

# Designing a Model for Accountants' Whistleblowing Against Financial Fraud

Mohammad Rahimi<sup>1</sup>, Mohammad Hasan Janani<sup>2,\*</sup>, Farid Sefaty<sup>3</sup> and Alireza Ghiyasvand<sup>4</sup>



**Citation:** Rahimi, M., Janani, M. H., Sefaty, F., & Ghiyasvand, A. (2024). Designing a Model for Accountants' Whistleblowing Against Financial Fraud, *Marketing, and Finance Open*, 2(4), 1-11.

Received: 06 January 2025

Revised: 02 February 2025


Accepted: 16 February 2025


Published: 01 July 2025




**Copyright:** © 2025 by the authors. Submitted for possible open access publication under the terms and conditions of Creative Commons Attribution-NonCommercial 4.0 International (CC BY-NC 4.0) License.

<sup>1</sup> PhD Student, Accounting Department, Boroujerd Branch, Islamic Azad University, Boroujerd, Iran; 

<sup>2</sup> Assistant Professor, Department of Accounting, Boroujerd Branch, Islamic Azad University, Boroujerd, Iran; 

<sup>3</sup> Assistant Professor, Department of Accounting, Boroujerd Branch, Islamic Azad University, Boroujerd, Iran; 

<sup>4</sup> Assistant Professor, Department of Accounting, Boroujerd Branch, Islamic Azad University, Boroujerd, Iran; 

\* Correspondence: mhjanani@yahoo.com

**Abstract:** This study employs real data and information to develop a model for accountants' whistleblowing against financial fraud. From the perspective of its objective, this research can be classified as an applied study. The qualitative research population includes accounting faculty members, certified accountants, and official judicial experts. This study utilized a grounded theory approach, and after conducting 11 interviews, theoretical saturation was achieved. In the next phase, 18 hypotheses were formulated and distributed among 342 certified accountants. Structural equation modeling (SEM) techniques were employed to test the research hypotheses. The results indicated that financial corruption has a significant positive impact on social responsibility towards society and social norms. Whistleblowing positively and significantly affects social responsibility towards society and social norms. Organizational communication has a positive and significant effect on social responsibility towards society and social norms. Organizational security also exerts a positive and significant influence on social responsibility towards society and social norms. Attitudes have a significant positive effect on social responsibility towards society and social norms. Personality traits positively and significantly influence social responsibility towards society and social norms. Organizational support regulations have a significant positive impact on social responsibility towards society. The internal organizational environment positively and significantly affects social norms. Furthermore, social responsibility towards society has a positive and significant impact on professional ethical values and optimal reporting. Social norms also exert a positive and significant influence on professional ethical values and optimal reporting.

**Keywords:** Whistleblowing, Fraud, Accountants, Grounded Theory.

## 1. Introduction

Fraud, in its meaning, behavior, and unethical and illegal actions, is one of the critical challenges societies face, posing a significant threat to societal well-being at both micro and macro levels. Scandals involving international corporations such as Enron and WorldCom, along with domestic financial scandals such as embezzlement cases and poor corruption rankings reported by Transparency International, highlight the crucial role of accounting and finance in these incidents [1]. In recent years, due to the discovery of various fraud cases and whistleblowing by employees, policymakers have recognized the importance of whistleblowing and have legally promoted such actions, incorporating them into laws such as the Sarbanes-Oxley Act as a fundamental principle [2, 3].

Numerous studies have examined the effectiveness of whistleblowing in detecting fraud [4, 5], with references to surveys conducted by the Association of Certified Fraud Examiners [6]. Studies [7] have found that accountants exhibit a tendency toward whistleblowing. Within the domain of whistleblowing on violations, the existence of organizational regulations supporting whistleblowing is crucial. These regulations emphasize the importance of backing whistleblowers by higher authorities and ensuring serious organizational actions to address disclosed violations. Therefore, understanding and enhancing the efficiency and effectiveness of whistleblowing is essential. Given the limited research on whistleblowing in accounting within Iran and its substantial role in fraud detection, studying this subject is imperative.

The study by Al-Salim et al. (2018) explored the whistleblowing triangle, comprising three fraud-related factors: opportunity, motivation, and rationalization. The findings indicated that among these factors, financial motivations were the most significant in driving whistleblowing behavior. In general, whistleblowing involves engagement at three levels: individual, organizational, and societal [8]. A semantic perspective links whistleblowing to two paradigms—network and stakeholders—and three concepts—flexibility, decentralization, and governance. The functions of whistleblowing include the realization of human rights, corporate social responsibility, individual accountability, integrity, organizational loyalty, and efficiency [9].

Qian et al. (2015) conducted a survey-based study on accountants using multiple regression analysis, which demonstrated a significant positive effect of tenure, ethical judgment, and organizational commitment on the intention to blow the whistle on fraud [10]. Similarly, Ahmed et al. (2017) found that professionalism positively influenced accountants' willingness to report fraud [11]. In a study by He et al. (2019) on the impact of accountants' ethical judgment on financial fraud whistleblowing, with a focus on intuition, the findings revealed that intuition significantly influences ethical judgment and whistleblowing behavior [12]. Sholihin and Ratmono (2020) examined ethical warning signals in whistleblowing and found that accountants with stronger ethical values are more inclined to report misconduct [13].

Ho (2021) investigated accountants' intentions to report fraud and found a significant positive relationship between organizational commitment, ethical values, and the intention to report fraudulent activities. The study by Tri Wahyuni et al. (2021), which focused on accountants' individual responsibility regarding whistleblowing and financial fraud, concluded that accountants bear responsibility toward the public and society, with ethical values and professional responsibilities driving them to report financial fraud [14].

A review of the literature highlights the necessity of understanding and improving the efficiency and effectiveness of whistleblowing. Given the limited research in Iran on accounting-related whistleblowing and its crucial function in fraud detection—recognized by international professional bodies—this study gains further importance. Additionally, enhancing the status of the accounting profession in combating fraud depends on identifying the whistleblowing process and its influencing factors. Thus, considering the significance of whistleblowing in fraud detection—a prevalent phenomenon in society—its role in identifying fraud, and the necessity of uncovering the whistleblowing phenomenon, this study aims to expand the theoretical foundations of fraud-related whistleblowing.

The primary objective of this research is to develop a model for accountants' whistleblowing against financial fraud. This study seeks to contribute to the theoretical literature on behavioral accounting by examining whistleblowing as an ethical and extra-role behavior. Furthermore, given the significance of detecting fraud in financial statements—a matter of concern for policymakers, investors, and managers—this research highlights the effectiveness of whistleblowing in fraud detection. The findings can inform professional organizations and

policymakers in mandating companies to establish secure and dedicated whistleblowing mechanisms, implementing proper protection programs for whistleblowers, and ensuring appropriate actions against offenders to eliminate fraudulent activities.

It is expected that the research findings will expand the theoretical foundations of previous studies regarding the identification of factors influencing whistleblowing and financial statement fraud detection, introduce a new perspective on the whistleblowing model for accountants specifically through the application of grounded theory, contribute to the auditing and accounting literature by providing empirical evidence on accountants' whistleblowing behavior against financial fraud, and enhance transparency and efficiency in the capital market by equipping auditors, inspectors, regulatory bodies, and banking systems with effective fraud detection techniques, optimizing resource allocation, fostering economic development, and improving social welfare. Given that no study in Iran has yet developed a whistleblowing model for accountants using grounded theory, this research seeks to answer the following question: How can a model for accountants' whistleblowing against financial fraud be designed?

## **2. Methodology**

This study employs a library and field research approach, is applied in nature, follows a cross-sectional data collection method, and adopts a descriptive-survey research design. To gain deeper insights into the subject, interviews were conducted to enhance understanding.

The qualitative research population comprises accounting faculty members, certified accountants, and official judicial experts. The interview process continued until primary and secondary themes recurred across interviews, and responses followed a repetitive pattern. To ensure robustness, additional interviews were conducted, concluding with 11 interviews upon reaching theoretical saturation. The extracted components from expert interviews were categorized into a questionnaire, which was then distributed among the research population, consisting of certified accountants.

In the quantitative phase, the sample size was determined using Cochran's formula, and the questionnaire was randomly distributed among 342 respondents from the statistical population. In this phase, descriptive and inferential statistical methods were applied to analyze the data. To test the research hypotheses, correlation techniques using structural equation modeling (SEM) were utilized.

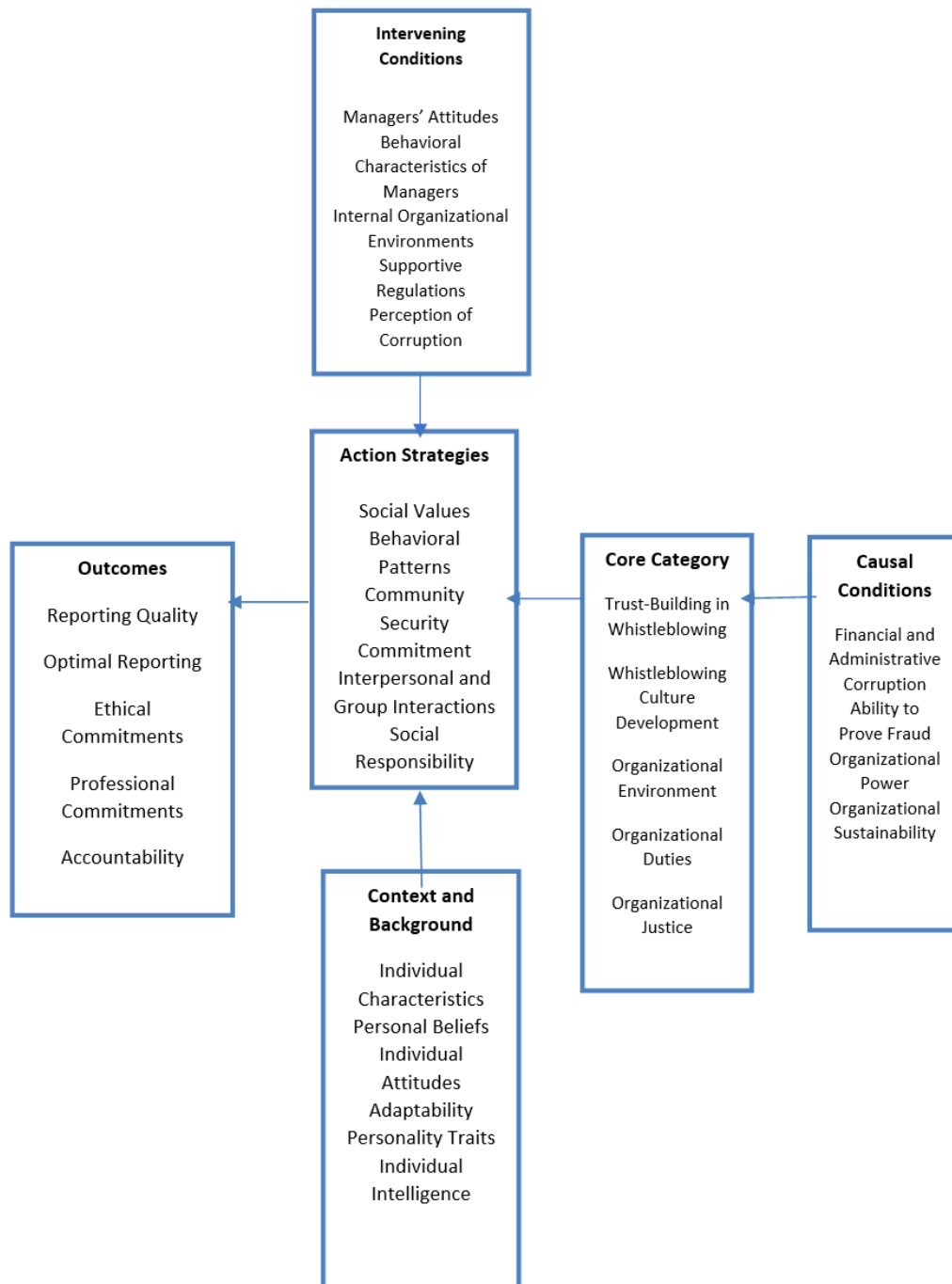
## **3. Findings**

The implementation of the grounded theory method began with conducting interviews, collecting, and coding data. As the researcher carried out initial exploratory interviews, interview skills improved, which was crucial for the research. Additionally, the recorded interview files were named and stored in a database, organized based on the interviewee's name, the audio file of the interview, and the interview date. After storing the data, the researcher listened to and transcribed the interviews. All identified indicators from the open coding phase were then used to define categories. At this stage, the primary and secondary categories were classified according to the initial codes. Through the three stages of coding, a conceptual framework for designing the whistleblowing model for accountants against financial fraud was developed based on the findings from the interviews, as presented in Table 1.

**Table 1. Conceptual Model of Accountants' Whistleblowing Against Financial Fraud**

Main Categories	Subcategories	Initial Codes
Financial Corruption	Administrative and financial corruption	Financial corruption, money laundering, administrative corruption, fraud, financial misrepresentation
	Ability to prove fraud	Sufficient technical knowledge, available documents, evidence and records, knowledge and ability, accountant's experience and expertise
Organizational Communication	Organizational power	Job position, political connections, institutional democratic power, power within the organization
	Job tenure	Job continuity, job position, staying in the job
Responsibility Toward Society	Commitment	Responsibility, duty awareness, commitment
	Social responsibility	Responsibility toward society, respect for society and laws, individual and group interactions
	Community security	Community participation, societal security, public interest
Social Norms	Social values	Attitudes, social values, motivational values, individual and organizational values
	Behavioral patterns	Behavioral justifications, retaliatory behaviors, behavioral models
Organizational Laws	Supportive regulations	Encouragement and support, implementation of deterrent laws, whistleblower protection laws, specific regulations
	Perception of corruption	Social fear, geographical location, perceived nature of corruption
Internal Organizational Environment	Managers' attitudes	Managers' behaviors, leadership elements, managers' perspectives
	Managers' characteristics	Manager's narcissism, overconfidence, incompetence, and competence
	Internal organizational environment	Number of employees, freedom of speech, level of responsibility and authority, trust between managers and employees
Professional Ethical Values	Ethical commitments	Ethical commitments, ethical values, adherence to ethical codes
	Professional commitments	Professional commitment, professional responsibility, professional social responsibility, commitment to standards
	Accountability	Accountability, financial transparency, trust
Optimal Reporting	Reporting quality	Effective internal control, financial reporting quality, audit quality
	Accurate reporting	Financial transparency, financial reporting system, accurate reporting
Trust and Whistleblowing	Whistleblowing culture	Creating motivation and willingness, existence of reporting channels, perception of whistleblowing
	Whistleblowing trust	Reporting and whistleblowing, willingness to disclose fraud and embezzlement, accountability regarding fraud
Organizational Security	Organizational environment	Organizational justice, organizational climate, work environment, organizational discrimination
	Organizational duties	Organizational laws and regulations, administrative rules, organizational duties
	Organizational justice	Fair distribution of salaries, equitable job positions
Beliefs and Attitudes	Individual characteristics	Gender, experience, education, marital status
	Individual beliefs	Religious and spiritual beliefs, ethnic culture, integrity, loyalty, honesty, self-esteem
	Personal attitudes	Personal beliefs, individual perspectives, family upbringing
Personality and Intelligence	Adaptability	Self-efficacy, resilience, self-confidence, openness to criticism
	Personality traits	Introversion or extroversion, acquired and hereditary traits, temperament (warm or cold)
	Individual intelligence	Personal intelligence, spiritual intelligence, emotional intelligence

Since the objective of the present study is to develop a whistleblowing model for accountants against financial fraud, a paradigmatic model was formulated based on the identification of the main and subcategories, as illustrated in Figure 1.



**Figure 1. Paradigmatic Model of Accountants' Whistleblowing Against Financial Fraud**

In the next phase, a questionnaire was designed based on the first part of the grounded theory approach, and 18 hypotheses were formulated, which are analyzed in the following sections.

The reliability of the research measurement instrument was assessed by calculating Cronbach's alpha coefficient and the composite reliability (CR) coefficient. The results are reported in Table 2.

**Table 2. Examination of Composite Reliability and Cronbach's Alpha for Each Research Component**

Components	Cronbach's Alpha	Acceptable Level	Composite Reliability (CR)	Acceptable Level
Organizational Communication	0.870	0.700	0.939	0.600
Professional Ethical Values	0.905	0.700	0.941	0.600
Trust and Whistleblowing	0.896	0.700	0.951	0.600
Organizational Security	1.000	0.700	1.000	0.600
Personality	1.000	0.700	1.000	0.600
Financial Corruption	0.869	0.700	0.938	0.600
Internal Organizational Environment	0.919	0.700	0.949	0.600
Organizational Support Laws	0.879	0.700	0.943	0.600
Responsibility Toward Society	0.962	0.700	0.969	0.600
Attitude	0.910	0.700	0.943	0.600
Social Norms	0.947	0.700	0.959	0.600
Optimal Reporting	0.861	0.700	0.935	0.600

An examination of Table 2 indicates that the Cronbach's alpha coefficients and composite reliability values for all components exceed the acceptable threshold. Therefore, it can be concluded that the questionnaire constructs demonstrate satisfactory reliability.

The quantitative variables in the study were measured based on the mean scores of related questions, and certain statistical indicators were calculated for them.

**Table 3. Descriptive Analysis of Quantitative Research Variables**

Components	N	Mean	Median	Min	Max	SD	Kurtosis	Skewness
Organizational Communication	342	3.072	3	1	5	1.07	-1.206	-0.137
Professional Ethical Values	342	3.027	2	1	5	1.81	-1.388	-0.195
Trust and Whistleblowing	342	3.069	3	1	5	1.09	-1.241	-0.131
Organizational Security	342	3.180	2	1	5	1.21	-1.018	-0.224
Personality	342	3.108	3	1	5	1.30	-1.029	-0.160
Financial Corruption	342	3.043	3	1	5	1.36	-1.271	-0.120
Internal Organizational Environment	342	3.078	3	1	5	1.31	-1.202	0.223
Organizational Support Laws	342	3.166	3	1	5	1.44	-1.112	-0.137
Responsibility Toward Society	342	3.138	3	1	5	1.27	-1.136	-0.283
Attitude	342	3.161	3	1	5	1.22	-1.106	-0.233
Social Norms	342	3.143	3	1	5	1.38	-1.128	-0.028
Optimal Reporting	342	3.166	3	1	5	1.29	-1.103	-0.150

The results in Table 3 indicate that the mean scores for all quantitative variables are around the midpoint of 3, suggesting a moderately favorable condition for all variables.

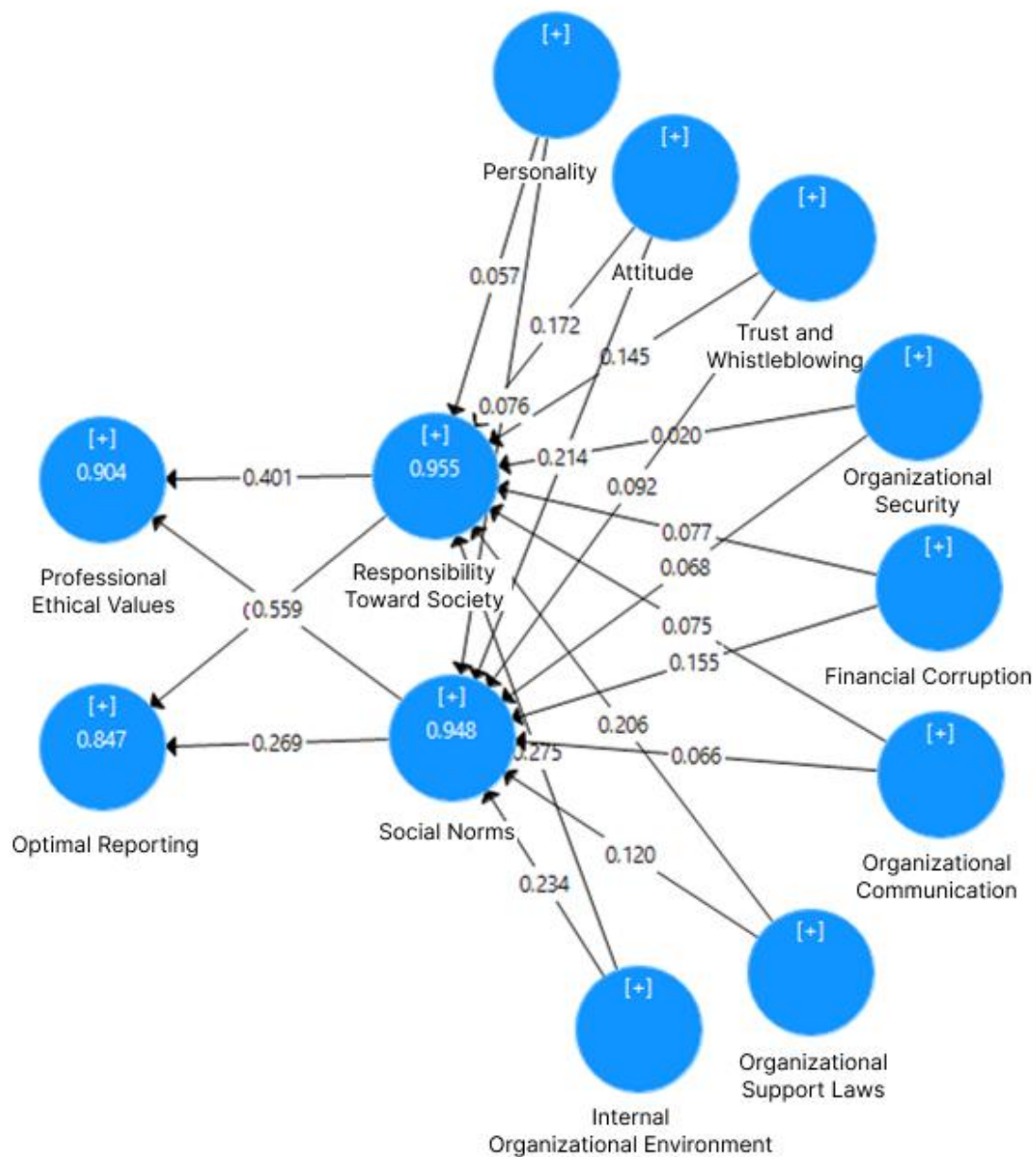


Figure 2. Path Coefficients in the Structural Model



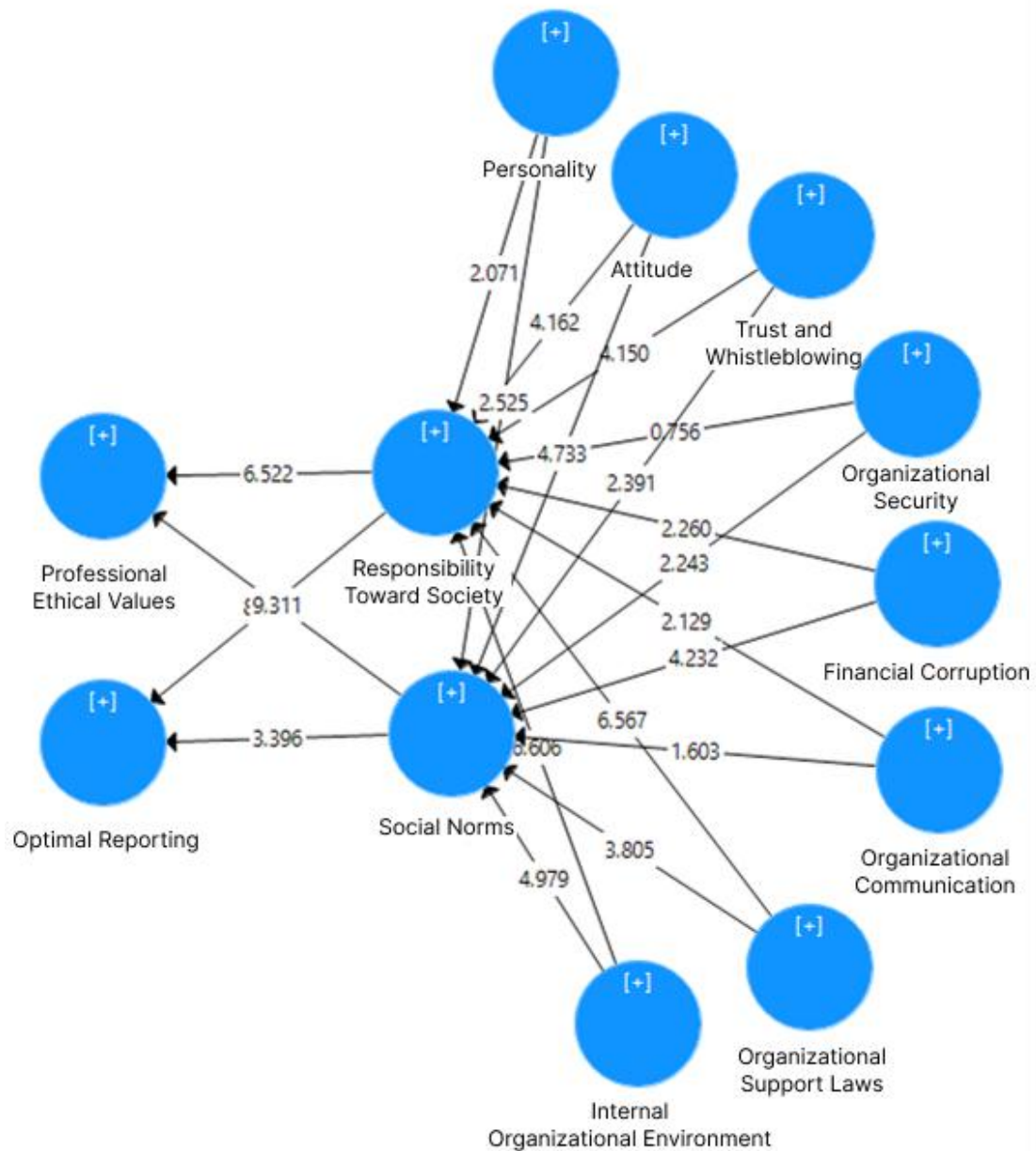


Figure 3. T-Statistics for the Significance of Path Coefficients in the Structural Model

Table 4. Path Coefficients in the Structural Model Analysis

Path	Path Coefficient	T-Statistic	P-Value
Organizational Communication → Responsibility Toward Society	0.075	2.129	0.034
Organizational Communication → Social Norms	0.066	2.603	0.010
Trust and Whistleblowing → Responsibility Toward Society	0.145	4.150	0.000
Trust and Whistleblowing → Social Norms	0.092	2.391	0.017
Organizational Security → Responsibility Toward Society	0.020	2.756	0.004
Organizational Security → Social Norms	0.068	2.243	0.025
Personality → Responsibility Toward Society	0.057	2.071	0.039
Personality → Social Norms	0.076	2.525	0.012
Financial Corruption → Responsibility Toward Society	0.077	2.260	0.024
Financial Corruption → Social Norms	0.155	4.232	0.000
Internal Organizational Environment → Responsibility Toward Society	0.275	6.606	0.000



Internal Organizational Environment → Social Norms	0.234	4.979	0.000
Organizational Support Laws → Responsibility Toward Society	0.206	6.567	0.000
Organizational Support Laws → Social Norms	0.120	3.805	0.000
Responsibility Toward Society → Professional Ethical Values	0.401	6.522	0.000
Responsibility Toward Society → Optimal Reporting	0.660	8.355	0.000
Attitude → Responsibility Toward Society	0.172	4.162	0.000
Attitude → Social Norms	0.214	4.733	0.000
Social Norms → Professional Ethical Values	0.559	9.311	0.000
Social Norms → Optimal Reporting	0.269	3.396	0.001

The results in Table 4 indicate that the probability values for rejecting the null hypothesis—stating that the path coefficients between the variables are zero—are all equal to 0.000 and less than the first-type error probability threshold of 0.05. This confirms the significance of these relationships. Additionally, all path coefficients are positive, demonstrating that the independent variables have a direct influence on the dependent variables.

#### 4. Discussion and Conclusion

The present study aimed to design a whistleblowing model against financial fraud. The results of coding were classified into six categories: causal factors, central factors, strategies, context, intervening conditions, and outcomes. The findings indicated that financial corruption has a significant positive effect on social responsibility toward society and social norms. Whistleblowing has a positive and significant impact on social responsibility toward society and social norms. Organizational communication positively and significantly influences social responsibility and social norms. Organizational security has a positive and significant effect on social responsibility toward society and social norms. Attitudes have a significant positive influence on social responsibility toward society and social norms. Personality significantly and positively impacts social responsibility and social norms. Organizational support laws exert a significant positive effect on social responsibility toward society. The internal organizational environment has a positive and significant influence on social norms. Social responsibility toward society has a significant positive effect on professional ethical values and optimal reporting. Social norms also positively and significantly impact professional ethical values and optimal reporting.

Financial scandals, increasing embezzlement, fraud, and reported cases of deception, along with growing concerns about money laundering in support of terrorism and trafficking, have led to greater legal directives and public expectations for defining the role of accountants in detecting fraud within organizations. When the moral integrity of individuals in a society is undermined, the community becomes highly vulnerable. The survival of a nation or culture depends on fundamental ethical values such as courage, altruism, respect for others, and adherence to laws. A nation cannot endure unless it consists of individuals whose actions are motivated by factors beyond personal gain. Compliance with the law, respect for life and property, devotion to family, defending national objectives, helping the underprivileged, and paying taxes are all linked to personal virtues such as bravery, loyalty, honesty, selflessness, benevolence, empathy, politeness, and a sense of duty. Among the forces that steer societies toward political prosperity and growth, religion and ethics serve as indispensable pillars. Ethical values provide the foundation for a civilized and culturally advanced society, as without this foundation, a civilized society will collapse.

The sustainability of any profession and the employment of its members depend on the quality of services provided and the credibility and trust derived from those services. This credibility and trust constitute the primary capital of any profession, and maintaining them is of utmost importance. Therefore, the fundamental duty and

purpose of any profession and its members should be to serve society, where personal interests are pursued only within the framework of service delivery. The accounting profession, being one of the most structured and disciplined professions worldwide, must uphold a high level of credibility and trust due to the nature of its services. The continuation and reinforcement of this credibility and trust depend on the intellectual and practical adherence of professionals to ethical and behavioral standards.

The information presented through financial statements and accounting profits is always at risk of being manipulated in reporting due to its significance in decision-making. Managers selectively choose accounting methods from the available accepted practices based on their interests, thereby exerting control over financial accountants. As preparers of financial statements, managers have greater oversight over companies and possess more knowledge than financial statement users. This knowledge enables them to manipulate financial reporting more effectively. Studies on accounting method selection indicate that managers often make specific decisions to shift income in their favor, demonstrating opportunistic behavior. Opportunistic behavior occurs when managers choose methods that maximize their wealth at the expense of shareholders. When managers engage in income smoothing, the motivation for accountants to engage in whistleblowing increases.

Personality traits in managers significantly influence their judgment and decision-making. Senior executives, holding the highest positions in the organizational hierarchy, have the power to define and influence ethical or unethical decisions. Many managers view accounting evaluations as determinants of their personal success and leverage their power to control, influence, and encourage employees to act in their personal interests. Sociopathic, narcissistic, and Machiavellian managers exhibit a stronger tendency for opportunistic behavior. Many unethical practices, including financial reporting manipulation, stem from a lack of social responsibility, a characteristic associated with sociopathy. When accountants encounter such managers, their likelihood of whistleblowing increases. The findings of the present study align with prior studies [6, 13, 15].

Based on the findings, the following recommendations are proposed:

The establishment of an error-recording and reporting system within organizations can play a crucial role in identifying and addressing errors while preventing their recurrence. Furthermore, ensuring that individuals are aware of the proper reporting channels and that clear procedures exist to facilitate whistleblowing can significantly reduce stress and encourage more effective disclosures.

Given the critical role of whistleblowing in both organizational and societal health, developing legal protections for whistleblowers at both organizational and legislative levels can facilitate and normalize the practice among employees.

Implementing incentive mechanisms to encourage and reinforce whistleblowing behaviors, including financial rewards, career benefits, and social recognition, can significantly enhance the disclosure of organizational misconduct.

To promote whistleblowing and harness its benefits, organizations should cultivate a culture of transparency by encouraging and reinforcing reporting behaviors, providing rewards and benefits to employees who report significant and minor organizational violations, and publicly recognizing whistleblowers for their ethical actions.

Organizations can mitigate misconduct by fostering an ethical corporate culture, establishing a trust-based work environment, supporting whistleblowers, and developing a positive attitude toward internal fraud reporting. Such measures can help prevent damage to the organization's reputation, financial losses, and societal harm.

Organizational leaders should prioritize internal controls to facilitate fraud detection and ensure appropriate actions are taken against offenders.

### Authors' Contributions

Authors equally contributed to this article.

### Ethical Considerations

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

### Acknowledgments

Authors thank all participants who participate in this study.

### Conflict of Interest

The authors report no conflict of interest.

### Funding/Financial Support

According to the authors, this article has no financial support.

### References

- [1] H. Raza, "Factors Influencing Fraud Whistleblowing," *Morfai Journal*, vol. 4, no. 4, pp. 1281-1292, 2025, doi: 10.54443/morfai.v4i4.2324.
- [2] B. O. Adelakun, "Enhancing Fraud Detection in Accounting Through AI: Techniques and Case Studies," *Finance & Accounting Research Journal*, vol. 6, no. 6, pp. 978-999, 2024, doi: 10.51594/farj.v6i6.1232.
- [3] O. E. Akinbowale, P. Mashigo, and M. F. Zerihun, "Analysis of cyberfraud in the South African banking industry: a multiple regression approach," *Journal of Financial Crime*, vol. 31, no. 4, pp. 952-973, 2024, doi: 10.1108/JFC-04-2023-0094.
- [4] D. J. Lowe and P. M. J. Reckers, "The Deterrence Effects of Whistleblowing Provisions, Corporate Governance Culture, and Machiavellianism," *Behavioral Research in Accounting*, vol. 36, no. 1, pp. 45-65, 2024, doi: 10.2308/BRIA-2022-041.
- [5] M. Habbash, K. Hussainey, and A. E. Awad, "The determinants of voluntary disclosure in Saudi Arabia: an empirical study," *International Journal of Accounting, Auditing and Performance Evaluation*, vol. 12, no. 3, pp. 213-236, 2016, doi: 10.1504/IJAAPE.2016.077890.
- [6] E. Ziba and A. Asadi, "The study of the relationship between corporate characteristics and voluntary disclosure in Tehran stock exchange," *International Business Management*, vol. 10, no. 8, pp. 1393-1399, 2016.
- [7] T. A. Hakami and M. M. Rahmat, "Fraud prevention strategies: The perception of Saudi Arabian banks employees," *Asian Journal of Accounting and Governance*, vol. 11, no. 1, pp. 29-38, 2019, doi: 10.17576/AJAG-2019-11-07.
- [8] M. Alsalim, H. Amin, and A. Youssef, "The role of corporate governance in achieving accounting information quality (field study in the mishraq sulfur state co.)," *Stud. Sci. Res. Econ. Ed.*, vol. 27, pp. 2-24, 2018, doi: 10.29358/scceo.v0i0.399.
- [9] E. B. Mutuc, J. S. Lee, and F. S. Tsai, "Doing Good with Creative Accounting? Linking Corporate Social Responsibility to Earnings Management in Market Economy, Country and Business Sector Contexts," *Sustainability*, vol. 8, p. 4568, 2018, doi: 10.3390/su11174568.
- [10] W. Qian *et al.*, "A study of the determinants of environmental disclosure quality: Evidence from French listed companies," *J. Clean. Prod.*, vol. 22, pp. 1608-1619, 2015.
- [11] A. Ahmed, R. M. Monem, D. Delaney, and C. Ng, "Gender diversity in corporate boards and continuous disclosure: Evidence from Australia," *Journal of Contemporary Accounting and Economics*, vol. 13, no. 2, pp. 89-107, 2017, doi: 10.1016/j.jcae.2017.05.004.
- [12] P. He, H. Shen, Y. Zhang, and J. Ren, "External pressure, corporate governance, and voluntary carbon disclosure: Evidence from China," *Sustainability (Switzerland)*, vol. 11, no. 10, pp. 1-20, 2019, doi: 10.3390/su11102901.
- [13] M. Sholihin and D. Ratmono, *Analisis SEM - PLS dengan WarpPLS 7.0 untuk Hubungan Nonlinier dalam Penelitian Sosial dan Bisnis*. Penerbit ANDI, 2020.
- [14] V. H. Ho, "Non-financial reporting & corporate governance: Explaining American divergence & its implications for disclosure reform," *Accounting, Economics, and Law*, pp. 1-23, 2021.
- [15] E. Tri Wahyuni, G. Puspitasari, and E. Puspitasari, "Has IFRS improved Accounting Quality in Indonesia? A Systematic Literature Review of 2010-2016," *J. Account. Invest.*, vol. 21, pp. 19-44, 2021, doi: 10.18196/jai.2101135.