

Developing a Framework for Fraud Risk and Financial Crimes Platforms in Companies Based On Managerial Cognitive Styles*

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Abstract

There has been a rise in financial misconduct and white-collar crimes in today's competitive economic landscape. The notable surge in observed accounting fraud cases has drawn significant attention from investors, academic researchers, the media, the public, and financial regulators. This study aims to develop a model to mitigate fraud risk in companies, grounded in managers' cognitive styles. A qualitative grounded theory approach was employed to construct this model, and the categorized indicators were validated using both a confirmatory factor analysis model and the Q-model approach. In this study, insights from 10 accounting and auditing professionals were used to identify and validate indicators aligned with the foundational model. Based on identified concepts related to fraud risk platforms, the findings led to the formulation and validation of a paradigm encompassing 22 primary categories. These categories include Supervisory, Economic, Political, and Social Factors, Managerial Pressure, Organizational Determinants, Management Cognitive Style, Governance Factors, Corporate Structural Variables, Managerial Motivational Drivers, Industry-Specific Factors, Legislative and Regulatory Framework, Employee-Related Determinants, Individual-level Determinants, Cultural Influences, Managerial Incompetence, Financial Literacy of Executives, Ethical Considerations and Organizational Commitment, Organizational Consequences, Ethical Consequences, Effectiveness Strategies, and Organizational Efficiency Strategies. These categories were incorporated into the paradigm framework as dimensions of causal conditions, contextual factors, intervening factors, strategies, and outcomes. The categorization of indicators in this proposed model was validated through confirmatory factor analysis with Smart PLS, further reinforcing the findings.

Keywords: Fraud Risk Platforms; Managerial Cognitive Styles; Grounded Theory Approach.

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A. INTRODUCTION

The financial reporting system has consistently struggled to secure public trust. The increasing frequency of fraud and financial statement restatements, often associated with the bankruptcy of large corporations, has raised concerns about the reliability and integrity of financial reports. Consequently, the prevention and detection of material fraud in financial statements has remained a central focus for investors, managers, and auditors ([Ramos, 2003](#)). In recent years, the accounting profession has attracted increased attention due to scandals involving financial fraud by managers. In this context, Statement of Auditing Standards No. 99 has compelled auditors to gather essential information for assessing fraud ([Hayes, 2006](#)). According to Section 24 of the Iranian Auditing Standards, fraud is defined as any intentional or deceptive act by one or more managers, employees, or third parties to gain an unfair or illegal advantage. Fraud involving one or more managers of the entity under examination is referred to as managerial fraud ([Committee for the Development of Auditing Standards, 2015](#)). According to Wallace ([1995](#)), fraud involves deliberate, premeditated schemes designed to deceive others, often executed through the use of falsified documents and records. International accounting and auditing institutions, along with professional associations and scholars worldwide, have developed and published principles, methodologies, and standards to support and guide auditors. The risk factors outlined in these standards provide essential guidance for both internal and external auditors to prevent, detect, and report fraud and fraudulent financial reporting. Therefore, fraud is now recognized as the most critical threat to public interests and the capital market. Its occurrence has more than quadrupled over the past few decades, and its destructive effects continue to endure ([Bayuandika & Mappanyukki, 2021](#)). As a result, fraud — encompassing asset misappropriation, financial corruption, and financial statement fraud has consistently been a central concern for company stakeholders. Despite stringent regulations in this area, the phenomenon continues to escalate. Modern-day fraudsters operate with remarkable innovation, sophistication, and speed. ([Sadgali et al., 2019](#))

With technological advancements, fraudulent schemes have become more intricate, making their detection significantly more challenging. As a result, the demand for innovative methods to effectively minimize errors in fraud detection has grown more pronounced. The biennial report by the Association of Certified Fraud Examiners (ACFE) highlights that "asset misappropriation" is the most common type of fraud across various societies. Estimates suggest that the global annual cost of fraud exceeds 4.5 trillion dollars, a figure that surpasses the annual budgets of many countries. According to Transparency International's 2020

report, Iran ranked 146th out of 180 countries in terms of the extent of financial corruption. Iran's ranking has declined by eight positions compared to the previous year, according to statistics from this organization. This marks Iran's lowest ranking in recent years. As reported by the Association of Certified Fraud Examiners ([2020](#)), asset misappropriation alone accounted for 89% of documented fraud cases between 2018 and 2020 ([Association of Certified Fraud Examiners, 2020](#)). Conversely, in today's dynamic environment, most organizations must undergo rapid transformations to maintain their competitive edge. Such changes demand leaders and employees who are adaptable, highly effective, and committed to continuously improving systems and processes, all while maintaining a strong customer focus ([Mortezavi, 2005](#)). Therefore, managers can no longer rely solely on traditional assumptions and management approaches to effectively initiate, manage, adapt to, and harness change. Instead, innovation and creativity are vital for organizational survival and growth. One key factor in fostering creativity and innovation within an organization is individuals' thinking styles. ([Sternberg, 1997](#))

In this regard, considering the crucial role of managers, their thinking styles become especially significant, as leadership involves influencing and guiding the actions of others to achieve defined goals. In other words, managers in organizations play a pivotal role in supporting, strengthening, and influencing the behavior of their colleagues and subordinates. By clearly defining the work environment, interpreting organizational goals, and making timely decisions, they must transform the organizational atmosphere into a dynamic, collaborative system of active engagement ([Alikhahband, 2005](#)). By gaining insight into thinking styles and their influence on individuals' behavior and performance, organizations can lay the foundation for creativity and progress. Studies conducted by Borlandoe ([2005](#)), Harrison and Bramson ([1984](#)), Sternberg ([1997](#)), and Yarbrough ([1995](#)) have highlighted that diverse thinking styles are a critical element in shaping leadership, management, and communication strategies ([Jones, 2006](#)). The varying thinking styles of managers and individuals within different organizations can lead to distinct performance outcomes. An individual's thinking style profoundly influences their methods of analysis, communication, problem-solving, leadership, management, and organizational structuring. ([Harrison & Bramson, 1997](#))

Therefore, fraud detection is of utmost importance, as neglecting it could, on the one hand, inflict irreparable harm on the auditing profession and, on the other hand, undermine public trust, jeopardize investors, and ultimately trigger a broader economic crisis. Appendix 24 of the Iranian Auditing Standards

outlines nearly 60 fraud risk factors that can significantly assist auditors in evaluating the potential risk of fraud. An auditor who fails to identify these fraud risk factors is likely to be ineffective in detecting fraud and may ultimately be held accountable. Thus, auditors' awareness and understanding of fraud risk factors, how these factors are applied, the extent to which they are integrated into audits, and the significance of each factor in fraud detection are critical elements that have driven international research. To date, there have been few studies in Iran examining fraud risk factors and their role in detecting fraudulent financial reporting. However, research exploring the relationship between fraud risk factors and managers' thinking styles has yet to be conducted. Therefore, the main objective of this study is to propose a model of fraud risk factors in organizations, grounded in managers' thinking styles, using a grounded theory approach.

Literature Review

1. Fraud

Fraud is a global phenomenon that affects both public and private organizations. It encompasses a wide range of unlawful activities, typically involving intentional deception or misrepresentation. According to the Association of Certified Fraud Examiners (ACFE), fraud is defined as any deliberate act intended to deprive others of property or money through deceit, manipulation, or other unjust means. When analyzing the behavior of individuals within business processes, it becomes evident that the human element is closely intertwined with Creasey's Fraud Triangle theory, which comprises three core components: pressure, opportunity, and rationalization ([Sanchez et al., 2018](#)). The ACFE defines fraud as: "Fraud involves the illicit exploitation of an individual's position and authority to misappropriate the assets and resources of an organization". In this report, professional frauds are systematically categorized into three overarching categories, each of which is examined in detail as follows:

- a. **Financial Corruption:** This type of fraud occurs when individuals within an organization exploit their position and influence to gain direct or indirect personal benefits, such as receiving commissions, engaging in conflicts of interest (e.g., through purchase and sale schemes), or accepting bribes ([Sedighi Kamal, 2013](#)). Corruption is a complex and dynamic phenomenon that, like other social and political constructs, resists precise and universally accepted definitions. In legal discourse, corruption is often contrasted with legality, as it involves actions that inherently lack legal

validity due to their unlawful nature ([Rashidi & Raeisi, 2017](#)). Corruption is considered a white-collar crime in which an employee abuses their position of influence in business transactions, violates fiduciary duties, and thereby provides direct or indirect benefits to their superior ([Prasmaulida, 2016](#)).

- b. **Misappropriation of assets** refers to the illegal appropriation or improper use of an organization's resources and assets by its employees. This includes activities such as the direct embezzlement of organizational funds, fraudulent manipulation of cash receipts, fictitious disbursements for goods, theft, unlawful trading in assets, and other forms of unethical conduct ([Sediqi Kamal, 2013](#)). Misuse of assets constitutes a white-collar crime in which an employee deliberately fabricates misleading statements or intentionally omits critical information from financial disclosures, thereby distorting the accuracy and integrity of the financial reporting process. ([Prasmaulida, 2016](#))
- c. **Financial statement fraud** refers to the intentional misrepresentation, selective omission, or inadequate disclosure of material information with the deliberate intent to deceive stakeholders, particularly investors and creditors. This often involves the intentional overstatement of assets and revenues, the understatement of liabilities and expenses, or both. Financial statement fraud constitutes a white-collar crime in which an employee intentionally distorts or omits crucial information within an organization's financial disclosures. This form of fraud typically manifests as the deliberate inflation of assets, revenues, and profits, alongside the intentional deflation of liabilities, expenses, and losses, thereby undermining the integrity of financial reporting. ([Prasmalida, 2016](#))

Over the past few decades, the financial ramifications of fraudulent activities and corporate financial misconduct have surged significantly. According to various estimates, the total losses incurred from fraud in organizations affected by such incidents are staggering at 250 million dollars. This figure represents only a fraction of the broader consequences of fraud and misconduct. These include damage to the company's reputation and the integrity of the capital market, which ultimately lead to the erosion of public trust and a reduction in investment, factors that remain largely unaddressed ([Hasas Yeganeh et al., 2010](#)). In its 1999 report, "Fraud in Financial Reporting," the Committee of Sponsoring Organizations of the Treadway Commission documented that the Chief Executive Officer orchestrated 72% of the analyzed fraudulent cases, while 42% were attributed to the Chief Financial Officer. ([Sofrazadeh, 2010](#))

The Committee of Sponsoring Organizations of the Treadway Commission, in its 1999 report titled "Fraud in Financial Reporting," documented that the Chief Executive Officer orchestrated 72% of the fraudulent cases analyzed, while 42% were attributed to the Chief Financial Officer ([Sofrazadeh, 2010](#)). Detecting fraud is critically important because neglecting it can inflict irreparable damage on the auditing profession and cause significant harm to investors, undermining their confidence in the capital market. On a broader level, this could precipitate an economic crisis. Appendix 24 of the Iranian Auditing Standards outlines approximately 60 fraud risk factors that help auditors evaluate fraud risks. A thorough understanding of these risk factors, their strategic application, the extent of their integration, and the significance of each in detecting fraud is a key element that has prompted extensive scholarly inquiry and research at the international level. Among the most prominent fraud risk factors in corporate environments are: the dependence of a substantial portion of executives' compensation and benefits on operational performance, financial position, or cash flow; the existence of constraints that significantly limit the auditor's access to key individuals or critical information; the imposition of restrictions on the scope of the audit by management, such as obstructing access to personnel and data; inadequate physical safeguarding of cash, securities, inventories, or fixed assets; insufficient oversight by management over essential internal controls; management's failure to address, promptly, significant deficiencies identified within the internal control framework; the delegation of disproportionate (or anomalous) authority to executives; and material transactions with related parties conducted outside the ordinary course of business within the audited entity. ([Pourheidari & Bezarafshan, 2011](#))

2. Management Thinking Style

Societal prosperity is determined by the competence and comprehensive qualifications of its leadership and officials. Similarly, the success of organizations in achieving their strategic objectives and missions fundamentally depends on the presence of proficient and qualified managers. Therefore, selecting appropriate executives and managers requires rigorous scrutiny and thoughtful consideration, necessitating the development of robust criteria for systematic evaluation and selection. ([Arefnejad et al., 2022](#)) Given that in today's dynamic and innovative competitive landscape, the realization of organizational goals fundamentally depends on the most critical human resource—the manager—who functions as the primary agent for turning these aspirations into action, it can be argued that the adoption of effective and strategically sound management practices is a decisive factor in an organization's ability to attain its

overarching objectives and long-term strategic goals. To accurately identify competent and effective managers, it is essential to evaluate their skills, knowledge, attitudes, emotional intelligence, and personality attributes. Since competence, like other cognitive constructs, is deeply influenced by an individual's attitudes and cognitive orientations, it can be argued that thinking styles—representing an individual's preferred ways of thinking—are intrinsically linked to their overall competence ([Hashemi et al., 2017](#)). Thinking styles represent robust cognitive frameworks through which individuals gain a nuanced understanding of themselves and others, thereby facilitating the refinement of their social competencies. Sternberg's (1997) theory of thinking styles, which centers on cognitive self-regulation, has attracted substantial academic interest. Sternberg argues that individuals apply distinct methodologies in using their cognitive abilities, and the preferred ways of utilizing these abilities are conceptualized as thinking styles ([Mahdavi-Shakib & Ahanchiann, 2014](#)). Thinking styles can be viewed in the context of the cognitive structures that underlie human thought. From this theoretical perspective, these styles are not simply coincidental; instead, they represent external expressions of the underlying cognitive processes through which individuals organize, regulate, and manage their mental and behavioral functions. Individuals typically regulate their activities by adopting styles that align with their personal preferences. However, thinking styles are not inherently advantageous or disadvantageous; instead, the effectiveness of a specific style is closely linked to the nature of the task and the situational context in which it is performed ([Mohammadi & Pourghaz, 2013](#)).

3. Research Background

A thorough examination of the existing literature underscores the multifaceted nature of the factors influencing the fraud risk environment within organizations. The following section highlights key studies that have critically explored the dynamics of fraud risk. For example, a recent study by Saadati et al. (2023), titled *"Foresight of Determinants of Managerial Fraud through the Application of the Fraud Diamond Model,"* employed structural equation modeling and concluded that the effectiveness of the components of the fraud diamond model is contingent upon two key factors: the existence of a distinct separation between management and ownership, and the absence of a robust and effective supervisory framework governing managerial behavior. Asharoznia et al. (2023) adopted an innovative approach to predicting financial statement fraud by comparing traditional, simulation-based, and modern models. By utilizing genetic algorithms alongside a non-linear Markov-switching methodology, they

found that a high incidence of fraudulent activities characterized the prevailing regime on the Tehran Stock Exchange. Moreover, the results from the regime-switching models demonstrated superior accuracy in forecasting fraud. Specifically, the genetic algorithm and logistic regression models achieved the highest precision in estimating fraud risks. The research by Abbasi Estamal and Rastkar Rezaei ([2023](#)) examined the influence of firm performance on the interplay between auditors' professional judgment and fraud detection. The study revealed a significant positive relationship between auditors' professional judgment and their ability to identify fraudulent activities. However, a negative correlation was found between the company's financial performance and its capacity to detect fraud. Furthermore, the company's financial performance negatively affected the relationship between auditors' professional judgment and their effectiveness in detecting fraud. Monti et al. ([2024](#)) examined internal auditors' responses to fraud risks. According to internal audit managers, the study found that internal auditors lack the essential professional qualifications required for fraud detection and prevention. They lack familiarity with fraud mitigation techniques, have not conducted comprehensive fraud risk assessments within their organizations, and do not use advanced tools and methodologies to counter and address these risks effectively.

Rajaab-Dari ([2022](#)) introduced the "Six-Sided Financial Fraud Model with an Islamic Perspective: An Analysis of the Significance and Interactions of Its Components." This model, known as the "Six-Sided Fraud Model," is described as an "interactive process" in which the components exert reciprocal influences, engaging in a dynamic interplay that shapes the overall framework. In the "Hexagonal Fraud Model," the construct of religiosity exerts the most profound influence. It interacts most with the other constructs, while the opportunity construct is the most susceptible to external factors. The model examining the determinants of financial statement fraud, grounded in a forensic accounting framework, was developed by Borna et al. ([2022](#)) using advanced thematic analysis (TA). The findings of this research contribute to refining and advancing previous models, including the Fraud Triangle, Fraud Diamond, Fraud Pentagon, and other frameworks that examine the individual factors that influence fraudulent behavior. Ghadami et al. ([2022](#)), in their comprehensive examination of the interplay between individual emotions, critical thinking, and fraud risk evaluation in auditing, demonstrated that individual emotions significantly and positively influence auditors' critical thinking, which in turn affects errors in fraud risk assessment. Additionally, negative emotions were found to have a significant and positive effect on the development of critical thinking. However, the influence of both positive and negative emotions on

auditors' judgment during the fraud risk evaluation process was not statistically significant. The study by Ghaderi et al. (2022) on the influence of financial corruption on fraudulent practices among companies listed on the Tehran Stock Exchange found a significant, direct association between the Corruption Perception Index and the likelihood of fraudulent financial reporting. The findings further indicated that a diminished accountability index is significantly associated with an increased propensity for fraudulent activities in financial reporting. Moreover, the comparative analysis of fraud models within the framework of audit program modifications conducted by Taheri and colleagues (2021) highlighted that applying the Diamond fraud model, relative to the Fraud Triangle model, as well as adopting the Pentagon fraud model, in comparison to both the Diamond and Fraud Triangle models, results in a more pronounced and substantial refinement of the audit program. The body of international research in this domain includes Sinha (2024), who presents an extensive review of the failures and exemplary practices in fraud risk management within banking institutions. The review systematically examines optimal strategies for developing robust fraud-prevention frameworks. The study further emphasizes the critical importance of corporate governance as a fundamental mechanism in curbing such fraudulent activities. The study conducted by Atmadja et al. (2024) on the determinants of accounting fraud in local government financial management established that internal control systems significantly and negatively influence accounting fraud. Moreover, strict regulatory compliance is associated with a lower incidence of accounting fraud, whereas the professional qualifications of human resources negatively correlate with it in the Gianyar district's operational units.

Siahaan et al. (2024) argued that the comprehensive implementation of Governance, Risk, and Compliance (GRC), combined with the quality of internal auditing and strong management commitment, significantly enhances an organization's internal capabilities and operational effectiveness. However, the failure to detect corruption acts as an intermediary in the relationship between management commitment and financial performance. Moreover, internal organizational factors can be strategically refined to improve overall organizational performance. Recent studies, such as the work by Brazel et al. (2024), investigated the identification, evaluation, and mitigation of fraud risks, offering conceptual frameworks for auditing performance and suggesting avenues for future research. Their study systematically categorized and synthesized findings from contemporary academic research, focusing on auditors' methods for identifying, assessing, and addressing fraud risks. They also developed applied conceptual models for each domain and proposed critical

research topics for future exploration. Biduri & Tjahjadi (2024) used rigorous quantitative methods to explore the determinants of financial statement fraud through the lens of the Pentagon fraud model. They revealed that external pressures, inadequate oversight, the integrity of independent auditing, auditor turnover, and disproportionate CEO influence significantly contribute to the prevalence of fraud in financial statements. These factors, along with organizational size, also affect the occurrence of financial statement fraud, further highlighting the complexity of these dynamics.

Kalovya (2023) rigorously analyzed the determinants of occupational fraud losses, considering perpetrators, victims, and theoretical insights from fraud frameworks. The study concluded that, beyond organizational and individual-level predictors, the interplay of situational factors and the perpetrator's history significantly contributes to understanding the extent of observed fraud-related losses. Alkhyoon et al. (2023) conducted a comparative analysis of organizational risk management and performance in the context of fraud across Iraq, Iran, and Saudi Arabia. Their findings indicated that implementing organizational risk management led to reduced sales growth but increased net profit margins in Saudi Arabian corporations. In Iranian companies, risk management enhanced asset returns, while in Iraq, it led to a reduction in sales growth. The International Fraud Triangle, as analyzed by Cheliatsidou et al. (2023), introduces the International Fraud Triangle Model. This model aims to provide auditors, managers, regulators, and scholars with a comprehensive, multidimensional understanding of fraud across both private and public sectors globally. Research by Adeel et al. (2023) on leader ambition and follower fraudulent behavior suggests that constructive leadership behaviors within organizations may unintentionally foster unethical conduct among subordinates. Similarly, Alazzabi et al. (2023) explored the dynamics of risk management, senior management support, internal audit functions, and fraud reduction, finding a statistically significant relationship between effective risk management and fraud reduction at both managerial and employee levels. Their study underscores the critical role of senior management support in mitigating fraud. In their study, Herron and Cornell (2022) demonstrated that organizational commitment, facilitated by strategic initiatives that enhance auditors' sense of belonging and personal investment, plays a crucial role in fostering long-term commitment to the organization.

It is crucial to highlight the key findings from these internal and external studies. These investigations have yielded a range of results, often divergent or even contradictory, depending on the sample studied. Thus, a comprehensive exploration of the underlying context of fraud risk and its assessment is essential.

Moreover, as previous research has shown, the impact of fraud risk on various determinants can vary across temporal contexts, historical periods, and managers' cognitive frameworks. The present study, employing grounded theory methodology, aims to develop an advanced model of the fraud risk landscape within organizations, grounded in managers' cognitive styles and decision-making paradigms.

B METHODS

The study is fundamentally descriptive-exploratory, aiming to conceptualize and develop a comprehensive model to mitigate the fraud risk environment among managers in Iran. This model will generate applied knowledge by constructing and examining the underlying influencing variables. As such, the research follows a developmental trajectory, highlighting its contribution to both theoretical advancement and practical application. In this phase, in-depth interviews with domain experts were conducted to gather the necessary data and insights. Following data collection, the gathered information was rigorously analyzed using grounded theory methodology, yielding the research paradigm model.

This study aims to develop a model to mitigate the fraud risk environment among managerial professionals in the accounting field. The research population comprises distinguished scholars and practitioners in accounting and auditing. The participants include 10 eminent experts, such as senior organizational managers, certified public accountants, auditors, and university professors, who were strategically selected through purposive sampling based on their substantial professional expertise and deep familiarity with the intricacies of fraud risk. Additionally, a snowball sampling method was employed, leading to the progressive selection of 16 experts for interviews. From the tenth interview onward, a noticeable repetition of information was observed, indicating theoretical saturation. The study follows a grounded theory approach, which unfolds through a series of methodical stages. An initial exhaustive review of the theoretical literature on fraud risk frameworks within organizations is conducted. Following this, the research questions are meticulously formulated, and interviews are held with domain experts. Data collection and iterative analysis continue until theoretical saturation is achieved. The interview data undergo a rigorous coding process comprising three stages: open coding, axial coding, and selective coding. In the open coding phase, relevant codes are assigned to data segments, which are then categorized into coherent themes. In the axial coding phase, the interconnections between these themes are critically examined. The selective coding phase refines the themes, ensuring a more

nanced understanding of the core constructs. After completing these coding stages, a conceptual framework is formed, followed by systematic note-taking, composition, and theory formulation. ([Shahbazi & Mehrani, 2020](#))

In this study, due to the specialized nature of the subject and the need for adequate expertise and a deep interest in the research topic, distinguished experts and professionals in accounting and auditing at the national level were invited to participate in interviews. These interviews aimed to extract, classify, and corroborate the underlying concepts related to fraud risk in organizations. After conducting the expert interviews, participants' perspectives on fraud risk frameworks within organizations were systematically collected. The collected data were then processed using MaxQDA software for coding and categorization. A single researcher conducted all interviews. The interviews were recorded, transcribed, and meticulously documented, forming the core data for subsequent analysis in the study. In the preliminary phase, the researcher approached each participant and provided a detailed explanation of the study's objectives and research questions. After obtaining their consent to participate, a suitable time for the interview was scheduled. At the participants' request, the interviews lasted 2 to 3 hours. The sociological profiles of the participants are as follows:

Table 1
Characteristics of the Experts

Primary Criteria	Gender		Educational Qualification		Field of Study	Professional Experience		Position	
Sub-classification Criteria	Female	Male	Master's Degree	Doctorate	Accounting	10 to 15 years	Over 15 years	Financial Manager	Chartered Accountant
Number	3	7	2	8	10	6	7	4	2

The qualitative analysis in this study used the Grounded Theory approach. The software results, combined with the analytical model framework, guide the researcher in designing and administering a questionnaire to validate the proposed indicators and to apply the factor analysis methodology. This process involves consulting with experts and specialists in accounting and auditing, who were part of the interviewee group, and then extending the consultation to a broader cohort of professionals in the field.

D. RESULTS

The interview data were systematically captured in audio format and subsequently transcribed into textual form. After transcription, the data were imported into MAXQDA version 18 (a qualitative data analysis tool), where they underwent a thorough, rigorous analysis. During the analysis, semantically equivalent data were grouped under shared codes, each of which was assigned an appropriate conceptual label. In line with the grounded theory methodology and its six key dimensions, the analysis identified 22 primary constructs and 113 categories through open coding. These constructs and categories were organized according to the research's conceptual framework, using MAXQDA's output. To refine these components, a detailed comparative analysis was conducted between the categories, examining both their convergences and divergences.

1. Descriptive Indicators and Frequency Distribution of Research Components

This section presents the descriptive indicators and the frequency distribution associated with the research components. Additionally, the central tendency metrics (mode, mean, and median) and the dispersion measures (standard deviation and variance) for each variable have been calculated. The results of the descriptive analysis for the variables under investigation are presented in Table 2.

Table 2
Descriptive Statistics of Variables Related to the Fraud Risk Framework in Corporations

Variable	Question Number	Mean	Median	Standard Deviation	Variance
Causal Factors	1-23	4.24	4.35	0.518	0.268
Central Category	24-50	3.87	4.00	0.606	0.368
Strategic Approaches	51-69	4.06	4.25	0.598	0.358
Mediating Factors	70-97	4.11	4.25	0.611	0.374
Contextual Influences	98-104	4.09	4.27	0.598	0.358
Consequences	105-110	4.22	4.25	0.635	0.404

As observed, the mean values for nearly all variables are either equal to or exceed the theoretical mean of 3. This suggests that the respondents predominantly selected the higher or moderate response options, indicating a general tendency toward greater agreement or intensity in their responses to the questionnaire items.

2. Findings from Coding

Step 1: After each interview, all interviewees' statements were carefully transcribed into a Word document.

Step 2: In this phase, key and relevant sentences and phrases from each interview transcript were identified and recorded in a separate file. These excerpts were then systematically coded by interview and paragraph number. Examples of these instances are presented in the table below.

Table 3
Exemplars of Significant Statements

Significant Statements
In our country, family-owned businesses or private joint-stock companies that do not prioritize profitability or boosting market stock prices often aim to minimize reported profits to reduce tax liabilities. To achieve this, they often engage in cost manipulation.
During periods of national sanctions, companies, especially refineries, often exploit alternative routes to bypass them, providing a viable mechanism for generating foreign currency.
Enhancing citizen oversight and leveraging this regulatory tool significantly curbs fraudulent activity.
The inadequacy of board oversight in Iranian companies is a commonly observed issue. Often, the board functions merely as an extension of the CEO, who exercises unilateral control over the company and sets the agendas.
Can one reasonably expect the establishment of robust internal controls from an individual who has ascended to a managerial position without the requisite expertise? Can such an individual be presumed to maintain integrity?
I am acquainted with a manager who unlawfully sold company shares to his relatives at discounted rates by exploiting insider information, subsequently profiting from these transactions. If there had been a system in place that recorded buyers' information in a national registry and linked it to the company's database, alongside legally traceable bank accounts for the manager and his relatives, such extensive fraud would have been virtually impossible.

Step 3: The semantic content of the key expressions was meticulously extracted and synthesized, with each interpretation systematically categorized. To ensure rigor and consistency, all expressions and their associated meanings underwent multiple rounds of review, thereby enhancing the validity and coherence of the findings.

Table 4
Exemplars of Formulated Meanings Derived from Significant Expressions
(Categories)

Significant Expressions	Formulated Meanings (Categories)	
In our country, family-owned businesses or private joint-stock companies that do not prioritize profitability or boosting market stock prices often aim to minimize reported profits to reduce tax liabilities. To achieve this, they often engage in cost manipulation.	Managerial (Strategies for Evasion)	Pressures for Tax
During periods of national sanctions, companies, especially refineries, often exploit alternative routes to bypass them, providing a viable mechanism for generating foreign currency.	Political (Sanctions and Strategies)	Factors and Evasion
Enhancing citizen oversight and leveraging this regulatory tool significantly curbs fraudulent activity.	Social Factors (Lack of Transparency in Societal Affairs)	

The inadequacy of board oversight in Iranian companies is a commonly observed issue. Often, the board functions merely as an extension of the CEO, who exercises unilateral control over the company and sets the agenda.	Supervisory Factors (Ineffectiveness of Executive Oversight)
Can one reasonably expect the establishment of robust internal controls from an individual who has ascended to a managerial position without the requisite expertise? Can such an individual be presumed to maintain integrity?	Social Factors (Lack of Merit-Based Appointments)
I am acquainted with a manager who unlawfully sold company shares to his relatives at discounted rates by exploiting insider information, subsequently profiting from these transactions. If there had been a system in place that recorded buyers' information in a national registry and linked it to the company's database, alongside legally traceable bank accounts for the manager and his relatives, such extensive fraud would have been virtually impossible.	Organizational Structural Factors (Absence of Systemic Operational Integrity)

Causal Attributes

Based on the categories derived from the interviews, indicators related to causal factors have been systematically classified and labeled, as detailed in Table 5.

Table 5
Categorization and Conceptualization of Variables in the Causal Domain

Variable	Category
Social Factors	Erosion of core human values within society
	Deficiency in transparency within societal processes
	Deterioration of the moral deterrence against corruption
	Lack of a merit-based system within society
	Deficiency in accountability mechanisms within society
Economic Factors	Economic stagnation and contraction
	Inflationary dynamics
	Pervasive poverty
	Instability in business environments
	State-imposed economic control
Political Factors	Imposition of economic sanctions
	Corporate involvement in political conflicts
	Political pressure in the formulation and enactment of laws, regulations, and professional standards
	Insufficiency of oversight over executive management
Supervisory Factors	Lack of independent regulatory bodies
	Weakness in governance oversight structures (Board of Directors, Audit Committees, Internal Auditors)
	Absence of robust processes for identifying and mitigating fraud risks
	Lack of an effective supervisory or audit committee monitoring executive and subordinate behavior
	Maintaining the company's strategic positioning in the market
Managerial Pressures	Strategic tax minimization
	Compliance with creditor expectations
	Exposure to unforeseen challenges or adverse conditions
	Pressure to secure liquidity
	Emergence of new regulatory or legal imperatives

For the second section on Core Characteristics: The analysis of the core characteristic framework, in response to the question "What are the justifiable and pivotal conditions underlying the risk of fraud within organizations?"

identifies 29 key concepts that show significant convergence in this regard, as presented in Table 6.

Table 6
Categorized Concepts and Core Characteristics Framework

Variable	Category
Organizational Determinants	Deficiencies within the organizational reporting mechanisms
	Inadequacy of professional development and training programs
	Organizational discrimination and inequity
	Authoritarian (top-down) organizational culture
	Absence of transparency in organizational processes
	Lack or failure of a meritocratic framework
	Inadequate or non-existent fundamental organizational controls
	Overemphasis on profitability and growth at the expense of broader objectives
Management Cognitive Style	Openness to alternative perspectives and external input
	Parental or paternalistic management style
	Authoritarian leadership approach
	Self-acceptance and individual accountability
	Commanding and authoritative behavior
	Responsiveness to accountability and constructive criticism
	Professionalism in managerial decision-making and thought processes
	Personal cost considerations (e.g., revenge against the organization)
Governance Factors	Organizational instability and volatility
	Personality traits influencing managerial conduct.
	Lack of robust and effective corporate governance structures
	Failure to distinguish between ownership and management roles
	Disregard for the separation of personal and corporate transactions
Corporate Structural Variables	Absence of institutionalized ownership
	Weaknesses in the internal control framework
	Lack of systemic integration and coherence
	Influence of affiliated individuals on organizational decision-making
	Complexity of technological infrastructures and organizational design
	Absence of organizational justice and equity
	Financial accounting is based on estimations and subjective judgment

For the third section on contextual factors: The analysis of the contextual factors approach, in response to the question "What justifiable and contextual conditions underpin the emergence of a fraud risk environment within organizations?", identifies 27 concepts with closely interrelated commonalities. The results of this analysis are systematically presented in Table 7.

Table 7
Categorized Concepts and Contextual Factors

Variable	Category
Individual Factors	Gender
	Age
	Individual Risk Propensity
	Narcissistic Tendencies
	Deficiency in Integrity and Honesty
	Avarice
	Religious Convictions
Cultural Factors	Inadequate Culture of Accountability and Responsiveness
	Absence or Erosion of Noble Human Values

Managerial Incompetence	Failure to Institutionalize Religious and Ethical Norms
	Professional Work Ethic
	Insufficient Knowledge and Professional Expertise
	Inadequate Addressing of Internal Control Deficiencies
	Disregard for Alerts from Relevant Oversight Bodies
	Lack of Willingness to Confront Fraudulent Practices
	Frequent Changes in Financial Management Personnel
Financial Literacy of Managers	Frequent Substitution of Legal Advisors or Internal Auditors
	Creation of Elevated Status for Managers
	Financial Foresight and Strategic Planning
	Personal Financial Management and Oversight
Ethical and Commitment Factors	Reliance on External Financial Consultancy
	Non-Adherence to Legal and Regulatory Foundations
	Weakness in Religious and Ethical Commitment
	Ethical Deficiencies
	Lack of Equity in Managerial-Employee Relations
	Tolerance of Minor Acts of Embezzlement or Theft
	Perceived Ethical Stringency

For the fourth section on intervening factors: The analysis of the intervening factors framework, based on responses to the question "What legitimate and mediating conditions contribute to the risk environment of fraud within organizations?", identifies 20 concepts with significant commonalities. These results are systematically outlined in Table 8.

Table 8
Categorized Variables and Concepts of Intervening Factors

Variable		Category
Managerial Drivers	Motivational	Compliance with stock market requirements
		Intentional concealment of financial condition
		Preservation of personal status within the organization
		Managerial or family members' vested interests in the company's performance
		Efforts to circumvent legal liabilities
Industry-Specific Factors		Industry characteristics
		Maintenance of the organization's competitive standing within the sector
		Diminishment of competitive capability and adverse industry conditions
		Government ownership
Legislative and Regulatory Framework		Frequent alterations to legal and regulatory frameworks
		Emergence of new legal requirements
		Proliferation of conflicting and inconsistent legal mandates
		Complex, convoluted, and unclear regulations
		Insufficient or vague legal provisions
Employee-Related Determinants		Lack of robust disciplinary mechanisms and effective enforcement of penalties
		Absence of a structured and effective recruitment process
		Marginalization of skilled and competent personnel
		Delays in acquiring timely performance assessments of employees
		Inadequate and inequitable remuneration and benefits
		Deficient or unproductive work environment for employees

For the fifth section on Strategic Approaches: The analysis of strategic factors, in response to the question "What justifiable conditions and strategies contribute to the fraudulent risk environment in corporations?", identifies 8

concepts with closely related commonalities. The findings are outlined in Table 9.

Table 9	
Categorized Themes and Concepts in the Strategic Approaches Section	
Variable	Category
Effectiveness Strategies	Establishing a comprehensive and effective monitoring system coupled with robust disciplinary measures
	Eliminating opportunities for fraudulent activities by implementing a sophisticated internal control infrastructure
	Decoupling executive compensation and benefits from operational performance outcomes
	Appointing highly specialized, experienced, and proficient managerial personnel
	Allocating substantial resources to enhance auditing capabilities
Organizational Efficiency Strategies	Institutionalizing effective corporate governance mechanisms
	Elevating shareholder awareness and cultivating their active engagement through targeted professional development programs
	Ensuring the accurate, timely, and transparent disclosure of corporate information

For Section 6, Consequences: The analysis of the approach to consequences, based on responses to the question "What are the repercussions of implementing essential strategies to mitigate the risk of fraud in organizations?", identified five concepts with significant interrelated commonalities. The outcomes are presented in Table 10.

Table 10	
Categorized Concepts and Definitions for the Consequential Factors Section	
Variable	Category
Organizational Consequences	Diminution of the fraud risk landscape within the organization
	Establishment of a sustainable and ethical economic ecosystem
	Protection and safeguarding of investor rights and interests
Ethical Consequences	Cultivation of a culture of accountability and transparency within the society
	Enhancement and institutionalization of ethical values in the societal framework

3. Research Model

In the process of open coding, data are fragmented and disentangled into distinct components. Conversely, axial coding integrates the previously identified categories through more nuanced conceptual frameworks. This process enables the establishment of complex interrelationships among the core categories initially expanded in the open coding phase, facilitating a deeper, more cohesive understanding of the data. In the present study, through axial coding, interrelationships were established among the following categories: "Causal Conditions," "Core Category," "Intervening Conditions," "Contextual Factors," "Strategies," and "Consequences." Based on the results obtained from the gathered data, and in accordance with the data analysis process following the

grounded theory framework, the conceptual model for this research, developed during the final stage of selective coding, is presented in the figure below:

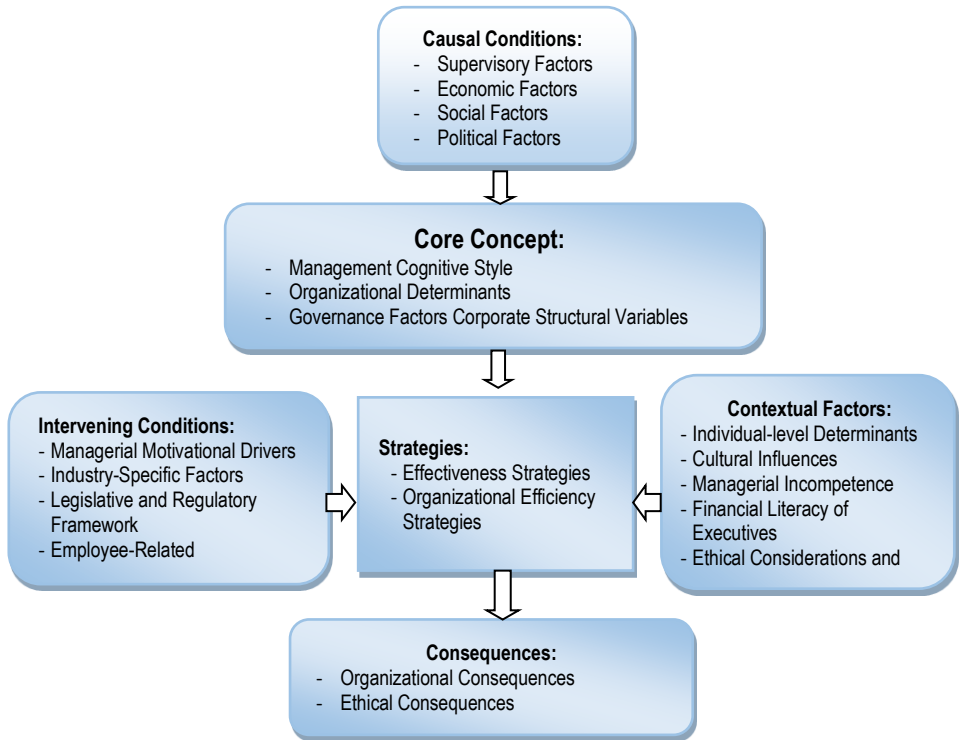


Figure 1: Paradigmatic Model of the Fraud Risk Context in Corporations
(Source: Researcher)

The validation of the derived indicators was carried out using the KMO and Bartlett's test, as outlined in Table 11. The findings substantiate the robustness of the indicators and categories in this research context. Based on the interview results and corroborated indicators, a range of categories and concepts has been identified as significantly influencing the fraud risk environment within organizations. These factors clearly align with fraud theories and the scholarly work presented in the theoretical foundations and prior research.

Table 11
KMO and Bartlett's Test Statistic Values

Row	Indicator	Number of Validated Concepts	Number of Validated Categories	KMO and Bartlett's Test Statistic Value	Significance Level
1	Causal Conditions	5	24	0.678	0.000
2	Core Conditions	4	29	0.677	0.000

3	Contextual Conditions	5	27	0.623	0.000
4	Intervening Conditions	4	20	0.647	0.000
5	Strategies	2	8	0.773	0.000
6	Consequences	2	5	0.644	0.000
7	Total	22	113		

D. DISCUSSION AND CONCLUSION

The present research employed a comprehensive mixed-methods approach, incorporating both qualitative and quantitative methodologies. Initially, a qualitative investigation was conducted, during which semi-structured interview questions were carefully crafted and administered to a panel of experts, scholars, and practitioners in accounting, auditing, and academia. This phase aimed to thoroughly examine the multifaceted factors that influence the fraud risk context within corporate entities. To enhance the effectiveness of this process, grounded theory was applied, emphasizing the systematic construction of theoretical frameworks from the data. This methodology is rooted in social research, ensuring that the theory is inductively derived from empirical data rather than being imposed beforehand. In this study, interviews served as the primary methodological approach to uncover and critically examine the factors influencing the reduction of fraud risk within the accounting profession. To ensure robust analysis, all interview participants were active members of the official accountants' association. Additionally, an intentional effort was made to include individuals from various age groups, enabling a comparative evaluation of perspectives between novice and experienced professionals in the field. After the interviews were completed, the insights shared by participants were systematically recorded for each question. Aligned with the central objective of this study—focused not on confirming or refuting specific claims but on developing a conceptual model—the primary focus was on addressing the following research inquiries. Consequently, the research questions are articulated as follows:

- What are the critical factors that influence the underlying risk of fraud within organizations? (Causal, Intervening, and Contextual Conditions).
- What strategic actions should organizations undertake to mitigate the underlying risk of fraud in their business operations? (strategies)
- What are the organizational-level consequences of mitigating the underlying risk of fraud? (Consequences)

Causal conditions encompass a broad spectrum of factors, including regulatory mechanisms, economic, political, and social influences, and managerial pressures. The inefficacy of oversight over executive leadership, the

absence of independent regulatory institutions, deficiencies within governance frameworks (such as the board of directors, audit committees, and internal audit functions), the lack of structured processes for detecting and mitigating fraud risks, and the absence of an effective supervisory body or committee tasked with overseeing the actions of both management and subordinates, may collectively serve as critical determinants in the formation of a corporate environment conducive to fraudulent behavior and managerial misconduct. Faced with economic fluctuations and external pressures, managers may, in their efforts to restore order to the company's operations, manipulate the profit figures reflected in the financial statements. This adjustment is aimed at generating a more favorable impression among the users of the financial reports, thereby enhancing their perception of the company's financial health. The fundamental dimensions encompass organizational factors, management's cognitive style, governance-related elements, and the company's structural components. Organizational factors include deficiencies in the reporting mechanisms, inadequacies in professional development programs, organizational discrimination, an authoritarian (top-down) organizational culture, a lack of transparency in operational matters, the absence or inefficacy of a meritocratic system, insufficient or non-existent foundational organizational controls, and a strategy that is narrowly focused on profitability and growth. Experts assert that environmental and cultural determinants play a pivotal role in shaping an organization's success or failure. Moreover, the institutionalization of ethical codes is recognized as a crucial safeguard in mitigating organizational malfeasance and fraudulent activities. When the organizational climate is founded upon a culture of integrity, transparency, the preservation of fundamental values, respect for stakeholders, and rigorous compliance with applicable laws and regulations, and when organizational leadership is resolutely committed to the institutionalization, continuous reinforcement, and fortification of these principles, the organizational milieu will inherently facilitate the eradication of misconduct and fraudulent behavior.

The institutionalization of transparency in organizational processes, the implementation of comprehensive training programs on professional ethics, the promulgation of regulatory frameworks such as the Sarbanes-Oxley Act (2002, USA), the formulation of rigorous professional ethics standards, and analogous initiatives are regarded as pivotal mechanisms in mitigating systemic deficiencies, preventing misconduct, and curbing fraudulent behavior within professional domains. The acceptance of others, self-acceptance, parental upbringing styles, the professional cognitive framework of managers, receptivity to criticism, accountability, authoritative conduct, an authoritarian managerial

style, personal costs (such as organizational retribution), and intrinsic personality traits constitute integral subcomponents of managerial cognitive orientation, which exert a significant influence on the propensity for fraudulent behavior.

Managerial motivational determinants, industry-specific dynamics, regulatory infrastructures, and employee-related factors act as intervening variables that create an organizational environment vulnerable to fraud risk. Key indicators of managerial motivation include meeting stock exchange compliance requirements, concealing financial status, protecting personal positions within the organization, intertwining the manager's or their relatives' interests with organizational performance, and strategically mitigating potential legal liabilities. Experts argue that a primary driver of fraudulent behavior is the managerial drive to meet objectives aligned with personal interests. When management holds significant personal financial stakes—such as shareholding—or when their remuneration and benefits are closely tied to performance and financial outcomes, the risk of malfeasance is markedly elevated. Motivational factors and external pressures, such as the goal of "minimizing income tax liabilities," can further incentivize fraud in organizations where ownership is unconcerned with analyst or shareholder perceptions.

This motivation is especially prominent when an organization faces significant challenges in meeting strategic objectives, attempts to meet unrealistic expectations set by creditors, inflates its stock price, or is driven by factors like preserving market share. This is especially significant when an organization faces substantial challenges in meeting its strategic objectives, attempts to satisfy unrealistic expectations set by creditors, seeks to boost its stock price artificially, or is driven by underlying pressures such as preserving market share. Such conditions are likely to foster an environment prone to corporate misconduct. In this study, the contextual variables include individual characteristics, cultural dynamics, managerial deficiencies, managers' financial literacy, ethical principles, and organizational commitment. A central theme explored in the interviews was the impact of managerial gender and age on the creation of an environment conducive to fraud risk. Experts suggest that human agency is the fundamental driver of all fraudulent activity, with individual factors the most critical factor in the occurrence of fraudulent behavior. Therefore, a thorough consideration of human factors is essential in any examination of fraud. In addressing the individual (personality and behavioral) traits linked to financial statement fraud, experts identified several key factors. Gender, age, individual risk tolerance, narcissistic tendencies, deficiencies in honesty and integrity, greed, and religious orientation were highlighted as crucial individual determinants. A prevailing view among the majority of experts and academics

interviewed is that, due to psychological and physiological differences between men and women and contrasting temperamental traits, gender-related differences can significantly impact individual decision-making processes. Conversely, experts emphasize that age and professional experience are influential factors that shape ethical decision-making frameworks. Experts widely agree that individuals engaging in fraudulent conduct often do so under the belief that, after carefully weighing the potential ramifications, they will evade any future consequences. According to these experts, effective methodologies for controlling and preventing fraud span eight fundamental areas: establishing a robust supervisory framework with strong disciplinary measures; minimizing opportunities for fraud through a comprehensive internal control system; fostering efficient and accountable corporate governance structures; enhancing shareholder awareness and engagement through advanced professional training; decoupling executive compensation and benefits from the company's financial outcomes; allocating adequate resources to audit practices; ensuring transparent and timely corporate disclosures; and recruiting highly skilled, knowledgeable, and experienced managerial personnel.

Widespread fraudulent practices at the societal level have profoundly harmful effects on economic growth and, by extension, on broader developmental outcomes. The consequences of such fraud include reduced economic efficiency, suboptimal resource allocation, inequitable income distribution, and diminished incentives for long-term investment—all of which collectively hinder sustainable economic progress. Consequently, the economic ramifications of widespread fraud within nations may include the slowdown or even regression of economic growth and development, the deepening and exacerbation of poverty and its far-reaching impacts, as well as a significant transformation in the economic ethos. Insights from the final model of this study suggest that numerous factors significantly influence reducing fraud risk within organizations. These factors are likely to have profound implications for professional practices and operational frameworks in the accounting field. Reducing fraud risk within organizations, fostering a robust and resilient economic infrastructure, safeguarding investor rights, promoting a culture of accountability and transparency within society, and advancing ethical values within the broader community are representative outcomes of these factors. By cultivating ethical values and reinforcing a culture of integrity, societal erosion and the rise of moral decay—leading ultimately to economic corruption—can be effectively prevented. This, in turn, enhances interpersonal and institutional trust, fostering a more resilient, equitable, and thriving society.

The findings of this research hold the potential to refine and expand established models such as the Fraud Triangle, the Fraud Diamond, the Fraud Pentagon, the Multidimensional Fraud Framework, and other theoretical frameworks advanced in academic discourse. It is recommended that the Auditing Standards Board, informed by these findings, systematically incorporate and refine fraud risk factors based on the Fraud Triangle model within the framework of Iranian Auditing Standard No. 240, thereby enhancing its comprehensiveness and relevance. Additionally, regulatory entities, such as the Securities and Exchange Commission and the Association of Certified Public Accountants, could strategically utilize the insights from this research to establish a comprehensive framework outlining factors contributing to financial statement fraud. An in-depth evaluation of the hierarchical significance of these factors, based on their influence on fraud in financial reporting, offers a crucial and intellectually rewarding avenue for future academic inquiry. Furthermore, the factors identified in this study can serve as a foundational basis for empirical research. A comprehensive examination of the drivers of asset misappropriation and corruption—two distinct yet critical dimensions of corporate fraud—within the country's specific institutional and socio-economic context also warrants further in-depth study.

The outcomes of the present study, grounded in criminal research and relying on expert interviews in the field of fraud, are subject to inherent limitations. These findings may vary depending on the participating experts' professional backgrounds, levels of expertise, and subjective interpretations, as well as the researchers' perspectives. Furthermore, this investigation did not include experts from other countries, suggesting that generalizing the findings to other national contexts should be done with caution, given the potential limitations.

REFERENCES:

- Abbasi, E, Mohammad, R, & Rastkar Rezaei, H. (2023). The effect of corporate performance on the relationship between professional judgment and fraud detection by auditors. *Journal of Ethical and Behavioral Studies in Accounting and Auditing*, 3(1), 41–66. (In Persian)
- Adeel, M., Afzaal, M., Saeed, F., Ahmed, A., Mahmood, K., Abbas Shah, Y., ... & Busquets, R. (2023). Encapsulation of probiotic bacteria in polyelectrolyte-stabilized nanoliposomes for improved viability under hostile conditions. *Journal of Food Science*, 88(9), 3839–3848.

- Alazzabi, W. Y. E., Mustafa, H., & Karage, A. I. (2023). Risk management, top management support, internal audit activities, and fraud mitigation. *Journal of Financial Crime*, 30(2), 569–582.
- Alkhyoon, H., Abbaszadeh, M. R., & Zadeh, F. N. (2023). Organizational Risk Management and Performance from the Perspective of Fraud: A Comparative Study in Iraq, Iran, and Saudi Arabia. *Journal of Risk and Financial Management*, 16(3), 205.
- Arefnejad, M., Shari'atnejad, A., Fathi Chegani, F & Sepahvand., M. (2022). Identification and prioritization of antecedents and consequences of the humble leadership style of school managers using the fuzzy Delphi method: A mixed-methods study. *Journal of Applied Educational Leadership*, 3(3), 1-19. (In persian)
- Asharouznia, K., Pouragajjan, A. A., & Nasl Mousavi, S.H. (2023). A novel approach to predicting fraud in financial statements (Comparison of traditional, simulation, and modern models). *Accounting and Auditing Research*, 15(57), 141-160. (In Persian)
- Atmadja, A. T., Dharmawan, N. A. S., & Saputra, K. A. K. (2024). Determinants of Factors that Affect Accounting Fraud in Local Government Financial Management. *Australasian Accounting, Business and Finance Journal*, 18(1), 148-160.
- Audit Standards Setting Committee of the Audit Organization. (2015). Auditing Standards. Audit Organization. (In Persian)
- Barna, M. R., Hasanzadeh Brothers, R., Fazlazadeh, A., Badavarnahandi, Y. (2021). Elucidating the dimensions, instances, and indicators of fraud in financial statements: A thematic analysis approach (TAM). *Quarterly Journal of Value and Behavioral Accounting*, 6(12), 373-406. (In Persian)
- Barna, M. R., Hasanzadeh, B., Rasool, Fazlazadeh, A., & Badavarnahandi, Y. (2022). A model of factors influencing the occurrence of fraud in financial statements with a forensic accounting approach: Based on the thematic analysis method (TAM). *Journal of Applied Research in Financial Reporting*, 11(21), 281-320. (In Persian)
- Bayuandika, M., & Mappanyukki, R. (2021). The effect of spiritual intelligence and professional skepticism of internal auditors on the detection of fraud. *International Journal of Asian Social Science*, 11(1), 22-29.

- Biduri, S., & Tjahjadi, B. (2024). Determinants of financial statement fraud: the perspective of Pentagon fraud theory (evidence on Islamic banking companies in Indonesia). *Journal of Islamic Accounting and Business Research*.
- Borlandoe, J. M. (2005). *An examination of thinking styles of community college women administrators in three mid-Atlantic states*. Wilmington College (Delaware).
- Brazel, J. F., Carpenter, T., Gimbar, C., Jenkins, J. G., & Jones, K. L. (2024). Recent research on the identification, assessment, and response to fraud risks: Implications for audit practice and topics for future research. *Accounting Horizons*, 38(3), 1-12.
- Cheliatsidou, A., Sariannidis, N., Garefalakis, A., Azibi, J., & Kagias, P. (2023). The international fraud triangle. *Journal of Money Laundering Control*, 26(1), 106-132.
- Ghadimi, B., Bani Mahd, B., & Nikoomaram, H. (2022). Individual emotions, critical thinking, and fraud risk assessment in auditing. *Journal of Accounting and Management Auditing Knowledge*, 11(41), 315-323. (In Persian)
- Ghadiri, K., Zolqi, H, & Aflatooni, A. (2022). An investigation into the impact of financial corruption on fraud in companies listed on the Tehran Stock Exchange. *Journal of Accounting Advances*, 14(2). (In Persian)
- Harrison, A. F., & Bramson, R. M. (1977). *InQ administration and interpretation manual*. Berkeley: Bramson, Parlette, Harrison and Associates.
- Harrison, A. F., & Bramson, R. M. (1984). *The art of thinking: strategies for asking questions, making decisions, and solving problems*. Berkley.
- Hashemi, S. A., Sadeghi Fard, A., & Hemmati, A. (2011). Investigating the relationship between thinking style types and creativity and innovation among school administrators in Lamerd County. *Research in Curriculum Planning (Knowledge and Research in Educational Sciences – Curriculum Planning)*, 8(30), 63-72. (In Persian)
- Hassas Yeganeh, Y., Daghani, R, & Osku, V. (2010). Fraud risk management. *Certified Accountant Journal*, (20), 86-95. (In Persian)
- Hayes, R. (2006). Operations, strategy, and technology: pursuing the competitive edge. *Strategic Direction*, 22(7), 1-9.
- Herron, E. T., & Cornell, R. M. (2022). Creativity in Auditing: Theoretical and Practical Concepts to Enhance Auditors' Recognition of and Responses to Fraud Risk. *Journal of Forensic and Investigative Accounting*, 14(3), 1-9.

- Jones, M. S. (2006). *Thinking style differences of female college and university presidents: A national study*.
- Kalovya, O. Z. (2023). Determinants of occupational fraud losses: offenders, victims, and insights from fraud theory. *Journal of Financial Crime*, 30(2), 361-376.
- Mahdavi Shakib, A., & Ahanchian, M. R. (2014). The influence of educational administrators' thinking styles on their alignment with transformational leadership indicators. *Quarterly Journal of Research in Educational Systems*, 8(26), 99-126. (In Persian)
- Manti, V., Arab Mazar Yazdi, M., and Khazen, A. (2023). An analysis of internal auditors' responses to fraud risks. *Quarterly Journal of Accounting Knowledge*, 14(52), 119-141. (In Persian)
- Matoori, A., Shakeri, A. A., & Matoori, R. (2022). The auditor's responsibility regarding fraud detection. *Quarterly Journal of Novel Research Approaches in Management and Accounting*, 6(84), 1375-1392. (In Persian)
- Mohammadi, A., & Pourghaz, A. (2013). The relationship between thinking styles and sources of authority among school administrators. *Journal of New Approaches in Educational Management*, 4(3), 117-138. (In Persian)
- Pour Heidari, O., & Bazrafshan, S. (2011). The significance of fraud risk factors from the perspective of independent auditors. *Financial Accounting and Auditing Research*, 3(10), 1-26. (In Persian)
- Prasmaulida, S. (2016). Financial statement fraud detection using the perspective of the fraud triangle adopted by SAS No. 99. *Asia Pacific Fraud Journal*, 1(2), 317-335.
- Rajab Dary, H. (2022). Formulation of a six-dimensional financial fraud model with an Islamic perspective: An examination of the significance and interaction of components. *Journal of Studies in Religion, Spirituality, and Management*, 9(17), 5-31. (In Persian)
- Ramos, M. (2003). Auditors' responsibility for fraud detection. *Journal of Accountancy*, 195(1), 28-36.
- Rashidi, A., & Reisi, L. (2017). Investigating the effects and consequences of financial corruption on human rights. *Quarterly Journal of Social Development*, 11(4), 237-254. (In Persian)

- Saadati, E., Yazdani, S., KhanMohammadi, M. H., & Gorji Zadeh, D. (2023). Foresight on the role of determinants of managerial fraud through the implementation of the fraud diamond model. *Journal of Financial and Investment Progress*, 4(11), 85-114. (In Persian)
- Sadeghi Kamal, L. (2013). Financial statement fraud based on the report of the Association of Certified Fraud Examiners. *Auditor Journal*, (64), 116–120. (In Persian)
- Sadgali, I., Sael, N., & Benabbou, F. (2019, October). Fraud detection in credit card transactions using neural networks. In *Proceedings of the 4th International Conference on Smart City Applications* (pp. 1-4).
- Safarzadeh, M. H. (2010). The efficacy of financial ratios in detecting fraud in financial reporting: A logit analysis. *Quarterly Journal of Accounting Knowledge*, 1(1), 137-163. (In Persian)
- Sánchez, M., Torres, J., Zambrano, P., & Flores, P. (2018, January). FraudFind: Financial fraud detection by analyzing human behavior. In *2018, IEEE 8th Annual Computing and Communication Workshop and Conference (CCWC)* (pp. 281-286). IEEE.
- Shahbazi, M., & Mehrani, K. (2020). Development of a professional judgment model for independent auditors. *Tehran University Journal of Accounting and Auditing Studies*, 27(1), 60-86. (In Persian)
- Siahaan, I. F. M., & Suryaningrum, D. H. (2024). Prosedur Audit Investigasi dalam Mengungkap Tindakan Fraud di PT XYZ oleh KAP JAS. *Small Business Accounting Management and Entrepreneurship Review*, 4(2), 24-34.
- Sinha, H. (2024). An examination of machine learning-based credit card fraud detection systems. *Methods*, 3, 4.
- Sternberg, R. J. (1997). The concept of intelligence and its role in lifelong learning and success. *American psychologist*, 52(10), 1030.
- Taheri, M., Izadinia, N., & Moyidfar, R. (2021). A comparative analysis of fraud models in auditing program adjustments. *Empirical Accounting Research*, 11(42), 33-54. (In Persian)
- Wallace, W. A. (1995). "*Auditing South-Western College*". Publishing Cincinnati. OH, 8.
- Yarbrough, S. R. (1995). *Perceptions of thinking styles and group environment among adults*. The University of Tennessee.