Designing an Individual Ethics Model for Reporting Audit Errors Using a Grounded Theory Approach

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Abstract: The present study aims to design an individual ethics model for reporting audit errors using a grounded theory approach. This research employed a meta-synthesis method. The qualitative statistical population consisted of articles published between 2018 and 2024. In this study, 279 articles were evaluated, of which 242 articles were excluded in several stages, leaving 37 articles as the final sample of the present study. The results of the statistical analysis were categorized into causal conditions, context, intervening conditions, action strategies, and outcomes. The primary categories of organizational laws and regulations, along with hereditary and acquired personality traits and behaviors, were classified as causal conditions. Supportive regulations and incentives were identified as intervening conditions. The primary category of societal norms and values for reporting errors was categorized under context. The organizational structure of auditing firms and the professional judgment and decision-making of auditors were identified as action strategies. Lastly, moral sensitivity and courage, along with commitment and responsibility, were classified as outcomes.

Keywords: Error reporting, Audit reports, Individual ethics, Meta-synthesis

1. Introduction

At a time when fraud in companies and organizations has reached its peak, and consecutive financial scandals have called the credibility of the auditing profession into question, reporting audit errors has become a critical supervisory mechanism [1]. The auditing profession and related regulatory organizations emphasize that reporting audit errors should be considered a vital organizational requirement instilled in corporate auditors [2, 3]. Today, the issue of reporting audit errors is among the topics of interest to researchers in the field of ethics and auditing [4]. Reporting audit errors involves an individual assessing the likelihood of errors and their tendency to exhibit error-reporting behavior based on their cognitive processes and actions [5-7]. The inclination of auditors to report audit errors is an ethical phenomenon influenced by individual moral characteristics [8, 9]. Auditors who report audit errors contribute to the service sector of audit firms by

enabling higher income and improved performance [10]. Reporting audit errors is an effective control tool for fraud prevention and highlights the importance of auditors' individual and ethical factors [5].

Fraud incidents can be identified and reported, but this study aims not to prevent fraud but to reduce audit errors. One method to achieve this goal is to encourage auditors to report errors in audit firms and to believe that error reporting involves a cognitive process in which the auditor evaluates the likelihood of error reporting behavior and relies on their ethical principles to reduce errors and report any observed errors. Accordingly, it can be argued that individual ethics can impact the reduction of audit errors [11-13].

Individual ethics, as defined by Park and Blenkinsopp (2009), are moral values concerning the personal lives of individuals, independent of their relationships with others. Individuals possess unique ethical characteristics that shape their behavior, speech, and thoughts. However, when these individuals assume positions within an organization, factors may cause them to exhibit different behaviors, which can impact the efficiency and effectiveness of the organization [14]. Moreover, ethical or unethical behavior can lead to positive or negative outcomes at the organizational level. Employees' actions should align with their values and beliefs to ensure proper performance and consistently connect their actions to ethical principles [15, 16]. Such arrangements free organizations from superficial ethics, emphasizing healthy personalities and behaviors, and reinforcing individual ethical principles, thereby fostering organizational and employee dynamism.

If ethics are integrated into employees' work lives, work becomes engaging, accompanied by job satisfaction, a sense of fulfillment, and the advancement of professional growth and stakeholder satisfaction [17]. Weaver et al. (2014) found that an individual's cognitive framework, based on their ethical beliefs about accepting or rejecting a specific behavior, influences auditors' decisions on whether to disclose financial report fraud or engage in whistleblowing [18]. Verschuuren (2019) demonstrated that in error reporting, individuals' ethical principles for reporting are more significant than organizational rules [19]. Moreover, Antinyan et al. (2020) revealed that individuals' ethical principles for error reporting affect their attitudes and willingness to report errors [11]. Similarly, Okafor et al. (2020) showed that in audit firms where auditors adhere to their ethical principles and possess positive individual moral thoughts, operational and job-related errors decrease [20].

The necessity of this research arises from Iran's global ranking in corruption. The annual report of Transparency International ranks countries based on corruption perception. In its 2022 report, Transparency International ranked Iran alongside Guinea and Bangladesh among the lowest-ranked countries. With a score of 25, Iran ranked 147th out of 180 countries, below nations such as Liberia, Madagascar, Mozambique, and Uganda. Considering these circumstances, and given that Clause 19 of the Resistance Economy Policies emphasizes transparency and the prevention of corruption in monetary, trade, and other sectors, authorities must take more serious measures to combat corruption and improve Iran's global standing. These statistics prompted researchers to seek solutions to reduce or prevent corruption. One of the best solutions in the financial and accounting sectors to mitigate this threat is reporting audit errors, which can be facilitated by auditors adhering to individual ethical principles.

In this context, the present study seeks to answer the following question: How can an individual ethics model be designed for reporting audit errors?

2. Methodology

The objective of this research is to design an individual ethics model for reporting audit errors using a meta-synthesis method and to test it empirically. Consequently, this study is applied in nature, as applied research aims to solve specific problems and ultimately provide information for decision-making and addressing immediate needs and challenges. The present study employs the meta-synthesis method. The statistical population includes all available sources and articles published between 2018 and 2024.

A total of 279 articles were evaluated in this research, of which 242 were excluded in several stages, leaving 37 articles as the final sample of the study.

During the search process, the researcher considered various parameters, such as the title, abstract, content, article details (e.g., author names, year), and eliminated articles that did not align with the research question and objective. The tool commonly used for assessing the quality of articles is the Critical Appraisal Skills Programme (CASP). This tool assists researchers in determining the accuracy, validity, and relevance of qualitative studies.

In this method, each article is evaluated based on ten criteria: (1) research objectives, (2) methodological rationale, (3) research design, (4) sampling, (5) data collection, (6) reflexivity, (7) ethical considerations, (8) accuracy of analysis, (9) clear presentation of findings, and (10) research significance.

Of the 112 articles assessed in this study, 75 were excluded, leaving a final total of 37 articles.

3. Findings

In this study, all factors extracted from the reviewed studies were initially considered as codes. Subsequently, based on their meanings, these codes were categorized into similar concepts, as shown in Table 1.

Table 1. Results of Axial Coding

Main Categories	Subcategories	Initial Codes (Indicators)
Organizational Laws and Requirements	Organizational Leadership	Management behavior, ethical leadership, organizational leadership.
	Organizational Culture	Organizational justice, organizational culture, organizational climate.
	Organizational Environment	Organizational opportunities, organizational environment, internal warnings, organizational position.
	Organizational Rules	Organizational support, organizational regulations, organizational laws, organizational duties, organizational requirements.
Inherited and Acquired Personality and Behavioral Traits	Individual Characteristics	Gender, education, marital status, age, experience.
	Individual Commitment	Individual commitment, individuals' positions, individuals' identity.
	Personality Traits	Conservative personality, Machiavellian personality, cognitive and personality styles.
	Controlled Behaviors	Opportunistic behaviors, perceived behavioral control, planned behavior.
	Acquired Characteristics	Introversion and extroversion, acquired and inherited traits, temperamental traits (e.g., warm or cold temperament).

Supportive Laws and Incentives	Supportive Incentives	Rewards for whistleblowing, encouragement and support, financial and non-financial incentives, supportive laws.
	Supervision and Inspections	Laws and regulations for error reporting, existing channels for whistleblowing, supervision and inspections, punitive regulations.
Individual Reactions	Fear of Whistleblowing	Fear of colleagues' reactions, fear of superiors' retaliation, fear of regulatory institutions, fear of job loss.
	Emotional Reactions	Emotion management, positive and negative psychological states, emotional reactions, whistleblowing reactions.
Societal Norms and Values in Whistleblowing	Social Values	Social norms, public interest preservation, community support, social values, respect for society.
	Cognitive Norms	Cognitive norms, respect for individuals, individual and group interactions, motivational values.
	Intelligence	Intelligence, emotional intelligence, individual intelligence, spiritual intelligence, social intelligence.
	Tendencies for Whistleblowing	Attitude toward disclosure, inclination to report wrongdoing, intention to disclose errors.
	Perception of Whistleblowing	Reporting violations, voluntary disclosure, understanding the consequences of violations.
Organizational Structure of Audit Firms	Structure of Audit Firms	Audit firm policies, audit firm structure, reputation and credibility of firms, ownership concentration in audit firms.
	Internal Controls	Internal auditing, internal controls in audit firms, auditing procedures.
	Auditor-Client Relationship	Power distance between auditor and client, collusion between auditor and client, nature of the auditor-client relationship.
Auditor's Professional Decision-Making and Judgment	Auditor Competence	Auditor competence, auditor independence, impartiality, audit reports, auditor experience and expertise.
	Auditing Tests	Number of observed errors, existing documents and evidence, auditing tests.
	Professional Judgment	Auditor's judgment and decision-making, auditor skepticism, professional doubt, ethical decision-making.
	Auditing Complexity	Conditional reporting, auditor fees, complexity of auditing tasks.
Moral Sensitivity and Courage	Moral Sensitivity	Moral sensitivity, ethical judgment, moral courage, ethical norms.
	Ethical Judgment	Ethical judgment, moral intuition, ethical and rational reasoning.
	Moral Courage	Ethical conduct, moral understanding, moral courage.
	Ethical Norms	Ethical values, adherence to ethical codes, ethical commitments.
Commitment and Responsibility	Religiosity	Religiosity, religious beliefs, cultural religiosity of ethnic groups.
	Responsibility	Individual responsibility, conscientiousness, commitment, self-awareness and accountability.
	Integrity	Honesty, loyalty, manipulation, self-esteem, empathy.

In social research, it is typically crucial to establish whether a study has achieved reliability and validity. In this study, inter-coder reliability was used to analyze the reliability of findings. Inter-coder reliability measures the agreement between two coders regarding the same source and is calculated by dividing the number of agreements by the average number of codes created by each coder, usually expressed as a percentage. The analysis of inter-coder reliability for the data is presented in Table 2.

Table 2. Reliability Analysis

Coded Items	Number of Agreements	Number of Disagreements	Percentage

Article 3	25	6	92%
Article 10	16	5	94%
Article 17	16	4	86%
Article 24	22	7	91%
Total	79	17	92%

The overall inter-coder reliability in this study was calculated at 92%, exceeding the threshold of 90%, which indicates an acceptable level of reliability.

Since the aim of the present study was to design an individual ethics model for reporting audit errors, the paradigm model is depicted in Figure 1.
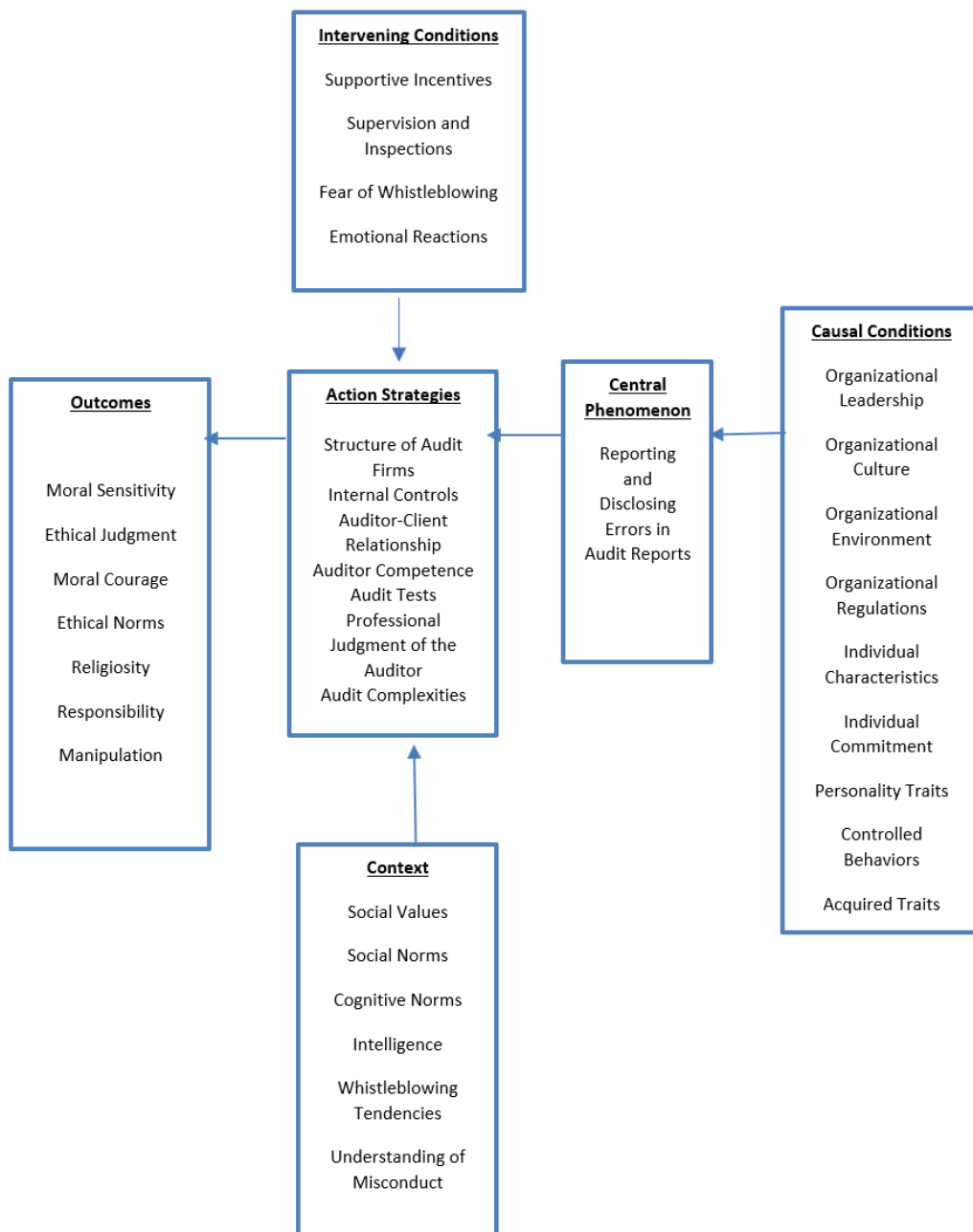

Figure 1. Paradigm Model of the Individual Ethics Model for Reporting Audit Errors

4. Discussion and Conclusion

The purpose of this study was to design an individual ethics model for reporting audit errors. The findings suggest that planned behavior theories serve as foundational frameworks influencing auditors' willingness to report audit errors. To cultivate auditors who are inclined to report observed audit errors, governments, surrounding environments, and organizational managers must create conditions in which auditors perceive error reporting as an opportunity rather than remaining silent about observed errors. Logical reasoning should lead them to prioritize reporting errors over silence.

Institutions and regulatory authorities should enact laws and adopt behaviors that motivate auditors to report errors rather than incentivizing silence about observed errors. Another key aspect to address, based on the results, is the promotion of individual ethics to foster a culture of reporting audit errors among auditors. While improving individual ethics requires ethical leadership and governance, organizations can also implement screening processes during hiring to select ethical individuals. Moreover, in-service programs designed to promote ethics, spirituality, and employee morale can contribute to this goal.

A significant factor influencing auditors' whistleblowing is the organizational structure of audit firms, which includes the ethical environment and internal rewards for error reporting. A formal structure within the audit organization can encourage error reporting, linking individual moral values to these features. When faced with adverse conditions, auditors typically have three choices: (1) leave the organization, (2) voice their dissatisfaction, or (3) remain silent. Auditors with a strong sense of organizational commitment and belonging are more likely to report their dissatisfaction internally rather than leaving the organization. Conversely, auditors lacking commitment may report issues to external bodies. Many managerial and partner actions, as well as those of other auditors, are influenced by individual ethical values. Individual ethics significantly impact audit performance, outcomes, and reporting. The stronger the adherence to individual ethical values—particularly those aligned with organizational priorities—the more likely auditors are to report errors.

The findings of this study align with prior findings [5-7, 9-13, 16, 19-26].

Based on the findings, the following practical recommendations are proposed:

1. **Enhancing Organizational Commitment:** Audit firms should adopt measures to increase auditors' commitment to their organization and profession. For instance, creating conditions that foster a sense of security among auditors or involving them in decision-making processes across different levels can enhance their sense of belonging to the organization, likely increasing their professional commitment. Furthermore, organizations can provide opportunities for auditors to grow and advance, boosting their confidence and, consequently, their commitment and accuracy in reporting audits. Given that a common concern among whistleblowers is the lack of security in audit firms, organizations could establish mechanisms to protect whistleblower anonymity or provide rewards and job-related benefits to encourage error reporting.

2. **Implementing Legal and Professional Training:** The association of certified public accountants and other regulatory bodies should establish enforceable laws within audit firms, ensuring compliance by auditors. Clear regulations and adherence by audit managers to these laws can increase other auditors' commitment to individual ethical values. Audit firms should also conduct training sessions for auditors, teaching them professional principles and guidelines. Such initiatives may clarify organizational values for auditors, leading to greater adherence to ethical standards.

Authors' Contributions

Authors equally contributed to this article.

Ethical Considerations

All procedures performed in this study were under the ethical standards.

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Conflict of Interest

The authors report no conflict of interest.

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