

The Impact of Auditor Competence on Fraud Detection in China

Changqing Liu, Nor Hamimah Mastor*

Faculty of Management, Universiti Teknologi Malaysia, Johor Bahru 81310, Malaysia

*Corresponding Author

DOI: <https://dx.doi.org/10.47772/IJRISS.2025.910000739>

Received: 02 November 2025; Accepted: 10 November 2025; Published: 22 November 2025

ABSTRACT

In recent years, the issue of corporate fraud has gained increasing attention in both academic research and professional practice, the role of auditors in fraud prevention and detection has become increasingly critical. This study investigates the impact of auditor competence—comprising technical knowledge, professional skepticism, and professional ethics—on fraud detection performance in China. Drawing on data from 382 practicing auditors and analyzed using SPSS statistical analysis, the findings reveal that all three dimensions significantly enhance auditors' fraud detection capability, with professional skepticism exerting the strongest influence, followed by technical knowledge and professional ethics. These results suggest that a questioning mindset, analytical acumen, and ethical integrity collectively determine the effectiveness of fraud identification. In particular, professional skepticism enables auditors to critically evaluate audit evidence, challenge management assertions, and maintain vigilance when confronted with ambiguous or conflicting information. Technical knowledge equips auditors with the analytical and procedural skills necessary to identify complex fraud schemes, while professional ethics ensure that judgments remain objective and independent despite social or client-related pressures. The study also highlights the unique institutional and relational dynamics within the Chinese auditing context, where factors such as guanxi and regulatory expectations may influence auditor behavior. Practical implications emphasize the importance of enhancing continuous professional education, integrating ethics and skepticism into competency frameworks, and cultivating an audit culture that encourages transparency and critical inquiry. By linking core auditor competencies to measurable fraud detection outcomes, this research contributes to improving audit quality and reinforcing public confidence in financial reporting.

Keywords: Auditor competence; fraud detection; professional skepticism; technical knowledge; professional ethics

INTRODUCTION

With the surge in accounting scandals over the past decade, both corporations and the public have grown more conscious of the critical need for early fraud prevention and detection mechanisms (Giroux, 2008; Xanthopoulou et al., 2024). Expectations surrounding auditors' abilities to detect fraud have intensified significantly. According to the U.S. Financial Fraud Committee, financial fraud can originate from internal misconduct as well as individual subjective factors. Regardless of whether the cause lies in deliberate manipulation or unintentional misstatements, any inaccuracy in financial disclosures can result in substantial, and at times irreversible, consequences for users of financial reports (Alharasis, 2025; Nemati et al., 2024). In recent years, the issue of corporate fraud has gained increasing attention in both academic research and professional practice. To deepen the understanding of fraud detection, this study concentrates on the Chinese context, in which the incidence of fraud has shown a persistent upward trend (reference, year). As a developing country that strongly emphasizes economic growth and capital market expansion, China continues to face financial reporting fraud as a major threat to market transparency and investor confidence. (Alao et al., 2024; Ren et al., 2022). High-profile cases such as Kangmei Pharmaceutical, Luckin Coffee, and others have exposed severe shortcomings in internal controls and external audit mechanisms. These events have not only damaged public trust in corporate disclosures but also raised urgent questions about the effectiveness of auditors in detecting fraud. Within this context, the competence of auditors has emerged as a critical factor influencing the credibility and accuracy of

financial information (Jarrah et al., 2022). While regulatory efforts have been made to strengthen auditing standards and promote professional accountability, the actual capacity of auditors to detect and prevent fraudulent activities remains a subject of ongoing concern.

Auditor competence encompasses a wide range of professional attributes, including technical knowledge, analytical skills, ethical integrity, and the ability to exercise professional skepticism (Jumaili et al., 2023; Rumasukun, 2024). It is generally believed that auditors who possess higher levels of competence are better equipped to identify red flags and irregularities in financial statements. However, in practice, many fraudulent activities continue to go undetected, even in the presence of external audits. This discrepancy between theoretical expectations and practical outcomes suggests that competence alone may not be sufficient, or that its influence is not fully understood in the Chinese auditing environment. Unlike in Western countries, where the auditing profession is relatively mature and well-regulated, China's institutional environment presents unique challenges such as regulatory fragmentation, local protectionism, and a rapidly evolving corporate landscape. These contextual factors may hinder the full realization of auditors' professional capabilities, thereby limiting the effectiveness of fraud detection.

Despite the growing body of literature on audit quality and fraud prevention, empirical studies that specifically examine the impact of auditor competence on fraud detection in the Chinese context remain scarce. Much of the existing research tends to focus on institutional reforms, corporate governance mechanisms, or the role of audit firms' reputational incentives, rather than the individual-level attributes of auditors themselves (Porcuna Enguix, 2021; Rizwan & Chughtai, 2023). While the individual-level cognitive and ethical factors that drive auditors' fraud detection performance are underexplored, there is a lack of systematic frameworks integrating the three competence dimensions (technical knowledge, professional skepticism, and professional ethics) into a coherent model of fraud detection effectiveness. This gap highlights the necessity for empirical studies that assess how each dimension contributes to fraud identification outcomes within the specific cultural and institutional context of China's audit profession. Therefore, this study investigates the impact of auditor competence on fraud detection performance using data collected from 382 practicing auditors across various firm types in China. The research examines the direct effects of three competence dimension (technical knowledge, professional skepticism, and professional ethics) on auditors' ability to detect fraud.

The contributions of this study are threefold: (1) It extends existing models of audit quality by explicitly linking individual-level competence dimensions to measurable fraud detection outcomes, providing a more comprehensive understanding of auditor performance; (2) it offers practical insights for policymakers and audit firms in China, emphasizing the importance of integrating technical, skeptical, and ethical training within professional development programs; (3) it highlights the need for cultivating a sustained culture of professional skepticism and ethical accountability to enhance public trust in the auditing profession. By bridging the gap between theoretical competence and practical performance, this study contributes to improving audit quality, regulatory effectiveness, and fraud resilience within China's evolving financial landscape.

LITERATURE REVIEW AND HYPOTHESES

Auditor Competence

Auditor competence is a foundational concept in auditing and assurance services. It refers to the combination of knowledge, skills, attitudes, and behaviors that enable auditors to perform their professional responsibilities effectively and ethically (Chanaklang et al., 2015; Mansouri et al., 2009). According to the International Federation of Accountants (2019), competence encompasses technical expertise, professional judgment, ethical conduct (Mat Ridzuan et al., 2022; Rumasukun, 2024). It is not merely a function of academic qualifications or certifications but includes continuous professional development, experience, and personal attributes. Scholars have approached auditor competence through both theoretical and empirical lenses. Bonner and Lewis (1990) define auditor competence as task-specific knowledge and cognitive ability that allows auditors to perform professional judgments accurately (Mala & Chand, 2015; Nelson & Tan, 2005). In practice, competence is often measured using indicators such as years of experience, educational background, professional certifications (e.g., CPA, ACCA), industry specialization, and the auditor's engagement with training and development programs (Lee et al., 2016). Further studies emphasize the importance of non-technical attributes such as professional

skepticism, ethical sensitivity, and interpersonal skills, suggesting that technical knowledge alone is insufficient for high-quality audit performance (Afroogh et al., 2024; Martinov-Bennie & Pflugrath, 2009; Tan et al., 2024). Therefore, auditor competence is now widely viewed as a multidimensional construct incorporating both objective credentials and subjective professional traits.

Fraud Detection

Fraud detection in auditing refers to the auditor's ability to identify material misstatements in financial statements that result from intentional deception (Johnson et al., 1993; Khaksar et al., 2022). The American Institute of Certified Public Accountants (AICPA, 2002) states that auditors have a responsibility to plan and perform audits with professional skepticism to detect fraud that may materially affect financial reporting (Carpenter & Reimers, 2013; Cullinan & Sutton, 2002). Conceptually, fraud is often analyzed through the "fraud triangle" framework, which identifies three key elements that contribute to fraudulent behavior: pressure (e.g., financial difficulties), opportunity (e.g., weak internal controls), and rationalization (e.g., moral justification) (Kassem & Higson, 2012; Oseifuah, 2025). Auditors must be trained to identify the presence of these conditions and assess the associated risks during an audit engagement.

Fraud detection involves both analytical and investigative techniques. Lumbanraja (2025) emphasized that the use of red flags, forensic data analytics, trend analyses, and interviews with personnel can enhance an auditor's ability to detect misstatements. However, fraud detection is inherently complex due to the deliberate efforts by perpetrators to conceal their actions. Management override of controls, collusion, and falsified documentation are frequent barriers to detection (Rezaee, 2005). Literature in this field also underscores the human factors involved in fraud detection. Professional skepticism, ethical orientation, and judgment play crucial roles in determining whether an auditor questions anomalies or accepts explanations at face value. Studies by DeZoort and Harrison (2018) suggest that individual auditors vary widely in their approach to fraud detection depending on their experience, risk tolerance, and ethical disposition.

The Relationship Between Auditor Competence and Fraud Detection

Theoretically, auditor competence is expected to positively influence the reliability and effectiveness of fraud detection. Competent auditors are more likely to possess the analytical ability, professional judgment, and ethical grounding necessary to detect fraudulent activities. This relationship has been supported by several empirical studies across different contexts. Rusli et al. (2025) found that auditors with high domain-specific knowledge and extensive experience were more adept at detecting complex fraud schemes, especially in revenue recognition. Similarly, Drogalas et al. (2017) demonstrated that auditors who received regular fraud detection training were more successful in identifying and responding to fraud risk factors. These findings support the view that competence is a critical enabler of effective fraud detection. Thus, the following hypothesis was proposed:

H1: There is a positive significant relationship between technical knowledge and fraud detection

Furthermore, auditor competence has been linked to professional skepticism—a crucial attitude for fraud detection (Noch et al., 2022). Hurtt et al. (2013) argued that more competent auditors tend to exercise greater skepticism, leading them to probe deeper into potential irregularities. Likewise, Aschauer et al. (2017) developed a scale to measure skepticism and found that it was positively associated with audit quality outcomes, particularly fraud identification. From a behavioral perspective, the ability to resist client pressure and maintain ethical independence is also seen as a function of competence. Kung and Li Huang (2013) found that auditors with higher ethical competence were less likely to succumb to client influences that might deter them from reporting suspicious findings. Therefore, the study proposes that:

H2: There is a positive significant relationship between professional skepticism and fraud detection

In addition, professional ethics plays a vital role in ensuring audit quality and enhancing auditors' ability to detect financial fraud. Ethical principles such as integrity, objectivity, and professional behavior guide auditors to act with honesty and fairness, even under pressure from clients or organizational constraints (IFAC, 2018).

Research indicates that strong ethical awareness reduces the likelihood of unethical decisions and increases auditors' commitment to report irregularities (Sweeney, Arnold, & Pierce, 2010). Furthermore, auditors with high ethical standards are more likely to exercise professional skepticism and maintain independence, which directly improves fraud detection effectiveness (Ardelean, 2013). Ethical training and a supportive organizational culture also reinforce auditors' moral reasoning and reduce tolerance for unethical practices. Therefore, strengthening professional ethics within the auditing profession is essential for promoting integrity, enhancing fraud detection, and safeguarding public trust in financial reporting. The following hypothesis was proposed:

H3: There is a positive significant relationship between professional skepticism and fraud detection

METHODOLOGY

Respondent Selection

The primary objective of this research is to explore the impact of auditor competence on their effectiveness in detecting fraud within the Chinese auditing context. While previous literature highlights the theoretical significance of auditor competence in fraud detection, empirical evidence—particularly in China—is still limited. Therefore, this study seeks to fill the knowledge gap by collecting primary data from practicing auditors to analyze how various dimensions of competence (e.g., technical knowledge, professional skepticism, experience) influence their fraud detection capabilities. The survey targets certified auditors working in accounting firms of different sizes, including the "Big Four," regional firms, and small local audit practices. Respondents include audit managers, senior auditors, and junior staff, as these professionals are directly involved in financial audits and possess varying levels of experience and responsibility. The geographical focus includes major economic zones in China, such as Beijing, Shanghai, Guangzhou, Chengdu, and Wuhan, ensuring regional diversity and enhancing the generalizability of the results.

To ensure the relevance and credibility of responses, only participants with at least two years of full-time audit experience and holding valid professional certifications (such as CPA or equivalent) were included in the study. This criterion ensures that respondents are sufficiently familiar with real audit environments and have had exposure to issues related to fraud detection. Participants were primarily drawn from major metropolitan areas in China (e.g., Beijing, Shanghai, Guangzhou) as well as selected second-tier cities, in order to account for potential regional differences in technological receptivity. All respondents were required to have attended at least one theatrical performance that incorporated new media elements, ensuring a baseline level of technological exposure and familiarity.

Sampling Method

The study adopts a **stratified random sampling** approach to ensure representation across different types of audit firms and levels of experience. The research subjects comprised 363,804 auditors registered with the Chinese Institute of Certified Public Accountants as of 2024. The population was stratified based on firm size (Big Four, large domestic, small/mid-sized local firms), job position (junior auditor, senior auditor, manager or partner), and region (East China, Central China, South China, West China). From each stratum, random samples were selected to ensure that the diversity within the population is reflected in the sample. The decision to distribute 600 questionnaires was based on both methodological and practical considerations. In stratified random sampling, it is important to ensure that each subgroup (stratum) is adequately represented. Given the large total population of 363,804 auditors, a larger sample size was required to capture sufficient variation within each stratum and maintain statistical representativeness. Ultimately, 382 valid responses were returned and used for data analysis, resulting in a response rate of 63.7%.

Research Design

The auditor competence assessment adopted three dimensions—Technical Knowledge, Professional Skepticism, and Professional Ethics—comprising a total of nine items (Table 1). These items were adopted from prior studies (Jumaili et al., 2023; Koswara et al., 2023) and have been proven to be valid and reliable measures of auditors'

ability to perform their professional duties with high knowledge and skill. The finalized questionnaire was distributed through online and offline channels. Online surveys were delivered via professional networking platforms such as WeChat audit groups and CICPA forums, using Wenjuanxing, a popular Chinese online survey tool. Offline surveys were distributed during training sessions and audit seminars in Beijing, Guangzhou, and Shanghai with the cooperation of local accounting associations. To further validate the measurement, the mean score for each item and the internal consistency reliability (Cronbach's α) for each dimension were calculated. The results indicate strong internal consistency across all competence dimensions, with Cronbach's α values ranging from 0.82 to 0.88, exceeding the threshold value of 0.70 (Tavakol and Dennick (2011) and confirmed its reliability. Mean item scores ranging from 4.01 to 4.40, reflecting generally high self-reported competence among respondents.

Table 1: Three dimensions and nine items of audit independence

Dimensions	Code	Item	Mean	Cronbach's α
Technical Knowledge	AC1	My previous audit experience has enhanced my ability to identify potential fraud risks	4.23	0.85
	AC2	I can draw upon past audit cases to make informed and efficient decisions in new situations	4.10	
	AC3	I am skilled in using forensic audit techniques to uncover fraudulent transactions	4.01	
Professional Skepticism	AC4	I critically evaluate all audit evidence rather than accepting it at face value	4.35	0.82
	AC5	I maintain a questioning mindset when assessing management's explanations or assertions	4.28	
	AC6	I remain alert to potential fraud indicators during every stage of the audit	4.32	
Professional Ethics	AC7	I uphold independence and objectivity in all audit tasks, regardless of external pressure	4.40	0.88
	AC8	I report unethical behavior or irregularities even if it may strain relationships with clients or colleagues	4.22	
	AC9	I comply strictly with professional standards and ethical guidelines in every stage of the audit	4.38	

The fraud detection assessment consists of five items adapted from Handoyo & Indah Bayunitri (2021), which are recognized as valid and reliable measures of auditors' ability to detect fraud through evaluating internal controls, reviewing information systems, verifying transactions, and identifying irregularities in operational or financial records (Table 2). Mean scores and Cronbach's α were also calculated for these items, showing high internal consistency ($\alpha = 0.87$) and mean scores between 3.86 and 4.18, suggesting that respondents generally report strong confidence in their fraud detection capabilities.

Table 2: Measurement items for fraud detection

Latent Variable	Code	Item	Mean	Cronbach's α
	FD1	I am able to assess the ethical culture and awareness of internal controls among employees to identify potential fraud risks.	4.18	0.87

Fraud detection	FD2	I am able to identify, analyze, and evaluate fraud risks through risk assessment procedures.	4.12	
	FD3	I am able to verify that transactions follow proper authorization procedures as outlined in the SOPs and identify suspicious activities.	4.05	
	FD4	I am able to evaluate the effectiveness of information and communication systems in identifying or reporting fraud-related concerns.	3.86	
	FD5	I am able to detect potential fraud through continuous audit procedures and review of operational activities.	4.08	

RESULTS AND ANALYSIS

Demographic Descriptive Statistics

The demographic analysis provides a comprehensive overview of the 382 valid responses collected from professional auditors across different firms in China. As shown in Table 3, the gender distribution is relatively balanced, with 55% male and 45% female participants, suggesting that both genders are adequately represented in the auditing profession. The majority of respondents are between 30 and 39 years old (41.4%), followed by those aged under 30 (26.7%) and 40–49 (23.0%). This distribution indicates that most participants are in their early to mid-career stages, a period typically characterized by both professional competence and active engagement in audit assignments. Regarding job position, 42.4% of respondents serve as senior auditors, 31.4% as junior auditors, and 26.2% as managers or partners. This spread ensures representation across multiple experience levels and hierarchical roles.

Table 3: Demographic characteristics of respondents

Demographic Variable	Category	Frequency	Percentage (%)
Gender	Male	210	55.0
	Female	172	45.0
Age	<30	102	26.7
	30–39	158	41.4
	40–49	88	23.0
	≥50	34	8.9
Position	Junior Auditor	120	31.4
	Senior Auditor	162	42.4
	Manager/Partner	100	26.2
Firm Type	Big Four	115	30.1
	Large Domestic	137	35.9

	Small/Mid Local	130	34.0
Work Experience	2–5 years	98	25.7
	6–10 years	150	39.3
	>10 years	134	35.1

Similarly, firm type is well-distributed: 30.1% from Big Four firms, 35.9% from large domestic firms, and 34.0% from small or mid-sized local firms. This balanced composition enhances the generalizability of findings across organizational scales. In terms of experience, 39.3% of auditors possess 6–10 years of professional experience, followed by 35.1% with more than 10 years. This suggests that most participants have substantial exposure to practical audit work, providing a robust foundation for examining competence and fraud detection ability. Overall, the demographic profile demonstrates a diverse and representative sample of the auditing population in China. The inclusion of varied ages, firm types, and experience levels ensures that the subsequent regression analyses on technical knowledge, professional skepticism, and professional ethics are grounded in a heterogeneous dataset, reducing sampling bias and enhancing external validity.

Impact of Technical Knowledge on Fraud Detection

The regression analysis results (Table 4) show that Technical Knowledge (TK) has a significant positive effect on Fraud Detection (FD), with a standardized regression coefficient $\beta = 0.46$, $t = 6.43$, $p < 0.001$. This indicates that auditors' technical proficiency enhances their ability to identify fraudulent activities. Therefore, Hypothesis 1 is supported.

This result suggests that auditors who possess a comprehensive understanding of auditing standards, analytical tools, and financial reporting systems are better equipped to recognize irregularities and detect potential fraud. Technical competence enables auditors to interpret complex data patterns, identify inconsistencies between supporting documents and reported figures, and apply forensic techniques effectively. From a theoretical perspective, these findings are consistent with the prior studies (e.g., Koswara et al., 2023; Jumaili et al., 2023) emphasizing that professional expertise is a key determinant of audit quality and fraud detection performance. In practice, auditors with stronger technical foundations can evaluate control environments more critically and design effective audit procedures tailored to specific fraud risks. Moreover, the significance of TK highlights the evolving skill requirements in the digital auditing environment, where data analytics and information systems are increasingly integrated into audit work. Thus, continuous technical training and professional education remain crucial for improving auditors' fraud detection capability and sustaining audit effectiveness in a rapidly changing technological landscape.

Table 4: Regression results of the impact of technical knowledge on fraud detection

Independent variable	β	T-value	P-value
Technical Knowledge → Fraud Detection	0.46	6.43	<0.001

Impact of Professional Skepticism on Fraud Detection

Regression analysis demonstrates that Professional Skepticism (PS) exerts the strongest positive influence on Fraud Detection (FD) among all competence dimensions (Table 5). The standardized path coefficient is $\beta = 0.58$ ($p < 0.001$), indicating a substantial and statistically significant relationship. Therefore, Hypothesis 2 passed the test.

This finding implies that auditors who maintain a questioning mindset, critically evaluate audit evidence, and remain alert to potential irregularities are considerably more likely to identify fraud. Skepticism encourages auditors to avoid overreliance on management representations, to seek corroborative evidence, and to interpret audit results with professional caution. According to Hurtt's (2010), the cognitive disposition enhances auditors'

alertness and analytical depth, particularly when evidence is ambiguous or contradictory. The result also supports Nelson (2009), who emphasized that skepticism acts as a cognitive safeguard against audit failures. In the Chinese context, where client relationships and social pressures can influence auditor judgment, the cultivation of professional skepticism is especially vital to maintaining audit objectivity.

Table 5: Regression results of the impact of professional skepticism on fraud detection

Independent variable	β	T-value	P-value
Technical Knowledge → Fraud Detection	0.58	7.31	<0.001

Impact of professional ethics on fraud detection

The regression results (Table 6) show that Professional Ethics (PE) also has a significant positive effect on Fraud Detection (FD), with a standardized path coefficient of $\beta = 0.34$ ($p < 0.001$). Therefore, Hypothesis 3 passed the test. Although this coefficient is lower than that of professional skepticism, it still represents a meaningful and robust influence on auditors' performance.

Ethical behavior reinforces auditors' independence, integrity, and objectivity, which are essential for unbiased fraud evaluation. Auditors who strictly adhere to ethical standards are more likely to resist external pressures, report irregularities, and maintain transparency in their audit judgments (Friday et al., 2024). The positive relationship between ethics and fraud detection in this study implies that moral principles serve as a behavioral anchor that guides auditors in situations involving conflicts of interest or client pressure. Ethical auditors are more likely to report fraud even when doing so may jeopardize client relationships or professional advancement. This result has important policy implications for the accounting profession in China. It underscores the necessity of integrating ethical reasoning and integrity-based education into continuing professional development programs. By reinforcing ethical standards alongside technical and skeptical competencies, audit firms can cultivate a professional culture that enhances both audit quality and public trust.

Table 6: Regression results of the impact of professional ethics on fraud detection

Independent variable	β	T-value	P-value
Technical Knowledge → Fraud Detection	0.34	5.24	<0.001

CONCLUSION

This study investigated the impact of three core dimensions of auditor competence—technical knowledge, professional skepticism, and professional ethics—on fraud detection performance among auditors in China. Using SPSS statistical analysis based on data collected from 382 auditors across different firm types and experience levels, the findings reveal meaningful insights into how competence factors shape auditors' ability to identify and respond to fraudulent activities. The empirical results demonstrate that all three competence dimensions exert significant positive effects on fraud detection, though their magnitudes differ. Among them, professional skepticism emerges as the most influential predictor ($\beta = 0.58$, $p < 0.001$), followed by technical knowledge ($\beta = 0.46$, $p < 0.001$) and professional ethics ($\beta = 0.34$, $p < 0.001$).

The results offer several implications for auditing firms, regulatory bodies, and professional education institutions. First, audit firms should prioritize fostering professional skepticism through continuous training, case-based learning, and scenario analysis. Encouraging auditors to maintain an inquisitive mindset can substantially reduce the likelihood of fraud oversight, particularly in high-pressure or relationship-sensitive engagements. Second, technical training should be strengthened, especially in areas of data analytics, forensic accounting, and digital auditing. As technological integration accelerates, auditors must be equipped with advanced analytical capabilities to detect increasingly sophisticated fraud schemes. Firms could develop competency-based learning pathways to ensure that technical skills evolve alongside changes in regulatory and

digital environments. Third, ethical education should be embedded into professional development programs. Integrating real-world ethical dilemmas into audit simulations and workshops can enhance moral awareness and decision-making under pressure. Moreover, audit regulators and professional associations should reinforce ethical codes through regular monitoring and ethical culture assessments to ensure that compliance is both behavioral and internalized.

While the study provides valuable insights, several limitations warrant consideration and open pathways for future inquiry. First, the data were collected through self-reported questionnaires, which may introduce response bias or overestimation of competence levels. Future studies could adopt mixed methods, combining survey data with objective performance indicators or experimental audit tasks to enhance measurement validity. Second, this research focused primarily on auditors in China, limiting generalizability to other cultural or regulatory contexts. Comparative studies across countries could explore how institutional and cultural factors moderate the competence–fraud detection relationship. Finally, future research could integrate technological competence as a distinct construct, reflecting the growing importance of artificial intelligence, blockchain, and data analytics in modern auditing. Investigating how digital literacy interacts with ethical and skeptical dimensions could offer a more comprehensive understanding of competence in the era of intelligent auditing.

REFERENCE

1. Afroogh, S., Akbari, A., Malone, E., Kargar, M., & Alambeigi, H. (2024). Trust in AI: progress, challenges, and future directions. *Humanities and Social Sciences Communications*, 11(1), 1-30.
2. Alao, A. I., Adebisi, O. O., & Olaniyi, O. O. (2024). The interconnectedness of earnings management, corporate governance failures, and global economic stability: A critical examination of the impact of earnings manipulation on financial crises and investor trust in global markets. *Asian Journal of Economics, Business and Accounting*, 24(11), 47-73.
3. Alharasis, E. E. (2025). The implementation of IFRS electronic financial reporting–XBRL and usefulness of financial information: evidence from Jordanian finance industry. *International Journal of Law and Management*, 6(2), 33-45.
4. Aschauer, E., Fink, M., Moro, A., van Bakel-Auer, K., & Warming-Rasmussen, B. (2017). Trust and professional skepticism in the relationship between auditors and clients: Overcoming the dichotomy myth. *Behavioral Research in Accounting*, 29(1), 19-42.
5. Carpenter, T. D., & Reimers, J. L. (2013). Professional skepticism: The effects of a partner's influence and the level of fraud indicators on auditors' fraud judgments and actions. *Behavioral Research in Accounting*, 25(2), 45-69.
6. Chanaklang, A., Ussahawanitichakit, P., & Boonlua, S. (2015). AUDIT ADAPTATION COMPETENCY AND AUDIT SURVIVAL: A CONCEPTUAL PAPER. Allied Academies International Conference. Academy of Accounting and Financial Studies. Proceedings,
7. Cullinan, C. P., & Sutton, S. G. (2002). Defrauding the public interest: A critical examination of reengineered audit processes and the likelihood of detecting fraud. *Critical Perspectives on Accounting*, 13(3), 297-310.
8. DeZoort, F. T., & Harrison, P. D. (2018). Understanding auditors' sense of responsibility for detecting fraud within organizations. *Journal of business ethics*, 149(4), 857-874.
9. Drogalas, G., Pazarskis, M., Anagnostopoulou, E., & Papachristou, A. (2017). The effect of internal audit effectiveness, auditor responsibility and training in fraud detection. *Accounting and Management Information Systems*, 16(4), 434-454.
10. Friday, S. C., Ameyaw, M. N., & Jejenywa, T. O. (2024). The Role of Auditors in Enforcing Ethical Standards in Corporations: A Conceptual Framework. *International Journal of Advanced Multidisciplinary Research and Studies*, 4(6), 1591-1601.
11. Giroux, G. (2008). What Went Wrong? Accounting Fraud and Lessons from the Recent Scandals. *Social Research: An International Quarterly*, 75(4), 1205-1238.
12. Hurtt, R. K., Brown-Liburd, H., Earley, C. E., & Krishnamoorthy, G. (2013). Research on auditor professional skepticism: Literature synthesis and opportunities for future research. *Auditing: A journal of practice & theory*, 32(Supplement 1), 45-97.

13. Jarah, B. A. F., Al Jarrah, M. A., Al-Zaqeba, M. A. A., & Al-Jarrah, M. F. M. (2022). The role of internal audit to reduce the effects of creative accounting on the reliability of financial statements in the Jordanian islamic banks. *International Journal of Financial Studies*, 10(3), 60.
14. Johnson, P. E., Grazioli, S., & Jamal, K. (1993). Fraud detection: Intentionality and deception in cognition. *Accounting, Organizations and Society*, 18(5), 467-488.
15. Jumaili, S., Rahayu, S., & Rahayu, R. (2023). The effect of auditor's competence, experience, professional ethics, and auditor's professional skepticism on the auditor's ability in detecting fraud. *JPPI (Jurnal Penelitian Pendidikan Indonesia)*, 9(3), 1687-1695.
16. Kassem, R., & Higson, A. (2012). The new fraud triangle model. *Journal of emerging trends in economics and management sciences*, 3(3), 191-195.
17. Khaksar, J., Salehi, M., & Lari DashtBayaz, M. (2022). The relationship between auditor characteristics and fraud detection. *Journal of Facilities Management*, 20(1), 79-101.
18. Kung, F. H., & Li Huang, C. (2013). Auditors' moral philosophies and ethical beliefs. *Management decision*, 51(3), 479-500.
19. Lee, S.-C., Su, J.-M., Tsai, S.-B., Lu, T.-L., & Dong, W. (2016). A comprehensive survey of government auditors' self-efficacy and professional Development for improving audit quality. *SpringerPlus*, 5(1), 1263.
20. Lumbanraja, T. (2025). Role of Big Data Analytics in Enhancing Audit Decision-Making and Detecting Material Misstatements. *Side: Scientific Development Journal*, 2(1), 35-41.
21. Mala, R., & Chand, P. (2015). Judgment and decision-making research in auditing and accounting: future research implications of person, task, and environment perspective. *Accounting Perspectives*, 14(1), 1-50.
22. Mansouri, A., Pirayesh, R., & Salehi, M. (2009). Audit competence and audit quality: Case in emerging economy. *International Journal of Business and Management*, 4(2), 17-25.
23. Martinov-Bennie, N., & Pflugrath, G. (2009). The strength of an accounting firm's ethical environment and the quality of auditors' judgments. *Journal of business ethics*, 87(2), 237-253.
24. Mat Ridzuan, N. I., Said, J., Razali, F. M., Abdul Manan, D. I., & Sulaiman, N. (2022). Examining the role of personality traits, digital technology skills and competency on the effectiveness of fraud risk assessment among external auditors. *Journal of Risk and Financial Management*, 15(11), 536-548.
25. Nelson, M., & Tan, H. T. (2005). Judgment and decision making research in auditing: A task, person, and interpersonal interaction perspective. *Auditing: A journal of practice & theory*, 24(s-1), 41-71.
26. Nemati, Z., Mohammadi, A., Bayat, A., & Mirzaei, A. (2024). Fraud Risk Prediction in Financial Statements through Comparative Analysis of Genetic Algorithm, Grey Wolf Optimization, and Particle Swarm Optimization. *Iranian Journal of Finance*, 8(1), 98-130.
27. Noch, M. Y., Ibrahim, M. B. H., Akbar, M. A., Kartim, K., & Sutisman, E. (2022). Independence and competence on audit fraud detection: Role of professional skepticism as moderating. *Jurnal Akuntansi*, 26(1), 161-175.
28. Oseifuah, E. K. (2025). Application of the fraud triangle model in mitigating tax evasion in developing countries: a conceptual framework. *International Journal of Business Ecosystem & Strategy* (2687-2293), 7(2), 297-306.
29. Porcuna Enguix, L. (2021). The new EU remuneration policy as good but not desired corporate governance mechanism and the role of CSR disclosing. *Sustainability*, 13(10), 5476.
30. Ren, L., Zhong, X., & Wan, L. (2022). Missing analyst forecasts and corporate fraud: Evidence from China. *Journal of business ethics*, 181(1), 171-194.
31. Rizwan, S., & Chughtai, S. (2023). Reestablishing the legitimacy after fraud: does corporate governance structure matter? *South Asian Journal of Business Studies*, 12(4), 537-558.
32. Rumasukun, M. R. (2024). Developing auditor competencies through continuous training and education. *Golden Ratio of Auditing Research*, 4(1), 14-23.
33. Rusli, A. A., Yusnaini, Y., & Sukanto, S. (2025). Enhancing Fraud Detection: Roles of Skepticism, Audit Technology, and Industry Specialization in Indonesia. *Economics, Business, Accounting & Society Review*, 4(1), 138-150.
34. Tan, M., Lee, H., Wang, D., & Subramonyam, H. (2024). Is a seat at the table enough? Engaging teachers and students in dataset specification for ml in education. *Proceedings of the ACM on Human-Computer Interaction*, 8(CSCW1), 1-32.

-
35. Tavakol, M., & Dennick, R. 2011. Making Sense of Cronbach's Alpha. *International Journal of Medical Education*, 2(5), 53-55
 36. Xanthopoulou, A., Skordoulis, M., Kalantonis, P., & Arsenos, P. (2024). Integrating corporate governance and forensic accounting: A sustainable corporate strategy against fraud. *Journal of Governance and Regulation*/Volume, 13(2), 23-34.