk <converis@shu.ac.uk>
Date Tue 04/10/2022 09:54
To Abidoye, Adenike [redacted]

Status change comment
DO NOT WRITE ANYTHING IN THIS NOTES BOX AS IT CAN BE SEEN BY ALL OTHER USERS. Proceed to select the workflow status and click Done.

- Dear Adenike

Title of Ethics Review: Towards advancing audit quality in the UK: A forensic accounting skillsets agenda
Ethic Review ID: ER44698872

The University has reviewed your ethics application named above and can confirm that the project has been approved.

You are expected to deliver the project in accordance with the University's research ethics and integrity policies and procedureshttps://www.shu.ac.uk/research/ethics-integrity-and-practice.

As the Principal Investigator you are responsible for monitoring the project on an ongoing basis and ensuring that the approved documentation is used. The project may be audited by the University during or after its lifetime.

Should any changes to the delivery of the project be required, you are required to submit an amendment for review.

Wishing you success you with your study

Kind regards,
Ethics Research Support

Appendix VI: Details of participants' profiles

Table VI.1 below, presents the key features of each participant.

Table VI.1 Participants' profiles

Participants ID	Gender	Occupation	Position	Organisation	Years of experience	Background in external auditing
ED001	Female	Educator	Senior Lecturer	University	30+	No
ED002	Male	Educator	Professor	University	30+	No
ED003	Female	Educator	Professor	University	30+	Yes
FA001	Female	Forensic Accountant	Director	Entrepreneur	24	Yes
FA002	Male	Forensic Accountant	Director	Entrepreneur	40+	Yes
FA003	Male	Forensic Auditor	Director	Entrepreneur	40+	Yes
PB001	Male	Researcher	Technical Adviser (ex)	Accounting body	40	Yes
PB002	Male	Chartered Accountant	Head of Qualifications	Accounting body	37	Yes
XA001	Male	External Auditor	Audit Quality Senior Manager	Audit firm	20+	Yes
XA002	Male	External Auditor	Audit Quality Senior Manager	Audit firm	13	Yes
XA003	Female	External Auditor	Managing Partner	Audit firm	37	Yes
XA004	Female	External Auditor	Manager	Audit firm	8	Yes
XA005	Male	External Auditor	Senior Manager	Auditing body	10	Yes
XA006	Female	External Auditor	Manager	Audit firm	8	Yes
XA007	Female	External Auditor	Partner	Audit firm	32	Yes

Source: Author's compilation

The following section provides more insight into each participant according to their interest groups.

Educators

Three Educators were interviewed. Their key characteristics are described below.

Educator 1 (ED001)

ED001 is a female senior lecturer in one of the UK universities. She has been in the academia for over 10 years and teaches in the area financial accounting and forensic accounting. Prior to her career in the academia, ED001 worked in various sectors as a forensic accountant. Although she did not practise as an external auditor, ED001 has a background in audit firms working in the forensic department. She is a qualified accountant. ED001 has published in fraud and forensic accounting topic areas.

Educator 2 (ED002)

ED002 is a male professor in one of the universities. He has been in the academia for about 26 years. ED002 is prominent in the area of counter fraud and cybercrime. Before venturing into the academia, ED002 worked in public service in various capacity including regulatory roles. He has publications in counter fraud and cybercrime topic areas. ED002 does not have a background in external auditing.

Educator 3 (ED002)

ED003 is a female professor in one of the universities. She has been in the academia for close to 20 years in the accounting field. Prior to joining the academia, ED003 worked as an auditor in an audit firm and in the public sector. She serves in various roles within the academia including board roles for top accounting journals, and as external examiner for accounting professional bodies. ED003 is a qualified accountant. She has published works in the area of accounting and fraud.

Similarities between the Educators

There are similarities between the Educators. The three educators each have 30+ years of experience and currently work in universities. While both ED001 and ED003 are female with prior experience in audit firms and fraud examination, ED001 and ED002 do not have a background in external auditing. They all occupy senior positions within the academia, with ED002 and ED003 being professors. Figure VI.1 below displays their areas of similarity.

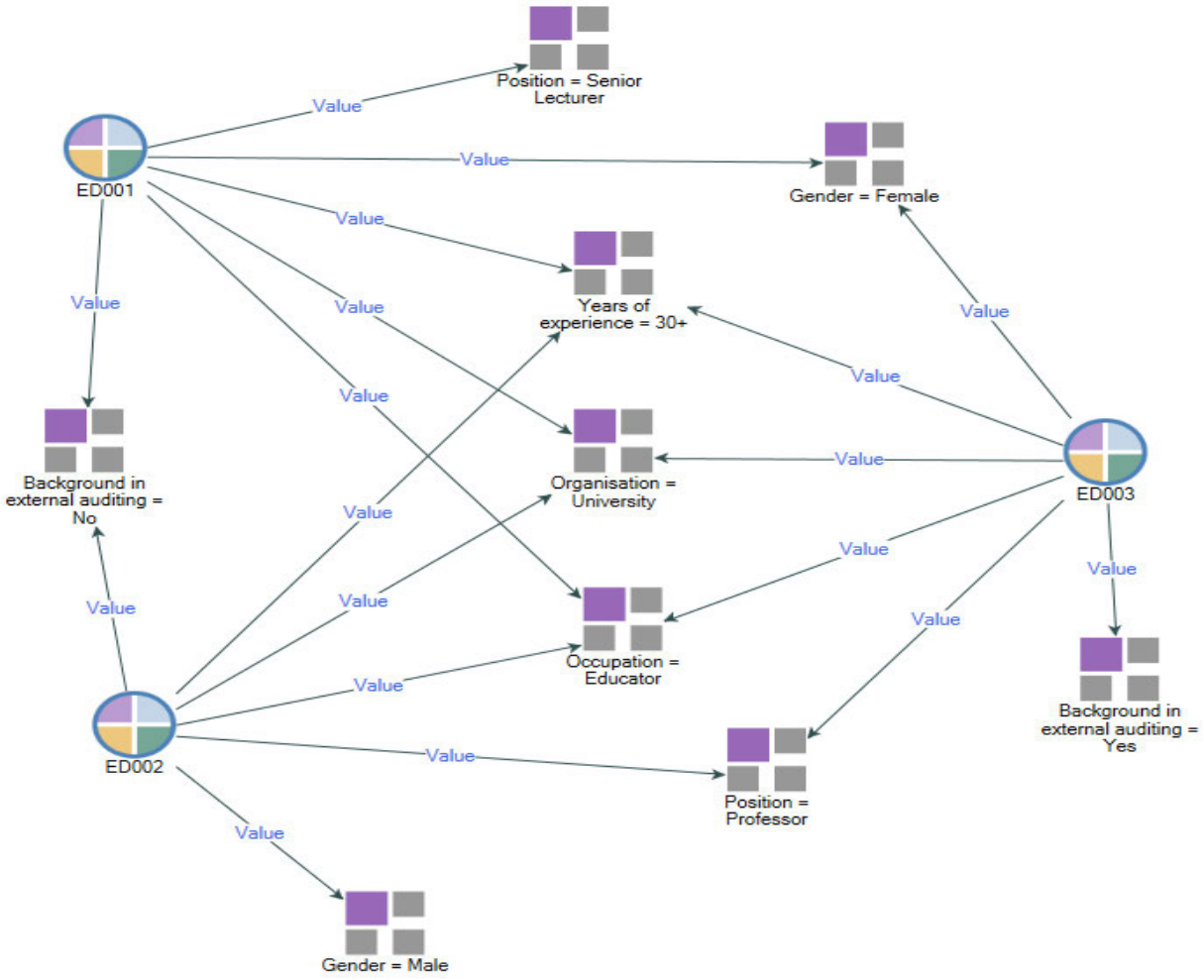


Figure VI.1: Mapping the similarities between the Educators
Source: Author's NVivo output

External Auditors

Seven external auditors were interviewed. Below is a description of their individual characteristics.

External Auditor 1 (XA001)

XA001 is a male, senior (Snr) manager with a top audit firm. He has over 20 years of audit experience, spanning across various industries, within the top audit firms. Besides audit quality, XA001 has been involved in forensic investigations and in efforts towards running an anti-organised crime agency. He is a qualified accountant.

External Auditor 2 (XA002)

XA002 is a male, senior manager with a top audit firm. He has 13 years post qualification experience working in both mid-level and the top audit firms. XA002's experience in financial statement audits spans across various industries. He participates in ensuring quality audits of client entities. XA002 is a qualified accountant.

External Auditor 5 (XA005)

XA005 is a male, senior audit manager. He has 10 years of work experience in both industry and audit services. XA005 has practised as an auditor in the private sector, working with a top audit firm. He holds a public sector auditor role with a regulatory body. XA005 is a qualified accountant.

Similarities between XA001, XA002 and XA005

There are similar characteristics shared between XA001, XA002 and XA005. All three are male auditors occupying senior manager positions. Their work experience spans between 10 to 20 years. They all have experience in financial statement audits with top audit firms. XA001 and XA002 play a role in ensuring quality audit for client organisations. Figure VI.2 shows their common characteristics.

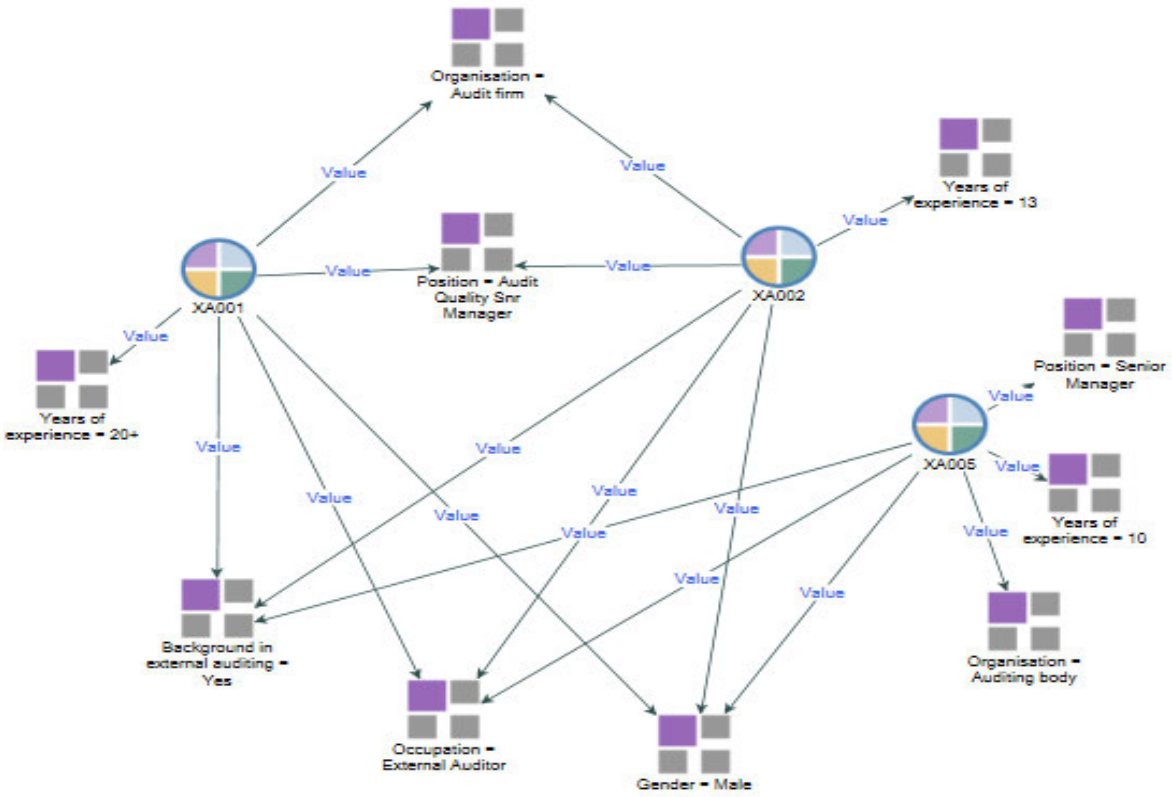


Figure VI.2: Mapping the similarities between XA001, XA002 and XA005
Source: Author's NVivo output

External Auditor 3 (XA003)

XA003 is a female, managing partner of an audit firm. She has 37 years of audit experience. Prior to her 18-year service as sole practitioner of a lower tier audit firm, XA003 worked with top audit firms. She is currently the head of audits and assurance of the practice. XA003 has audit experience within and outside the UK. She is a Fellow qualified accountant.

External Auditor 7 (XA007)

XA007 is a female audit partner in a top audit firm. She has 32 years of work experience. Although XA007 worked in short-term attachment roles within audit services and industry, her full career has been in audits with the top firms. Prior to taking on a partner role, XA007 spent about 20 years auditing across various industries. Her role as audit partner involves driving the quality of audits conducted by the firm. XA007 has practiced internationally. She is a Fellow qualified accountant.

Similarities between XA003 and XA007

XA003 and XA007 share close similarities. Both are female and have over 30 years of consistent audit experience. They occupy partner level roles, in charge of audits for their firms. XA003 and XA007 both have audit exposure within and outside the UK. They are Fellow qualified accountants. Figure VI.3 below depicts their commonalities.

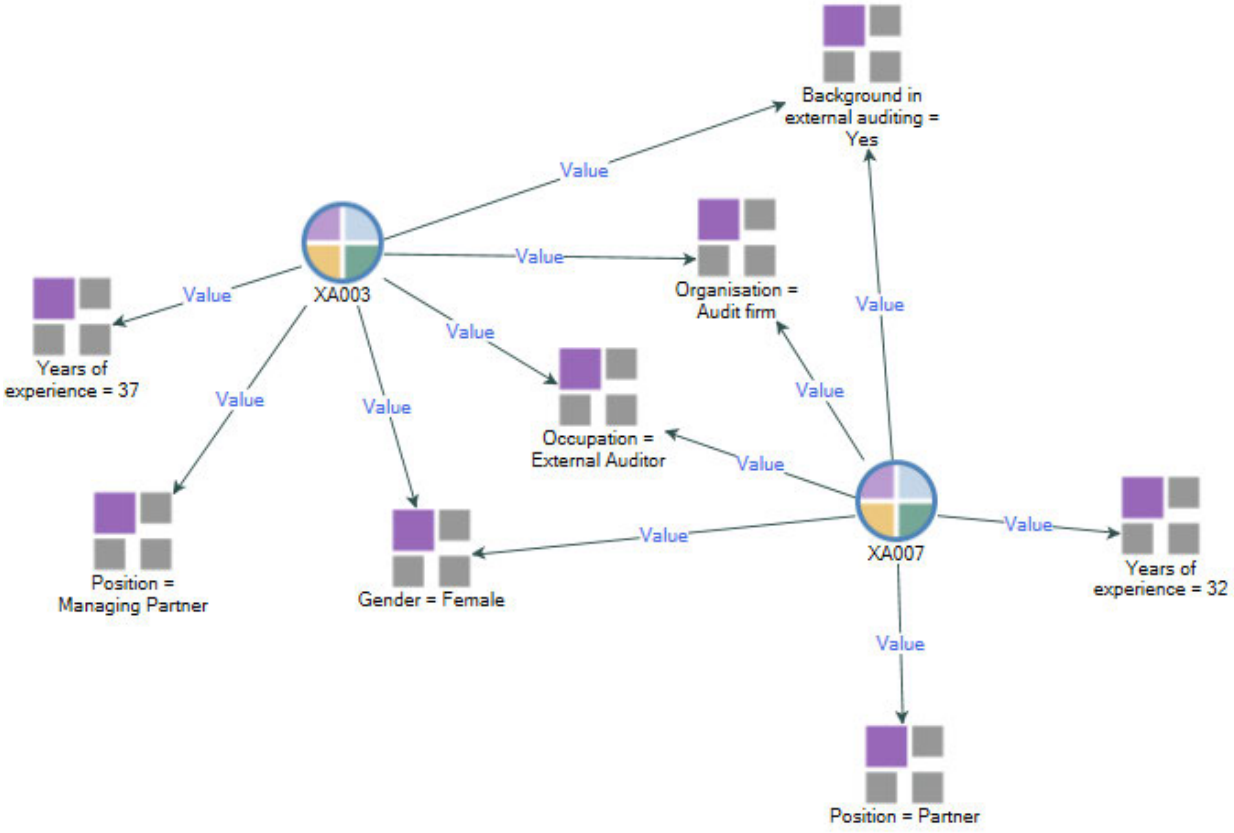


Figure VI.3: Mapping the similarities between XA003 and XA007
Source: Author's NVivo output

External Auditor 4 (XA004)

XA004 is a female. She is an audit manager at a top audit firm. XA004 has eight years of work experience solely in the audit profession. She has covered financial statement audits in various industries within the private sector. XA004 has practiced as an auditor both within and outside the UK. She is a qualified accountant.

External Auditor 6 (XA006)

XA006 is a female audit manager. She has eight years work experience, all as an auditor. Prior to working at a mid-level audit firm, XA006 worked at one of the top audit firms. She participates in financial statement audits across different industries. XA006 has practiced auditing within and outside the UK. She is a qualified accountant.

Similarities between XA004 and XA006

There are strong similarities between XA004 and XA006. Both are female with eight years of work experience. XA004 and XA006 occupy manager positions in their respective audit firms. They both have audit experience from top audit firms and have practised within and outside the UK. Figure VI.4 below highlights the convergence of their similarities.

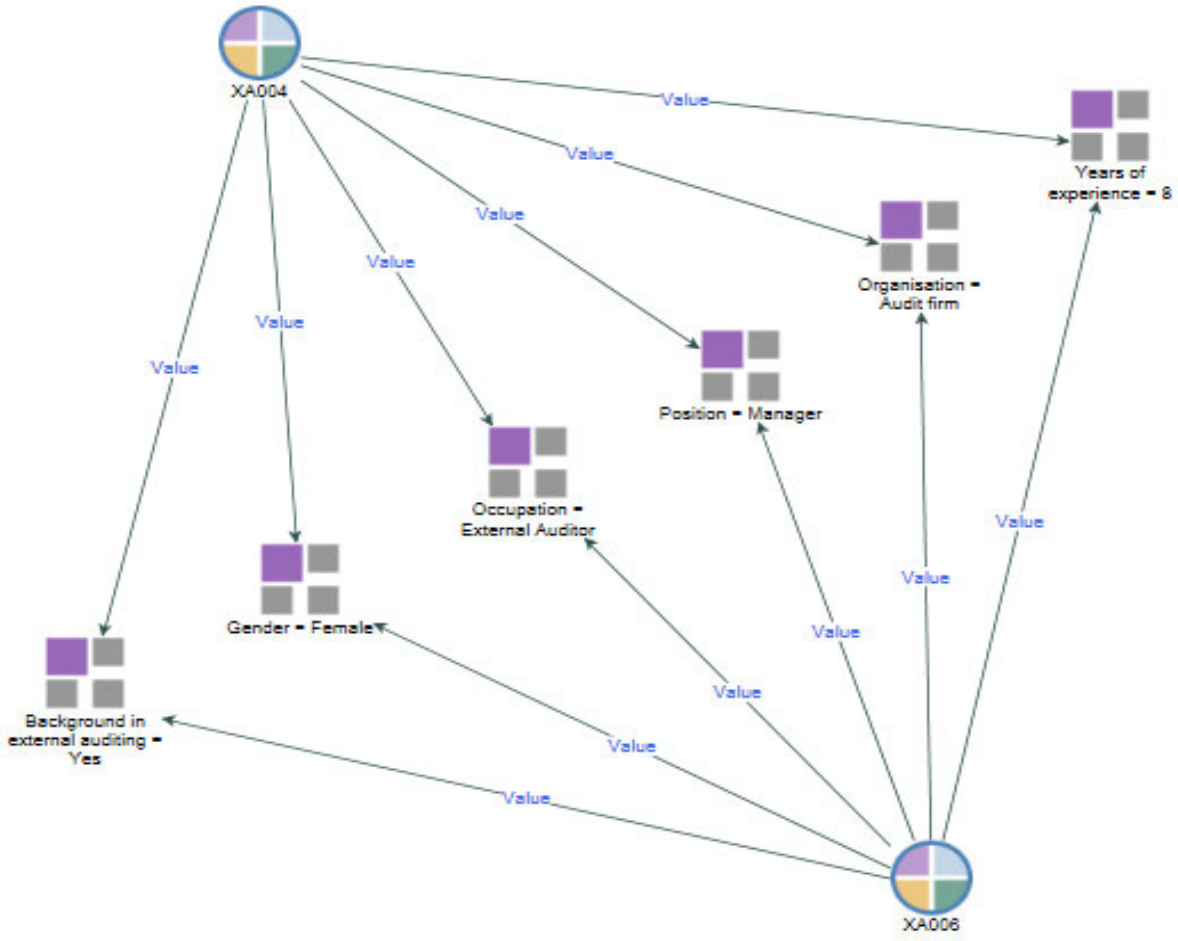


Figure VI.4: Mapping the similarities between XA004 and XA006
Source: Author's NVivo output

Forensic Accountants

Three forensic accountants were interviewed. The following sections highlight some of their individual features.

Forensic Accountant 1 (FA001)

FA001 is a female with 24 years of post-qualification experience. Prior to establishing a practice in forensic accounting, she had her roots in accounting from an established accounting firm. FA001 has audit experience from one of the top audit firms. She has been a forensic accountant, in a top audit firm, in accounting and advisory service practices and as a sole practitioner, for over 19 years. FA001 is a qualified accountant.

Forensic Accountant 2 (FA002)

FA002 is a male with 40 years of post-qualification experience in forensic accounting at a top audit firm. Prior to venturing into forensic accounting, he trained as an auditor in a top audit firm. FA002 has practised as a forensic accountant both within the UK and internationally. Over the course of his career, FA002 was involved in coaching ad training external auditors on how to identify fraud risks and apply forensic accounting skills in audit assignments. He provides consultancy services in forensic investigation and compliance on a freelance basis. FA002 is a qualified accountant.

Forensic Accountant 3 (FA003)

FA003 is a male. He has over 40 years of experience as both external and internal auditor in the public sector. FA003 has been involved in training internal auditors across government agencies. His flair for forensic audits spans over 30 years. Besides his fraud audit practice, FA003 delivers lectures at some of the UK universities on fraud risks and how to identify fraud, borne out of his wealth of experience in the public service sector. He has led several major fraud investigations in the public sector. FA003 has authored several books in this domain.

Similarities between the forensic accountants

FA001, FA002 and FA003 have worked in top audit firms. They have established forensic investigation and consultancy practices and have been involved in forensic investigations for over 20 years. Interestingly, FA002 and FA003 are involved in training and education

at practitioner and university levels. This means that the forensic accountants share their views as forensic accountants, educators and from their auditing backgrounds. Figure VI.5 displays the commonalities in their individual characteristics.

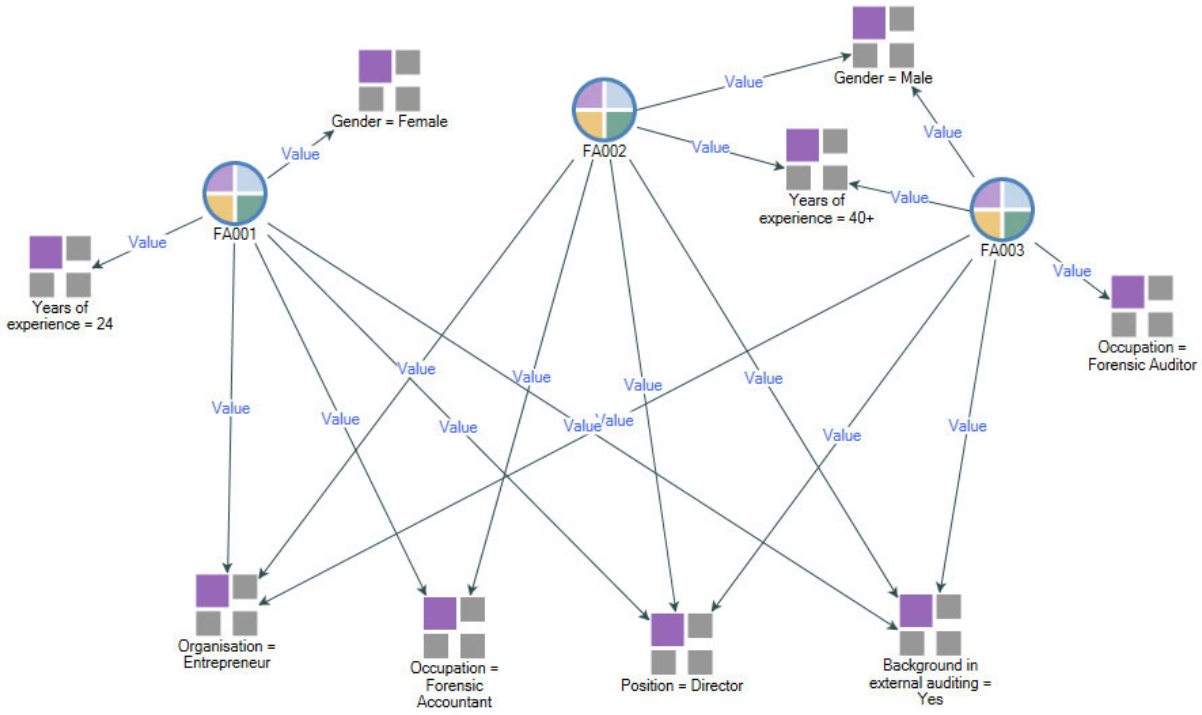


Figure VI.5: Mapping the similarities between the forensic accountants
Source: Author's NVivo output

Professional bodies

Two professional body specialists were interviewed. Below is a description of their individual characteristics.

Professional body specialist 1 (PB001)

PB001 is a male with about 40 years of experience. He trained at one of the top audit firms. PB001 has been an adviser in one of the accounting and auditing professional bodies for over 12 years. His role involved reviewing contents for the syllabi from a market readiness perspective. PB001 spent over 15 years in the financial services sector. His experience spans across forensic accounting, external and internal audits.

Professional body specialist 2 (PB002)

PB002 is a male with 37 years of work experience, both in industry and as a practitioner. He has been with one of the professional bodies for about 15 years. PB002 oversees the syllabi and contents for the professional accounting qualifications. He is an experienced educator, having tutored candidates for various professional qualifications across accounting and management. PB002 trained as an auditor at one of the top audit firms. He is a qualified accountant.

Similarities between the professional body specialists

PB001 and PB002 are male with about 40 years of work experience in industry and practice. They both have been involved in syllabus and examination content related roles for professional accounting qualifications. PB001 and PB002 earned their audit training from top audit firms. Although occupying distinct positions in professional body organisations, PB001 and PB002 can be said to be educators at professional qualification level. Figure VI.6 below depicts their similarities.

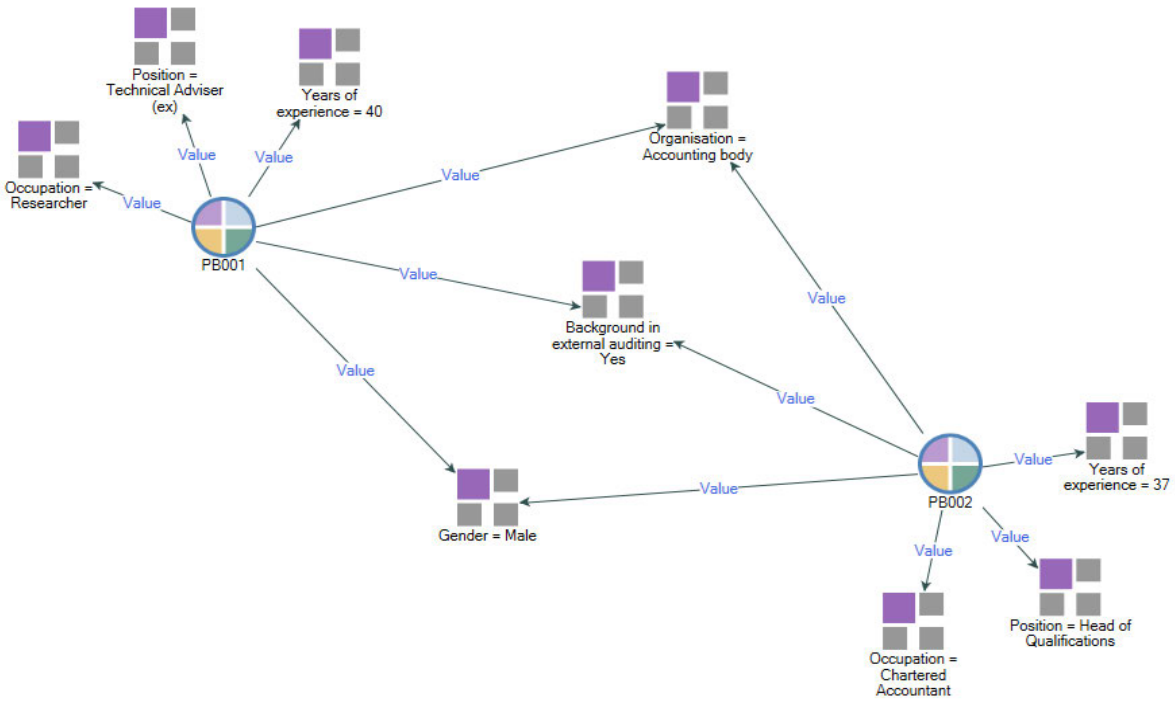


Figure VI.6: Mapping the similarities between the professional body specialists
Source: Author's NVivo output

Appendix VII: NVivo Analysis – Visual outputs

A – Participants' case classification

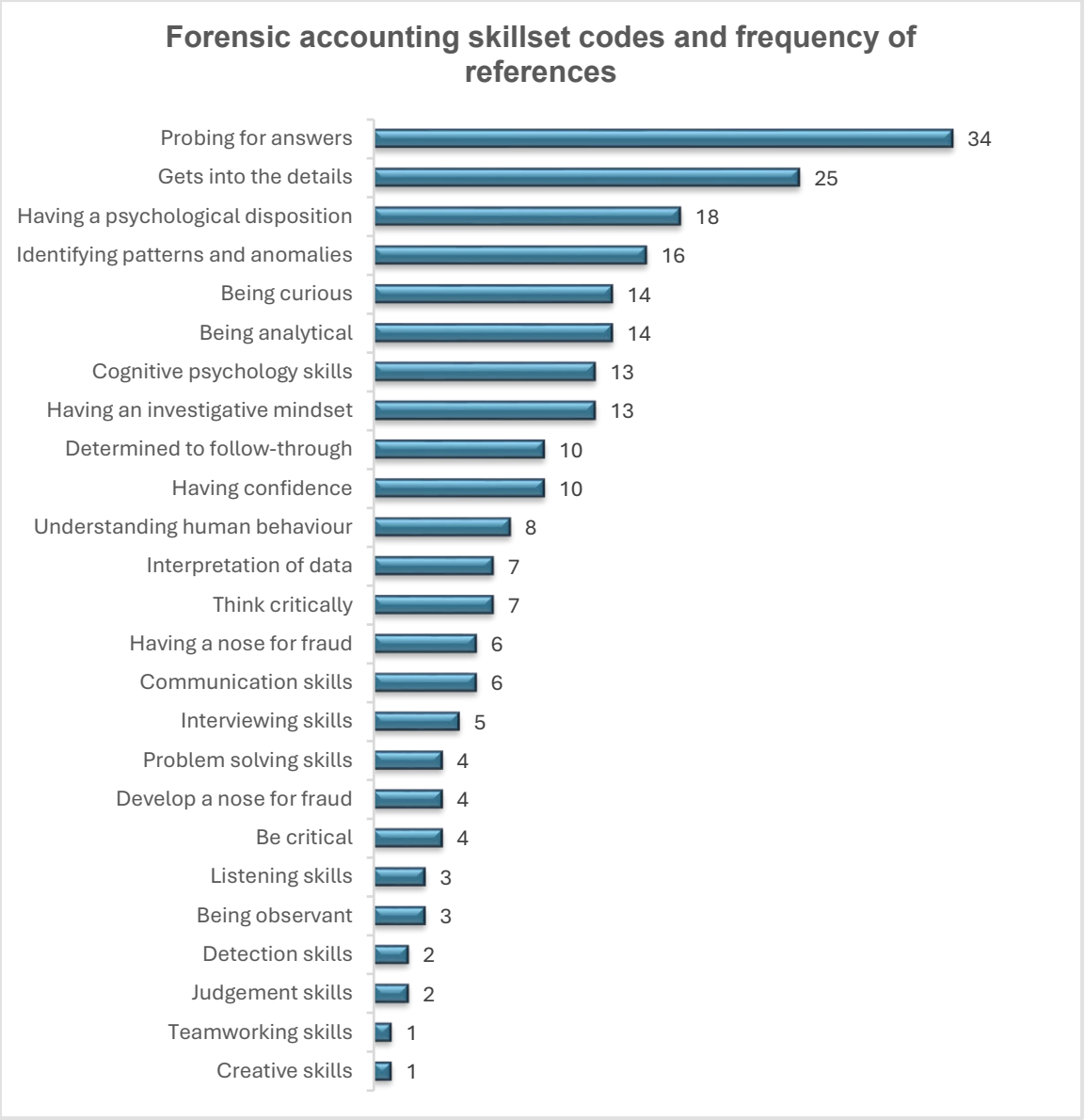
Cases

Search Project

Name	Files	References	Modified On	Modified By	Classification
ED001	1	1	7/14/2023 12:43 PM	AA	Participants ID
ED002	1	1	7/14/2023 5:05 PM	AA	Participants ID
ED003	1	1	7/21/2023 12:32 PM	AA	Participants ID
FA001	1	1	7/21/2023 3:39 PM	AA	Participants ID
FA002	1	1	7/26/2023 5:28 PM	AA	Participants ID
FA003	1	1	7/28/2023 5:46 PM	AA	Participants ID
PB001	1	1	8/1/2023 3:26 PM	AA	Participants ID
PB002	1	1	10/28/2023 10:18 PM	AA	Participants ID
XA001	1	1	8/3/2023 5:18 PM	AA	Participants ID
XA002	1	1	8/8/2023 3:00 PM	AA	Participants ID
XA003	1	1	10/28/2023 10:19 PM	AA	Participants ID
XA004	1	1	8/10/2023 3:37 PM	AA	Participants ID
XA005	1	1	7/12/2023 1:02 PM	AA	Participants ID
XA006	1	1	8/18/2023 3:44 PM	AA	Participants ID
XA007	1	1	8/18/2023 4:13 PM	AA	Participants ID

B – Initial codes on skillsets, linked to section 4.3.2.1

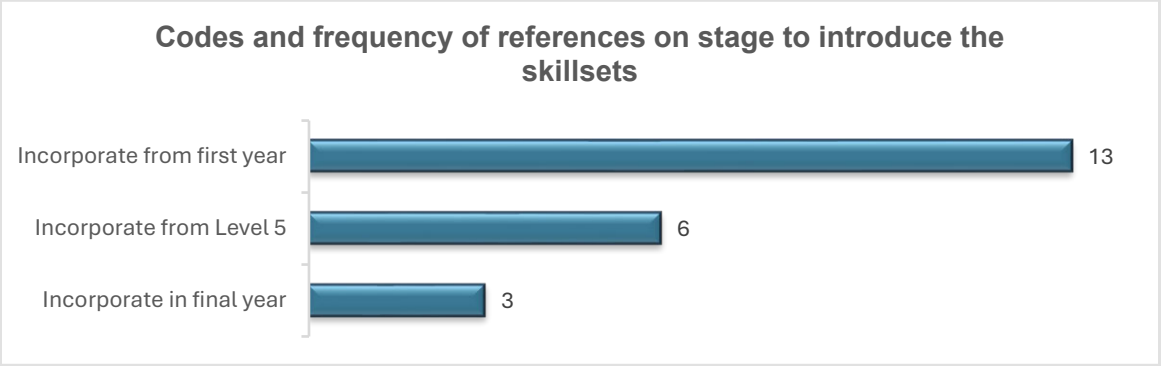
A visual presentation of all codes and the frequency of references



NVivo codes for key forensic accounting skillsets

C – Initial codes on stages to introduce forensic accounting in education and training, linked to section 4.3.2.2

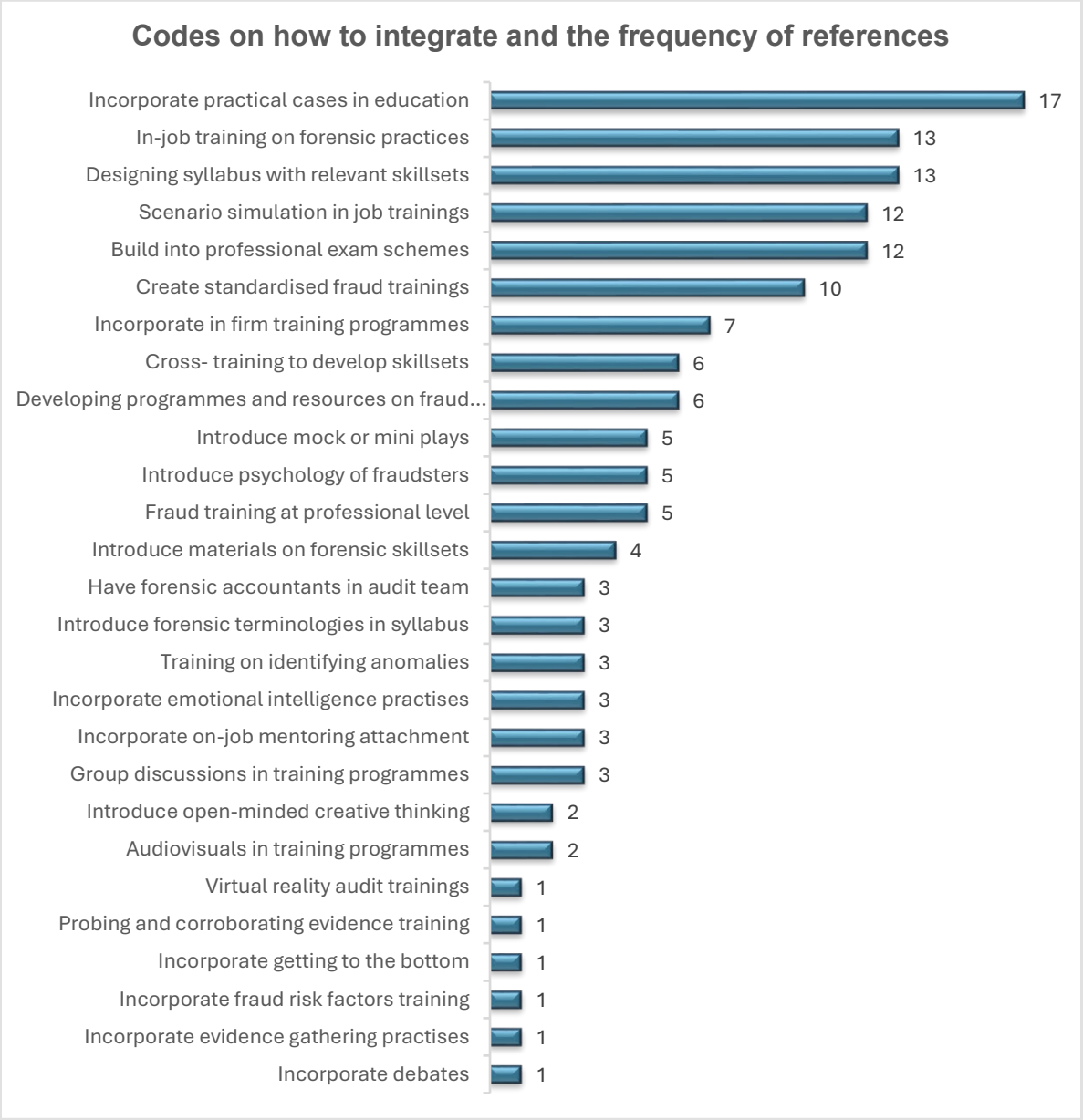
A graphic presentation of the codes and the frequency of references



NVivo codes for stages to introduce the skillsets in education/training

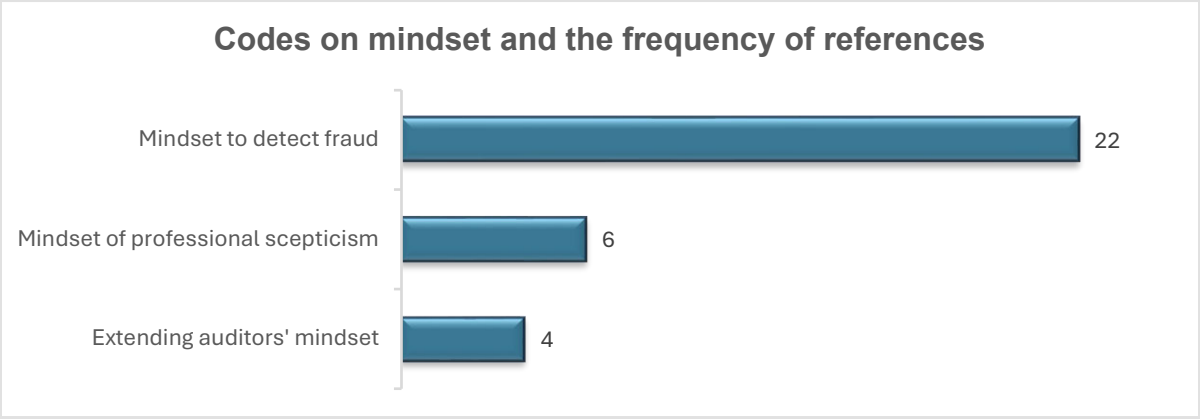
D – Initial codes on how to integrate skillsets in education and training, linked to section 4.3.2.3

A graphic presentation of the codes and the frequency of references



NVivo codes on how to incorporate the skillsets into auditors' education/training
Source: Author's creation

E – Initial codes on the essentiality of mindset, linked to section 4.3.2.4



NVivo codes for the essentiality of mindset
Source: Author's creation