



RESEARCH ARTICLE

The Distortions of Machiavellianism, Containment Solutions and Effect on the Quality of Audit Judgments

Siroos Habibzadeh, Mehdi Alinezhad Sarokolaei *, Mahdi Zeynali

Department of Accounting, Tabriz Branch, Islamic Azad University, Tabriz, Iran

How to cite this article:

Habibzadeh, S. , Alinezhad Sarokolaei, M. and Zeynali, M. (2025). The Distortions of Machiavellianism, Containment Solutions and Effect on the Quality of Audit Judgments. Iranian Journal of Accounting, Auditing and Finance, 9(2), 135-156. doi: 10.22067/ijaaf.2025.45229.1443
https://ijaaf.um.ac.ir/article_45229.html

ARTICLE INFO

Article History

Received: 2024-02-17

Accepted: 2024-08-21


Published online: 2025-04-15

Keywords:

Cognitive, Knowledge Factors, Machiavellian Twists, Preventive and Regulatory Factors, Quality of Audit Judgments

Abstract

The present research, using the qualitative method of background, has tried to identify the effective background and interfering factors in the creation of Machiavellian tendencies of auditors and to calculate the strategies and consequences of limiting the Machiavellian characteristics of auditors. The statistical population of the current research is composed of expert and experienced university professors in the field of auditing, partners of auditing institutions, managers of auditing organizations, and other members of the community of certified accountants. The period of the study implementation is between 2021 and 2022. Using the purposeful mixed sampling method, 14 in-depth and semi-structured interviews were conducted until theoretical saturation was reached. Also, the structural equation modeling approach was used to measure the model's validity, and PLS software was used to fit the model. The findings show that the effective and intervening factors in creating Machiavellian tensions include preventive and supervisory factors, cultural, environmental, and social factors, structural and technical factors, financial and economic factors, and perceptual, human, and knowledge factors. Also, providing cultural and social platforms, structural and technical reforms, economic improvement and political communication, strengthening the knowledge and skill of the workforce, and providing a legal and regulatory platform are among the strategies to contain Machiavellian distortions. In addition, cultural and social influences on the auditing profession and laying the foundation for increasing audit quality are essential consequences of enclosing Machiavellian distortions.

 <https://doi.org/10.22067/ijaaf.2025.45229.1443>



NUMBER OF REFERENCES

36



NUMBER OF FIGURES

1



NUMBER OF TABLES

7

Homepage: <https://ijaaf.um.ac.ir>

E-Issn: 2717-4131

P-Issn: 2588-6142

*Corresponding Author:

Mehdi Alinezhad Sarokolaei

Email: mehdi12may@yahoo.com

Tel: 09112239209

ORCID:

1. Introduction

Communication between auditors and stakeholders is not beyond the limits of human communication (through symbols and signs), and in recent decades, not understanding this issue has been challenging for the audit profession because the economic units are the geometric place and the meeting point of the contracts. The community of different stakeholders forms, and each has different information needs and interests. Since the audit is a process based on social relations, it has a decisive role in reducing the conflict of interests and agency costs. When the Machiavellian behavioral strains of the auditors' judgments affect the audit objectives, the effectiveness and added value of the audit services will not be realized (Saladrigues and Grañó, 2014; Sahla and Iryanie, 2018). According to Hamilton and Smith (2021), the limitations of auditors' behavioral strains, such as opportunism, limited individual emotions, pessimism, recklessness, self-centeredness, psychotic abuse, antisocial personality, and extreme attention-seeking, are not clearly explained in accounting and auditing standards. At the same time, it has influenced the quality of auditors' essential judgments. According to Sikka et al. (1998), the nature of each of these characteristics has made it difficult to remove the behavioral strains that affect auditors' judgments. The attributes of Machiavellianism have created a universal and unavoidable phenomenon in auditors' judgments and made the understanding of this term somewhat ambiguous (Pranyanita and Sujana.,2019).

Hammersley and Ricci (2021) have divided auditors' performance in the current complex business environment into program-oriented and goal-oriented. The traditional and program-oriented approach focuses on the evidence-gathering procedures resulting from auditors' planning, and the goal-oriented approach focuses on the purpose of the task. In a goal-oriented approach, auditors collect evidence for improved professional judgment and more effectively track evidence than program-oriented auditors. As a result, audit quality is improved due to the flexibility of goal-oriented auditors in response to users' information needs in evaluating evidence. Although auditors' planning in the audit process helps to obtain and collect reliable evidence, the negative characteristics of Machiavellianism such as lack of feeling of shame or regret, failure to learn from past experiences, weakness, and insufficiency in emotion and excitement, distance from others, anxiety, and high stress can confuse critical judgments of auditors in presenting a fair report (Houghton et al., 2011).

Audit quality is an infinite and relative phenomenon, which research and investigation do not stop increasing, and more research adds to its evolution in implementation. Several factors have been investigated in previous studies to improve audit quality; However, one of the verifiable dimensions that has been given less attention in previous research in a deep and structured way is limiting negative personality traits and Machiavellianism to improve the quality of auditors' judgments. The characteristics of Machiavellianism have created a universal and unavoidable phenomenon in auditors' judgments and have affected the usefulness of financial reports for users (Pesudo et al., 2023).

For this purpose, reaching a common understanding through the theoretical insights of the auditing profession's experts can help formulate and revise the supervisory regulations and the auditors' professional code of conduct to enclose the features of Machiavellianism. Research in this area has focused on identifying the relationship between Machiavellianism and unethical behavior among auditors. In contrast, an in-depth and structured study has yet to investigate the causal and intervening factors in creating Machiavellian distortions of auditors and the bases and strategies for limiting this abnormal phenomenon. Also, the potential consequences of such behavior for the auditing profession are unclear. On the other hand, the importance of examining cultural and social issues and structural and technical factors in creating auditors' Machiavellian tendencies and identifying the most effective strategies for promoting ethical behavior among auditors to limit their behavioral tendencies is visible to everyone. Hence, the present research provides a broader view of why auditors have Machiavellian

behavior in their assignments and whether such biases affect their professional judgments. In this regard, the current research, while conducting the questions and answers of the evaluator, is trying, by combining qualitative analysis and experimental test (through the mixed research method), to calculate the factors affecting the Machiavellian tendencies of auditors in Iran and about the adaptation of the views of experts in the auditing profession. Provide platforms and strategies to improve the quality of auditors' judgments. The philosophy of conducting this research is based on alternative or non-mainstream views. It is considered interdisciplinary research that combines sociology with the auditing profession so that the resulting theories are an alternative to the realistic perception of social relations. For this purpose, theoretical foundations, experimental background, research methodology, findings, discussion, and conclusions will be presented in the continuation of the research.

2. Theoretical principles

Professional associations such as the International Organization of Supreme Audit Institutions and the International Federation of Accountants since 2016, with the slogan of effectiveness instead of assurance, argue that reporting compliance or non-compliance (zero and one) and confirmation or rejection of historical information do not have the necessary effectiveness for users. Responsible for providing financial reports that are the basis of future forecasts and have extended this role and responsibility to auditing standards. The American Institute of Certified Public Accountants (AICPA) (2020) stated in its report that its demand will decrease if auditing cannot generate money from the present to the future. [Serafeim and Ioannou \(2013\)](#) also believe that auditors should always consider themselves a part of society, feel responsible towards society, and act independently of the company's direct interests to improve public welfare. To fulfill this role, auditors' personality traits must follow the professional code of conduct within the practical ethics framework. In contrast, the experimental and field evidence of auditors' performance shows the occurrence of the Machiavellian personality phenomenon in essential judgments. These personality traits have been identified with pessimism, recklessness, and the influence and dominance of a person or group against themselves and persuading the other party to secure personal interests ([Sharpe et al., 2021](#)). Also, sometimes Machiavellianism has had entirely negative characteristics, such as ruthlessness, deception, or self-centeredness, which is immensely worrying for maintaining the credibility of the auditing profession ([Zettler and Solga, 2013](#)).

International auditing standards describe three factors as the fraud triangle and predict the possibility of fraudulent financial reporting (Public Company Accounting Oversight Board (PCAOB), (2005); International Accounting Standards Board (IAASB), (2009). The first two factors are opportunity and motivation/pressure, which are widely recognized as factors influencing the occurrence of cheating ([Erickson et al., 2004](#); [Graham et al., 2005](#); [Wells, 2001](#)), while the third factor is attitude and rationality, which can be related to the Machiavellian characteristics of people ([Hogan et al., 2008](#); [Wells, 2004](#)). Therefore, the existence of negative characteristics of auditors' Machiavellianism has negligible similarity with fraud. In contrast, the auditors themselves oversee disclosing and providing reasonable assurance about the absence of material misstatements in the financial statements. Based on this, we can acknowledge the importance of addressing the issue of Machiavellian characteristics of auditors. Auditors should avoid ineffective behavior because it affects the report's reliability and, as a result, can harm the public interest. The tendency to inefficient behavior can be adjusted by identifying and limiting some causal factors caused by auditors' personality aspects ([Murphy, 2012](#)).

Social sciences are always mixed with interpretation, and the disciplines discussed in these

sciences are based on subjective perceptions and are not objective. The possibility of bias in judgments has been possible. In other words, everything that happens in service professions is based on essential judgments. In scientific schools related to social sciences, neo-realist and neo-liberal views are proposed, which are based on progressive ideas and are at the opposite point of critical theory. Realist theorizing takes the existing order for granted, while critical theorizing seeks to disrupt the apparent order and change what it is (Mujiono and Jonnardi, 2022). The views governing the theory of realism are based on the interests of the majority, and its goal is to meet the expectations of the dominant groups. On the other hand, critical theory consistently reveals and destroys hierarchical structures that affect small groups in society. In other words, critical theory also has an ethical position whose roots are in providing minority rights. The reduction of inequalities, the establishment of distributive justice, diversity instead of exclusivity, and pluralism and differences are among the points of attention of critical theorists in scientific analysis. The followers of the critical school believe that the typical behavior patterns among the specialists of that society prevent the formation of a specialized and competitive society (Linklater, 2010).

2.1 Machiavellian biases and the quality of auditors' judgments

The level of society's expectations from auditors of financial statements day by day coincides with their social responsibility. Meanwhile, auditors, due to one of the characteristics of Machiavellianism (not being social), do not accept this responsibility of harming financial health and social health and consider it related to not addressing the issue of social responsibility in auditing standards. Auditors admit that the audit of social and environmental responsibilities is expensive, challenging (administratively), retrospective, and often needs more accuracy and timeliness (Castka et al., 2020). Besides not helping the dynamics of the profession and gaining users' trust in financial reports, the antisocial personality that some auditors include in their judgments also limits the application of professional values in a supervisory system. Therefore, recognizing and enclosing Machiavellian distortions is necessary for a high-quality audit and helps to increase trust, optimal allocation of resources, and the quality of financial reporting and the profession's effectiveness. In the current situation and era, Machiavellian twists in service professions based on social relations are considered a severe threat to public interests, especially capital market actors, and their destructive effects on countries' economies can last for years (Brown et al., 2016). According to Bloomberg (2003), due to the influence of auditors' personality traits in critical judgments, dissatisfaction with auditors' performance and lawsuits against them have increased in recent decades. Not paying attention to social responsibilities and conservative reporting due to Machiavellian characteristics reduces the risk of litigation and lawsuits against auditors and fuels the problem of information asymmetry (Arens et al., 2012). Machiavellianism refers to a personality trait characterized by manipulation, collusion with clients, biased reporting, cynicism, and focus on personal interests in the auditing profession, making people more involved in unethical behavior. Machiavellian characteristics have negative effects that can weaken the auditor's integrity and impartiality when making essential judgments. Auditors who behave this way reduce the quality of the audit report. Machiavellianism is characterized by a lack of concern for personal relationships and a disregard for conventional morality, with low ideological commitment (Sahla and Iryanie, 2018). According to Patton (2014), this characteristic makes individuals prioritize results over processes. In addition, Machiavellian traits are often associated with manipulative attitudes to achieve personal goals. This characteristic is detrimental to professions, especially auditing because it is associated with professional judgments. The higher the level of Machiavellianism, the more likely the auditor will engage in unethical actions (Cahyono and Sudaryati, 2023). The above content shows that addressing the issue of increasing audit quality by limiting the Machiavellian characteristics of auditors can improve the quality of auditors' judgments

while gaining society's trust, leading to the growth and promotion of the auditing profession. Therefore, the central question of the research is raised as follows: what is the appropriate model for enclosing the Machiavellian characteristics of auditors?

The results of surveys in the last few decades have indicated its existence and continuity in most parts of the world.

[Pesudo et al. \(2023\)](#) showed that the characteristics of Machiavellianism have a negative effect on the quality of auditing, and auditors' competence has a positive effect on the quality of auditing. Also, the motivation variable does not affect audit quality.

[Cahyono and Sudaryati \(2023\)](#) concluded that an ineffective audit process reduces the quality of audit results, which may lead to public trust in the auditing profession. Therefore, a Machiavellian attitude among auditors can lead to negative consequences, including unethical behavior. To prevent auditors from unethical behavior, it is vital to promote fundamental values and norms in the auditing profession as a source of ethical guidance for auditors.

[Mujiono and Jonnardi \(2022\)](#) showed that the audit fee negatively affects the auditor's independence, and the Machiavellian nature negatively affects the auditor's independence. Also, professional ethics as a moderating variable affects the relationship between audit fees and auditors' Machiavellianism.

[Prativi \(2021\)](#) showed that the negative characteristics of Machiavellianism affect the complexity of auditors' tasks as an inefficient behavior. Also, the Machiavellian trait affects the source of control as the background of the auditor's ineffective behavior in the audit department.

[Putu et al. \(2020\)](#) studied the mediating effect of ineffective auditor behavior on Machiavellian personality and time budget pressure on audit quality. The results showed that auditor ineffective behavior ultimately affects audit quality through Machiavellian characteristics. In contrast, an auditor's ineffective behavior pressures the time budget, which affects the quality of the audit in a completely partial way.

[Pranyanita and Sujana \(2019\)](#) concluded that the nature of Machiavellianism, time budget pressure and external control sources positively affect audit inefficiency. In comparison, the internal control center has a negative effect on audit inefficiency. Auditors' asymmetric behavior is one factor affecting this behavioral deviation. Inefficient audit behavior can reduce audit quality.

[Wijayanti \(2018\)](#) investigated the effect of Machiavellian nature, emotional intelligence, spiritual intelligence, and understanding of professional ethics codes of accountants on ethical behavior in auditing. The results showed: 1) Machiavellian nature affects the ethical behavior of auditors, that the higher the level of Machiavellianism, the greater the tendency to perform unethical actions, 2) Spiritual intelligence has a positive effect on the ethical behavior of auditors, and 3) Understanding the codes of professional ethics of accountants. It has a positive effect on the ethical behavior of auditors, and emotional intelligence does not affect the ethical behavior of auditors.

[Tricky et al. \(2017\)](#) showed a significant relationship between Machiavellianism and relativism, idealism, anti-intellectualism, and social bias. Also, similar personality traits regarding climate between Canada and the United States were not observed.

[Saputri and Wirama \(2015\)](#) showed that Machiavellianism and personality type significantly affect the auditor's ineffective behavior. Audiences with high Machiavellian values and a negative personality type tend to perform ineffective behaviors.

[Murphy \(2012\)](#) showed that individuals with more Machiavellian characteristics are likelier to give false reports, and auditors who give false reports experience negative emotions (affect). Also, auditors with Machiavellian characteristics are not affected by Machiavellian characteristics and feel less guilty when reporting falsely.

3. Research methodology

The approach and logic of data collection in this research is of analogical induction type. The study was conducted from 2022 to 2023, and the research method is of a mixed type, describing how to carry out the methodology of each section.

3.1 Qualitative section

In the qualitative part of the research, to identify the effective factors that create the characteristics of auditors' Machiavellianism, as well as to explain the platforms and strategies that are effective in enclosing this phenomenon from the foundation data method and due to the desire for elitism of the investigated phenomena, a semi-structured interview tool has been used. The statistical population of the current research, to conduct interviews and statistics of the conceptual model of the research, consists of expert and experienced professors in the field of auditing with scientific and executive expertise, senior managers and technical managers of auditing organizations, as well as partners of private sector auditing institutions and members of professional associations and institutions supervising the profession. Audits are formed like the Supreme Council of the Society of Certified Accountants. Also, due to the exploratory nature of the research, the purposeful mixed sampling method or the conscious selection of specific participants has been used. This method is due to the use of expert samples in different groups and the aim of theoretical saturation in presenting a conceptual model (Teddlie and Yu, 2007). To select the sample to the extent of sufficiency and with the aim of theoretical data saturation, 14 in-depth and semi-structured interviews were conducted with a weighted average of 36 minutes. The questions have been designed according to the research objectives and used with the advice and approval of 5 university professors in the auditing field. In the interview with the experts, six questions were asked to reach theoretical saturation, and an example of the compiled questions is in Table 1:

Table 1. Research questions

No	Questions
1	In your opinion, what are the effective and interfering factors in creating Machiavellian characteristics of auditors?
2	What strategies and platforms do you suggest limiting the negative characteristics of auditors' Machiavellianism? Which institution or authority should provide and monitor These platforms and strategies?
3	If an approach is presented to limit the Machiavellian characteristics of auditors, what could be its consequences on the auditing profession? (Separately, the consequences should be stated).
4	Please state whether important things have yet to be mentioned in limiting Machiavellianism's negative characteristics and the auditors' monopoly.

After the interviews, data collection, analysis, and construction were done simultaneously, and the model indicators in this section were selected codes, central codes, and open codes to analyze textual and unstructured data using MAXQDA Software. was determined. The interview concepts were classified and coded in open coding by reviewing the collected data set to determine the codes and distil and summarize the information. In the next stage (axial coding), to create a relationship between the categories listed in open coding, the principal axes in the data set were identified around the axis of the two main categories to the Machiavellian distortions of the auditors. In the last stage, selective coding, selecting and categorizing the main categories, systematically linking each concept with other categories, and confirming the validity of the relationships between the main and sub-components were done. In this way, the central category, the characteristics of Machiavellianism, was systematically related to other categories, and the categories that needed more improvement and development were modified. Audio recording devices were used during the interviews after

coordinating with the interviewees to ensure the validity of the qualitative data and provide the possibility of a detailed examination of the raw data. By producing the interview text verbatim, the resulting rich, deep, and transparent data can be made. Also, to check the reliability of the data in this section and ensure the coders' correctness and the data's internal validity, Cohen's kappa test was used in SPSS Software, the results of which are presented in the research findings section.

3.2 Quantitative section

In the quantitative section, after preparing the questionnaire, the questions are based on concepts extracted from interviews with experts and emerging components. In other words, the research data collection tool in the quantitative section a researcher-made questionnaire based on the items extracted from the qualitative section, including six main questions with 121 items based on a 5-point Likert scale (from no impact to high impact) and with the approval of 5 experienced professors in The statistical population of the quantitative part also includes: members of the interviewed panel of the qualitative part, other university professors, technical managers and senior auditors of the audit organization and private sector audit institutions, financial analysts, official judicial experts and finally doctoral and master's students in the field Accounting and auditing consists of 280 people. Using Cochran's formula, 162 questionnaires were distributed, of which 156 items were collected, and 154 items were evaluated as usable. Cronbach's alpha test and KMO index, which were analyzed in the research findings section, were used to check the validity and reliability of the questionnaire. Further, to validate the conceptual model of the research, the structural equation modeling approach was used using Smart PLS3 software to evaluate the influence and coefficients of each of the implicit and explicit components of the conceptual model.

4. Research findings

The current research was conducted with at least 14 experts in our country's auditing profession, and their valuable opinions were analyzed. Table 2 shows the statistics of research participants in the qualitative section. As can be seen, most of the experts participating in the research are experienced university professors. Each of these experts, with their knowledge and long experience, is a valuable treasure for our country's accounting and auditing profession, and the current research is based on the experts' opinions and scientific analytical achievements. He is trying to find a suitable approach to contain the Machiavellian tendencies of statistical auditors. It is worth mentioning that some experts are both in the field of universities (membership in the faculty of universities) and in the category of partners of auditing institutions, which are grouped separately to match the total number of interviews with the statistical sample of the qualitative section.

As mentioned, 154 questionnaire items were analyzed in the quantitative section to model the structural equations, and Table 3 shows the descriptive statistics of the participants in this section. As can be seen, about 27% of the respondents are women, and 73% of them are men. About 5% of the statistical sample in this department have the scientific rank of associate professor, 25% have the scientific rank of assistant professor, 33% have the degree of specialized doctor, and 56% have contributed with a master's degree. Also, 52% of the participants in this section have more than ten years of executive experience in the audit field, and 48% have less than ten years of executive experience. The leading professional category of auditors participating in the quantitative section and completing the questionnaire are senior auditors, with about 30%, and audit supervisors, with 14%.

Table 2. Statistics of the participants of the qualitative part of the research

Filed area	No.	Scientific rank			Education		Executive experience level (in years)	
		Professor	Associate professor	Assistant professor	Master's	PhD	Less than 10	More than 10
Experienced university professors with scientific and executive expertise	6	3	3	-	-	6	1	5
Senior managers and technical managers of the auditing organization	2	-	1	1	-	2	-	3
Partners of audit institutions	2			2	-	2	-	2
Other members of the community of certified accountants	4	-	-	4	3	1	-	4
Total	14	3	4	7	3	11	1	13

Table 3. Statistics of the participants of the quantitative part of the research

Filed area	No.	Gender		Scientific rank				Education			Experience level (in year)		Professional position					
		Male	Female	Professor	Associate professor	Assistant professor	No rank	PhD	Master's	Other	Less than 10	More than 10	Senior auditor	Technical manager	Supervisor	Partner	No position	
Panel members of the quality department	8	7	1	2	2	4	-	8	-	-	-	8	-	-	-	-	-	6
Education Board members	20	12	3	-	4	18	-	22	-	-	6	16	1	2	5	1	10	
Auditors of auditing organizations and private sector institutions	58	32	31	-	2	15	31	19	30	14	13	50	32	5	8	3	2	
official court expert	7	7	-	-	-	3	4	2	5	1	2	5	-	2	-	-	4	
Financial analysts	26	18	8	-	2	8	20	13	11	5	11	15	3	-	2	-	27	
PhD students	35	25	10	-	-	-	39	1	24	-	17	11	11	2	4	-	21	
Total	154	101	53	2	10	48	94	65	70	20	49	105	47	11	19	4	73	

The text of all 14 interviews was analyzed in MAXQDA software for categorization and sorting, and 119 primary concepts were identified for influential and interfering factors, foundation, and strategies, as well as the consequences of enclosing Machiavellian distortions. Table 4 shows the frequency of concepts extracted from the MAXQDA software.

Table 4. Frequency of research concepts

The main categories of research	Subcategories	No. of concepts	Frequency percentage
Effective and interfering factors in creating Machiavellian tensions	Cultural, environmental and social factors	16	22.5
	Structural and technical factors	10	17
	Financial and economic factors	6	10
	Perceptual, human and scientific factors	16	27.5
	Preventive and regulatory factors	13	23
	The sum of the concepts	58	100
Encapsulation platforms and strategies Machiavellian twists	Cultural and social background	5	11
	Structural and technical reforms	6	11
	Economic improvement and political connections	4	9
	Strengthening the knowledge and skills of human resources	8	19
	Providing a legal and regulatory platform	21	50
	The sum of the concepts	44	100
Consequences of confinement characteristics of Machiavellianism	Cultural and social consequences on the auditing profession	7	41
	The platform for increasing audit quality	10	59
	The sum of the concepts	17	100

The structural equation approach was used for validation. In structural equation modeling, the standard criterion for establishing convergent validity at the construct level is the extracted average variance. The results of this section are presented in Table 5. As can be seen, the values of the factor loadings of the hidden components of the model are more than 0.4, which is statistically significant and confirms the appropriate description of the variance of the corresponding indicators. Also, the average extracted variance of each component is more than 0.4, which shows that the fitted model has good convergent validity and confirms the confirmatory factor analysis.

Table 5. Results of confirmatory factor analysis of questionnaire questions

Components	Item	Factor load	Standard error	AVE
Cultural, environmental and social factors	Religious beliefs and convictions	0.687	0.074	0.579
	Imposing personal opinions resulting from individualism			
	Personality type and social culture of auditors			
	Lack of real understanding of the importance of the consequences of unfair reporting			
	Discrimination and lack of meritocracy for the right work			
	Rampant unemployment			
	There is an uncertain future.			
Instability of practical and normative ethics in society				

	Replacing anti-values with current moral and behavioral values in society			
	Lack of comprehensive definition of responsible auditor			
	Work environment conditions and conditions governing it			
	Basic mental conflicts in Machiavellian twists			
	Disregarding the auditors' social goals			
Structural and technical factors	Special features of the profession	0.508	0.073	0.520
	Refusal to disclose economic facts due to irresponsibility			
	The inadequacy of the audit committee members regarding expertise has made monitoring the auditors' performance challenging.			
	Global developments and specialization of affairs			
	Overriding the environment of the auditing profession			
	Management style, reporting quality and reporting tools used			
	The complex nature of the distortions that cause the auditors to throw away clean accounts			
	Inappropriate feedback from managers regarding the audit clauses reduces the motivation of auditors to audit the content.			
	Lack of deficit or lack of standards in the field of information technology			
	The deviation of the environmental growth of the owners in terms of information technology and the lack of sufficient expertise of auditors in this field			
Financial and economic factors	Auditors and auditing institutions are worried about maintaining their company activity, which affects their independence.	0.545	0.072	0.536
	The downward pressure on audit fees			
	Disruption of the state of the national economy and lack of income stability			
	Dependence on the rentier economy			
	Failure to meet personal needs in conditions of uncertainty			
	Acute inflation in the country's economy has practically affected financial information, reports, and handling.			
	Conservatism and channelized treatment of auditors: 1- The conservatism of auditors during the audit tenure is caused by conservatism tendencies (for example, auditors in the last two years of their tenure in the company act bolder and stricter than in the first two years. In other words, in the last year of tenure, the independence of auditors increases)/ 2- The conservatism of auditors in the shadow of customer retention (for example, most banks are not in good condition, but can auditors clearly state this fact in their reports? Disclosing this issue has negative consequences for society)			
	Sometimes, there is a conflict between the financial knowledge of auditors and the delegation of responsibility to them.			
Perceptual, human and scientific factors	Auditors' lack of responsibility for the development of information technology.	0.761	0.071	0.659
	Lack of experienced and trained manpower			
	Sometimes, the judgments of the auditing profession are not based on the mastery of concepts and judgment tools, and there is a misappropriation of judgment.			
	Personality factors such as high stress and anxiety			
	Little experience for a lot of work			
	Influential personal characteristics: auditor's level of optimism or pessimism, emotions associated with stress and worry			

	Psychological and emotional characteristics Personal pressure and intimidation and expectations of work and social situation (special side) Inadequate investment in specialized human resources under the pretext of low wages Lack of access to sufficient and experienced human resources Improper application of standards due to poor training and insufficient skills Personal and educational characteristics Managers' inattention to solving the ambiguity and solving the problem of the audit clauses Lack of creative mind in creating service innovation			
Legal and regulatory factors	There is insufficient monitoring of the Machiavellian behavior of auditors Prescriptive pricing of auditors' services The level of importance in the audit causes auditors to be indifferent in dealing with violations lower than this level, according to the company's size. Lack of disciplined and restraining financial laws The standards limit the auditors' scope of responsibility and cause the auditors to be too conservative. Absence of a framework for accountability to stakeholders and prosecution against auditors Lack of insurance coverage for auditors, which increases the fear of disclosing economic consequences Excessive interpretability of laws and regulations and incorrect inferences from them Lack of sufficient supervision by professional associations and supervisory bodies on auditors' behavior, thoughts and ethics Lack of mechanism for information transparency certificate Outsourcing the work of auditors to third-party companies Deficiency in legal requirements and its effect on auditors' conservatism	0.452	0.074	0.445
Platforms and strategies for limiting the features of Machiavellianism				
Cultural and social background	Improving communication and creating a common language between audit committees, constituent shareholders, executives and internal auditors Compliance with ethics and professional code of conduct regarding price cuts and avoiding utilitarianism Reducing social pressure on auditors Increasing the role of auditing and accounting professionals in the financial reporting ecosystem Understanding the technical, behavioral and personality fields of auditors	0.502	0.073	0.543
Structural and technical reforms	Rating of auditors (every audit is not necessarily allowed to audit every company of any size), like the engineering system Foresight and expressing the consequences of audit clauses in the company's future activities Control of environmental factors Prevention of fraud through full attention to corporate governance mechanisms Establishing a mechanism for the health of financial reporting Auditors are selected based on experience in a particular industry, industry-specific rules and regulations, and business conditions.	0.531	0.071	0.602

Economic improvement and political connections	Decision making and informed judgment in an economic environment in investments	0.521	0.072	0.594
	Creating a competitive environment in the economy and real privatization			
	Controlling the influence of some political governments in developing standards and laws			
	Increasing the efficiency of financial markets			
Strengthening the knowledge and skills of human resources	Continuous training of auditors to increase expertise and technical skills	0.511	0.073	0.610
	Recognition and awareness of external and internal factors by auditors			
	Employing expert human resources for standardization in the auditing organization			
	Full adherence to professional code of conduct and inner independence			
	Accrediting and equipping auditors: Accredite auditors with moral and value standards and invest more in their continuous education.			
	Training auditors in the field of today's businesses and adaptation and progress in the field of information technology			
	The priority of the content over the form of audit committees that are not among the people below the key of the CEO and the major shareholder			
	Strengthening audit institutions in terms of tools and experienced human resources			
Providing a legal and regulatory platform	Providing the necessary legal basis for the implementation of judicial accounting	0.494	0.071	0.566
	Limiting the continuation of the activity of institutions by selling comments			
	Classification and ranking of auditing institutions in terms of the size of the companies under consideration and the volume of reports provided			
	Resolving the concern of the continuity of auditors' activities by defining the fees and how to change auditors			
	Clarity in laws and regulations and determination in their implementation			
	Increasing the quality of financial reporting and reducing existing limitations in reporting			
	Rating of auditors and peer evaluation of quality indicators of auditors			
	Determining indicators for how to choose an auditor			
	Applying heavy fines for auditors' negligence			
	A structured and logical review of audit fees and transparency of variables that affect audit fees and contracts.			
	The need to review auditing standards through foresight and expressing the economic consequences of companies			
	Stating the economic problems of the company in the audit paragraphs alone is not enough, and its consequences on the company's future activities should also be determined.			
	The stronger role of professional and supervisory associations such as the Capital Market and the Society of Certified Accountants and the creation of a committee by these associations for the implicit training of auditors.			
	Strengthen regulatory and basic laws (such as trade law)			
	Hearing the auditors' concerns by the public accountants' society and the audit organization and expressing them in the cabinet and government supervisory meetings.			

	Creating coercive power to answer auditors in front of users in case of negligence and moving in line with the social goals of companies			
	Separation of audit reports from the legal inspector to differentiate the importance of reports and the volume of proceedings due to the amendment of the commercial law			
	An independent body consisting of various stakeholders and professional auditing organizations should be formed to control the Machiavellian tendencies of auditors.			
	Supervision of audit fees			
	Paying attention to the personality aspects of official accountants at the time of joining the society			
	Honoring audit services and contributing to the dynamism and effectiveness of the audit profession			
Consequences of enclosing the characteristics of Machiavellianism				
Cultural and social consequences on the auditing profession	Clearing the ambiguity regarding the malpractice of companies	0.501	0.073	0.544
	Growth, excellence and dynamism of the profession			
	Accomplishing auditors' operational responsibility			
	Increasing audit quality and effectiveness of the profession			
	Ensuring the achievement of auditors' social goals			
	A more accurate basis for judgment and comment is created in outer space.			
	The amount of important mistakes (distortions) is minimized.			
A platform for increasing audit quality	The quality of information is improved in the decision-making process	0.536	0.072	0.509
	Fair distribution of income and quality results of financial reports			
	The usefulness of information increases			
	Qualitative features of information: reliability, comparability and relevance are improved			
	Restrictions on the sale of opinions and creating public confidence are achieved.			
	Capital market efficiency and optimal allocation of resources			
	Reducing information risk and increasing the reliability crediting and assurance of auditors			
	Preventing the outsourcing of auditors' work to third parties			
	Reducing coercive financial corruption			
	Increasing the quality of financial reporting			

The results of divergent validity are shown in Table 6. Fornell and Larcker's (1981) method was used for the divergent validity test. The relationship of each component with its identifiers and with other components has been investigated in this test. The values of the correlation coefficient between the components in the primary diameter and the square root of the extracted average variance values for each component are presented in the table below. As can be seen, the model's components interact more with each other than the corresponding components, confirming the model's divergence.

Also, the results of measuring the model's reliability, i.e., Cronbach's alpha and composite reliability, were 0.711 and 0.796, respectively, which shows that the fitted model has good reliability. The coefficients of each path and the significant values of each path indicate the explanatory power of each component. Path coefficients between hidden components show the explanatory power of the presented structural model.

Table 6. Fornell and Larcker matrix results

Components	Cultural, environmental and social	Structural and technical factor	Financial and economic factor	Perceptual, technical and knowledge factors	Legal and regulatory factor	Cultural and social background	Structural and technical reforms	Economic improvement and political connections	Strengthening the knowledge and skills of human resource	Providing a legal and regulatory platform	Cultural and social consequences	A platform for increasing audit quality
Cultural, environmental and social	0.657											
Structural and technical factors	0.052	0.667										
Financial and economic factors	0.631	0.427	0.767									
Perceptual, technical and knowledge factors	0.671	0.105	0.031	0.769								
Legal and regulatory factors	0.292	0.189	0.023	-0.107	0.739							
Cultural and social background	0.353	0.120	0.218	0.157	0.180	0.742						
Structural and technical reforms	0.650	-0.241	-0.269	0.411	-0.007	0.180	0.721					
Economic improvement and political connections	0.440	-0.026	0.055	0.219	-0.047	-0.007	0.339	1.000				
Strengthening the knowledge and skills of human resources	0.508	0.058	-0.016	0.205	0.068	-0.047	0.206	0.350	0.694			
Providing a legal and regulatory platform	0.040	-0.052	-0.014	-0.120	0.309	0.068	-0.024	0.260	0.335	0.701		
Cultural and social consequences	0.249	-0.003	0.013	0.048	0.374	0.309	0.050	-0.127	0.023	0.178	1.000	
A platform for increasing audit quality	0.666	-0.234	-0.228	0.228	0.423	0.374	0.275	0.069	-0.174	0.057	0.217	1.000

4.1 Summarizing and developing the structural model

The structural model of the research shows the impact of each factor that creates a gap between the expectations of auditors and users of financial reports. The results of the path analysis of the leading research components are shown in Figure 1. As can be seen, cultural, environmental, and social factors amount to (0.276); structural and technical factors (0.270); financial and economic factors (0.394); cognitive, human, and knowledge factors (0.597); inhibitory and supervisory factors (0.658) are effective in creating the Machiavellian bias of auditors. Also providing cultural and social services to the extent of (0.601); structural and technical reforms (0.468); economic improvement and political communication (0.514); strengthening the knowledge and skills of human resources (0.521) and providing a legal and regulatory framework (0.492) were counted among the strategies to contain Machiavellian tendencies. Finally, the cultural and social consequences on the auditing profession (0.530) and creating a platform for increasing Audit quality (0.522) were explained in line with the consequences of enclosing Machiavellian distortions. Figure 1 shows the structural model of the research.

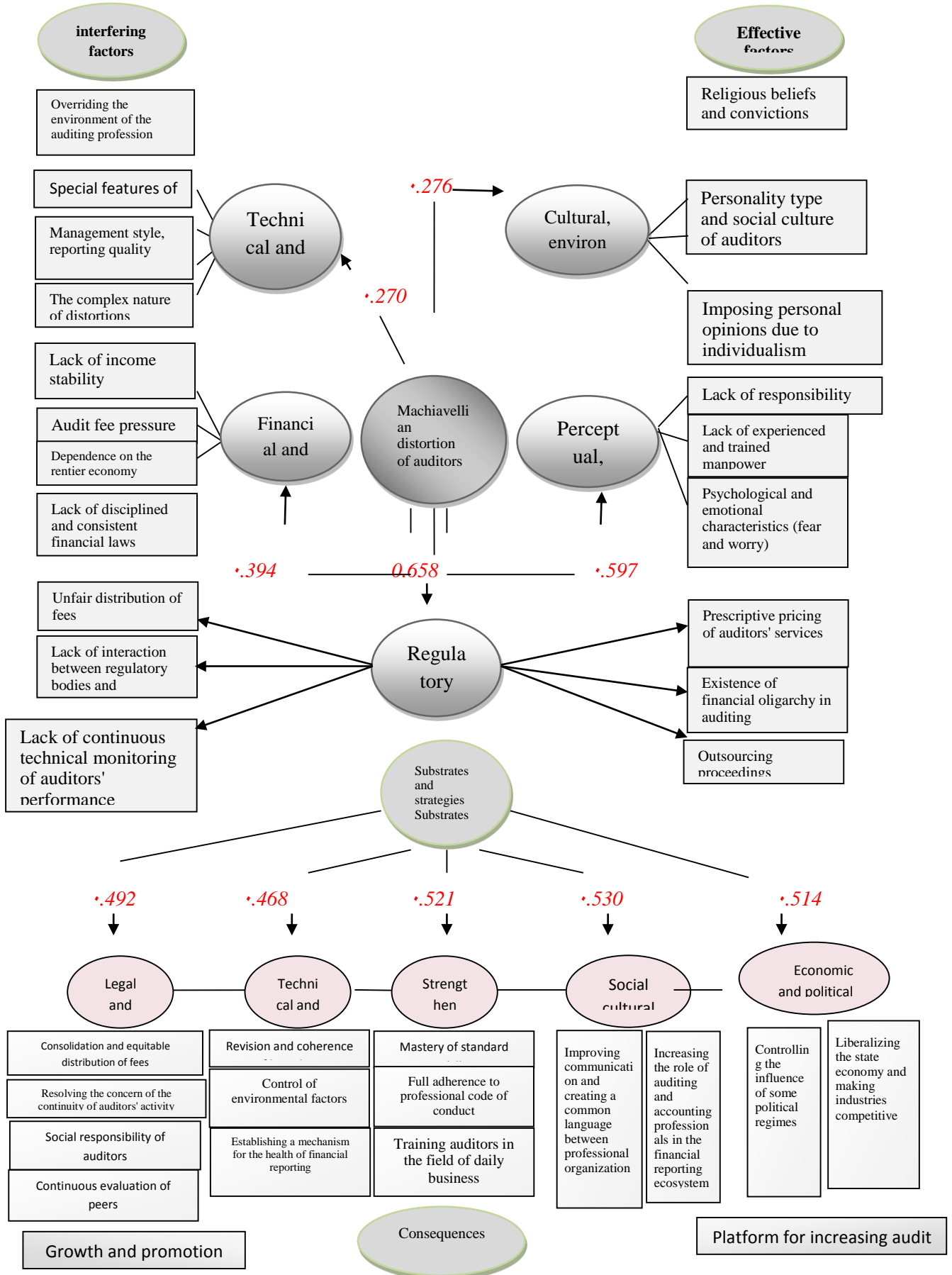


Figure 1. Encapsulation pattern of Machiavellian Views of auditors

In Table 7, the results of the path analysis show the explanatory power of each of the components affecting the Machiavellian tendencies of auditors and the platforms and strategies for enclosing Machiavellian tendencies.

Table 7. Path analysis results of research components

Path	P-value	Path coefficients
Cultural, environmental and social factors	0.276	<0.012
Structural and technical factors	0.270	<0.003
Financial and economic factors	0.394	<0.001
Perceptual, human and scientific factors	0.597	<0.001
Preventive and regulatory factors	0.658	<0.001
Providing a cultural and social platform	0.601	<0.001
Structural and technical reforms	0.468	<0.010
Economic improvement and political connections	0.514	<0.002
Strengthening the knowledge and skills of human resources	0.521	<0.008
Providing a legal and regulatory platform	0.492	<0.020
Cultural and social implications on the auditing profession	0.530	<0.001
A platform for increasing audit quality	0.522	<0.003

5. Discussion and conclusion

Auditing the knowledge of doubt is the pursuit and collection of evidence, the methods of which are based on historical facts. Financial statements mainly reflect the financial effects of past events and do not include non-financial performance measures or prospects and plans. Credibility and legitimacy as the cornerstone of the auditing profession result from the capacity of this profession to respond to the responsibilities arising from their professional judgments. The need to instil auditors' responsibilities through their ethical judgments is created. The present study tried to provide strategies to increase audit quality by identifying the Machiavellian tendencies of auditors in significant judgments and calculating the consequences of moral values in limiting their behavioral patterns. Therefore, this study provides critical practical consequences for auditors, supervisory institutions, professional associations, and researchers, showing that paying attention to these strategies can help improve the quality of auditors' judgments.

In this regard, in the first phase of the research, the main factors affecting the creation of Machiavellian tendencies of auditors, the bases and strategies to contain them, and the consequences of preventing auditors' behavioral strains were calculated through 14 semi-structured interviews among the experts of the auditing profession in Iran at the academic and executive levels. In the second phase, 162 questionnaires were compiled and distributed based on the concepts extracted from the interviews, of which 154 items were evaluated as measurable. This section was implemented to determine the impact of each of the existing and emerging components between the interviewed members and professionals in the auditing profession. The effect of each factor that creates the Machiavellianism of auditors and its confinement strategies, along with the consequences of each, were analyzed using one of the multi-indicator decision-making techniques, structural equations, and PLS software. The results showed that cultural, environmental, and social factors; structural and technical factors; financial and economic factors; cognitive, human, and knowledge factors; and preventive and supervisory factors have amounted to and effectively created Machiavellian distortions of auditors. Also providing cultural and social services; structural and technical reforms;

economic improvement and political communication; Strengthening the knowledge and skills of human resources and providing a legal and regulatory framework effective in providing strategies to contain Machiavellian tendencies, and finally, cultural and social consequences on the auditing profession and foundation To increase audit quality is one of the consequences of enclosing Machiavellian distortions. The findings of this research are based on the studies of Mansouri Nalbandan and Hashemi Gohar (2021) and Sayal and Singh (2020).

In line with the main research question, the results showed that the auditors' lack of real understanding of the economic consequences of conservative reporting has created a gap between the expectations of financial report users and auditors. The current research evidence indicates that the auditors act more boldly and rigorously at the end of their tenure in the unit under review than in the first two years. In other words, internal independence becomes more apparent in the last year of the auditors' tenure. Also, auditors' judgments are based on something other than mastery of judgment concepts and tools, and the misappropriation of critical judgments has caused their unfavorable performance. This issue may be caused by high work density and influential personal characteristics such as optimism or pessimism, emotions associated with stress and worry, inattention to social goals, personal pressure and intimidation, and incorrect application of standards due to weak training and insufficient skills. Of course, the environmental conditions and the specific characteristics of the auditing profession are also not without influence. Discrimination and the lack of meritocracy for exemplary work, the existence of a vague future of work, mental and economic conflicts, global developments, and the specialization of affairs were among the factors that are influential in creating the negative characteristics of auditors' Machiavellianism. Also, in line with how to limit the negative characteristics of auditors' Machiavellianism, the primary conditions and strategies that can be enumerated include equipping auditors with moral and value standards and equipping them with more investments in the field of today's business education, establishing communication and a common language between audit committees and independent and internal auditors (as the executive arm of audit committees), ranking auditors (each audit does not necessarily have permission to audit any company of any size, such as the engineering system organization); selection of auditors based on experience in a specific industry with specific rules and regulations; providing the necessary legal framework for the execution and implementation of judicial accounting and the rating of auditors and the evaluation of colleagues, all of the strategies to limit the negative characteristics of the Machiavellianism of auditors were explained.

Accounting and auditing are products of social relations and arise out of necessity. In our country, this profession is a product of political relations, and from the point of view of stakeholders and managers, auditing is mandatory, not necessary. Also, accounting and auditing standards have yet to be well adapted to the environmental conditions of the country and existing businesses, which has deepened the gap between businesses and the ability to implement standards. The standards developed in a competitive economy with up-to-date laws cannot be implemented in a non-transparent government economy. In addition to these factors, the need for sufficient monitoring of auditors' performance by professional associations and supervisory institutions regarding the auditors' critical judgments, which their Machiavellian tendencies and behavioral patterns have influenced, has also been shown to neglect their social responsibilities. In general, our country needs a comprehensive definition of a responsible auditor. Also, the lack of specialized and trained personnel, the second-hand nature of the work, the breaking of the fee rate, and, most importantly, the non-compliance with the code of professional conduct have been influential in the unfavorable performance of auditors. Conducting audits and judgments combined with Machiavellian tendencies will not only help information transparency in complex businesses, but it will also lead to non-optimal allocation of resources in financial markets and incorrect decisions. In this situation, the attraction of foreign

investment is reduced due to the lack of a transparent capital market, and fraud, collusion, and misuse of assets also increase. Also, auditors' independence faces more uncertainty, and political thinking and mismanagement in the country's economic environment are becoming more visible. Deviation of facility consumption, unbridled money laundering, non-productive and ineffective investments, inefficient human resource recruitment, and delayed reporting are all consequences of judgments based on Machiavellian characteristics.

It is suggested to strengthen auditors' perception, continuous training in using standard skills and new tools, and full compliance with the code of professional conduct. Auditors should be equipped with excellent professional ethics and professional associations to invest more in education. Complete adherence to the professional code of conduct through maintaining internal independence, using expert human resources, and preventing the outsourcing of the proceedings process can effectively make the auditing profession market competitive through the quality of work. The interaction between professional organizations in the continuous monitoring of audit quality, the obligation to fully adhere to the code of professional conduct, joint efforts, and the coherence of laws, regulations, and standards in controlling auditors' behavioral patterns are among the things that are essential steps in increasing audit quality by limiting the Machiavellian biases of auditors. The findings of this research, with the studies of Wijayanti (2018), Pryanita and Sujana (2019), Murphy (2012), Putu et al. (2020), Cahyono and Sudaryati (2023), Prativi (2021), was in agreement with the findings of Tricky et al. (2017), Pesudo et al. (2023), Mujiono and Jonnardi (2022) and Putu et al. (2020).

5.1 Practical implications

To limit the distortions of Machiavellianism, the solutions to curb it and its effect on the quality of audit judgments are suggested as follows. Awareness of the results of the negative characteristics of Machiavellianism in auditors and its impact on the quality of their important judgments is well known. Also, restructuring the composition of audit partners and using social science and information technology specialists in the composition of audit institutes' partners, or even, if possible, joint working groups to improve the quality of auditing, will help to improve the quality of auditors' judgments and prevent their behavioral abuses. The community of certified accountants should provide a platform so that the monopoly in referring to audit work is minimized and the audit market becomes competitive due to the quality of work.

Auditors should equip themselves with professional ethics within the framework of compliance with the code of professional conduct, and auditing institutions should pay special attention to more investments in education. Also, it is undeniable that auditors are in the vicinity of risk and produce risk by submitting an audit report. Auditors should benefit from civil liability insurance for this purpose. Finally, it is suggested to provide a platform for stakeholders to report auditors' violations to the competent authorities through a free reference.

References

1. American Institute of Certified Public Accountants (AICPA). (2020). Professional standards, report, conclusions and recommendations, New York, USA.
2. Arens, A. A. E., Beasley, R. J., & Mark, S. (2012). Auditing and assurance service an integrated approach, 14th global edition. New Jersey: Prentice Hall.
3. Bloomberg. L.P. (2003). Ex-Andersen firms will pay \$40 million Enron settlement, Working paper, available at: <https://www.nytimes.com/2003/07/15/business/ex-andersen-firms>.
4. Brown, J. O., Hays, J. and Stuebs Jr, M. T. (2016). Modeling accountant whistleblowing intentions: Applying the theory of planned behavior and the fraud triangle. *Accounting and the*

- Public Interest*, 16(1), pp. 28-56. <https://doi.org/10.2308/apin-51675>
5. Cahyono, S. and Sudaryati, E. (2023). Machiavellian behavior in auditor ethics and professionalism: Cognitive moral development study approach. *Global Financial Accounting Journal*, 7(1), pp. 28-44. <http://dx.doi.org/10.37253/gfa.v7i1.7445>
 6. Castka, P., Searcy, C. and Mohr, J. (2020). Technology-enhanced auditing: Improving veracity and timeliness in social and environmental audits of supply chains. *Journal of Cleaner Production*, 258, A. 120773. <https://doi.org/10.1016/j.jclepro.2020.120773>
 7. Erickson, M., Hanlon, M. and Maydew, E. L. (2004). How much will firms pay for earnings that do not exist? Evidence of taxes paid on allegedly fraudulent earnings. *The Accounting Review*, 79(2), pp. 387-408. <https://doi.org/10.2308/accr.2004.79.2.387>
 8. Graham, J. R., Harvey, C. R. and Rajgopal, S. (2005). The economic implications of corporate financial reporting. *Journal of Accounting and Economics*, 40(1-3), pp. 3-73. <https://doi.org/10.1016/j.jacceco.2005.01.002>.
 9. Hamilton, E. L. and Smith, J. L. (2021). Error or fraud? The effect of omissions on management's fraud strategies and auditors' evaluations of identified misstatements. *The Accounting Review*, 96(1), pp. 225-249. <https://doi.org/10.2308/tar-2017-0355>
 10. Hammersley, J. S. and Ricci, M. A. (2021). Using audit programs to improve auditor evidence collection. *The Accounting Review*, 96(1), pp. 251-272. <https://doi.org/10.2308/tar-2018-0120>
 11. Hogan, C. E., Rezaee, Z., Riley Jr, R. A. and Velury, U. K. (2008). Financial statement fraud: Insights from the academic literature. *Auditing: A Journal of Practice & Theory*, 27(2), pp. 231-252. <https://doi.org/10.2308/aud.2008.27.2.231>
 12. Houghton, K. A., Jubb, C. and Kend, M. (2011). Materiality in the context of audit: the real expectations gap. *Managerial Auditing Journal*, 26(6), pp. 482-500. <https://doi.org/10.1108/02686901111142549>
 13. International Auditing and Assurance Standards Board (IAASB). (2009). The auditor's responsibilities relating to fraud in an audit of financial statements. International Standard on Auditing 240. New York: IAASB. New York.
 14. Linklater, A. (2010). Neorealism, critical theory and school of reconstruction, ministry of foreign affairs printing and publishing center, 8th edition, Tehran, Iran (In Persian).
 15. Mansouri Nalbandan, M. and Hashemi Gohar, M. (2021). Investigating the relationship between organizational culture in auditing institutions and professional judgment with emphasis on Machiavellianism. Mohsen, Investigating the Relationship between Organizational Culture in Auditing Institutions and Professional Judgment with Emphasis on. <https://dx.doi.org/10.2139/ssrn.3856811>
 16. Mujiono, M. and Jonnardi, J. (2022). The effect of audit fee and Machiavellianism on auditor independence with professional ethics as a moderating variable. *SAR (Soedirman Accounting Review): Journal of Accounting and Business*, 7(1), pp. 13-23. <https://doi.org/10.32424/1.sar.2022.7.1.5836>
 17. Murphy, P. R. (2012). Attitude, Machiavellianism and the rationalization of misreporting. *Accounting, Organizations and Society*, 37(4), pp. 242-259. <https://doi.org/10.1016/j.aos.2012.04.002>
 18. Patton, M. Q. (2014). Qualitative research & evaluation methods: Integrating theory and practice. Sage publications. 3rd ed, New York, United States.
 19. Pesudo, D. A. A., Kurniadi, C. I., Martono, S., Theotama, G. and Matitaputty, J. S. (2023). Factors affecting audit quality of BPKP–Central Java Chapter. *Perspektif Akuntansi*, 6(1), pp. 56-73. <https://doi.org/10.24246/persi.v6i1.p56-73>
 20. Pranyanita, A. I. and Sujana, I. K. (2019). Pengaruh Sifat Machiavellian, time budget pressure,

- loc pada dysfunctional audit behavior, Akuntan Publik Di Bali. *E-Jurnal Akuntansi Universitas Udayana*, 26(2), pp. 1161-1188.
21. Prativi (2021). The investigated the effect of Machiavellian characteristics in moderating the relationship of task complexity as antecedents of ineffective auditor behavior, *International Journal of Business, Economics and Law*, 24(5), pp. 288-302.
 22. Public Company Accounting Oversight Board (PCAOB). (2005). Consideration of fraud in a financial statement audit. American Institute of Certified Public Accountants, America. The U.S.
 23. Putu, I., Rasmini, N., Budiarta, I. and Widanaputra, A. A. G. P. (2020). The mediating effect of auditor dysfunctional behavior on Machiavellian character and time budget pressure of audit quality. *Accounting*, 6(6), pp. 1093-1102. <http://dx.doi.org/10.5267/j.ac.2020.7.009>
 24. Sahla, W. A. and Iryanie, E. (2018). Perception of locus of control, level of education, Machiavellianism and ethical reasoning against auditor behavior in audit conflict situations. *AKRUAL: Jurnal Akuntansi*, 10(1), pp. 15-26. <https://doi.org/10.26740/jaj.v10n1.p15-26>
 25. Saladríguez, R. and Grañó, M. (2014). Audit expectation gap: Fraud detection and other factors. *European Accounting and Management Review*, 1(1) , pp. 120-142. <https://ssrn.com/abstract=2532494>
 26. Saputri, I. G. A. Y. and Wirama, D. G. (2015). Pengaruh sifat machiavellian dan tipe kepribadian pada perilaku disfungsi auditor. *E-Jurnal Ekonomi dan Bisnis Universitas Udayana*, 4(2), pp. 70-86. <https://doi.org/10.1002/per.1912>
 27. Sayal, K. and Singh, G. (2020). Investigating the role of theory of planned behavior and Machiavellianism in earnings management intentions. *Accounting Research Journal*, 33(6), pp. 653-668. <https://doi.org/10.1108/ARJ-08-2019-0153>
 28. Serafeim, G. and Ioannou, I. (2013). The impact of corporate social responsibility on investment recommendations. *Strategic Management*, 36(7), pp. 1053-1081.
 29. Sharpe, B. M., Collison, K. L., Lynam, D. R. and Miller, J. D. (2021). Does Machiavellianism meaningfully differ from psychopathy? It depends. *Behavioral Sciences & the Law*, 39(5), pp. 663-677. <https://doi.org/10.1002/bsl.2538> .
 30. Sikka, P., Puxty, A., Willmott, H. and Cooper, C. (1998). The impossibility of eliminating the expectations gap: some theory and evidence. *Critical Perspectives on Accounting*, 9(3), pp. 299-330. <https://doi.org/10.1006/cpac.1997.0159>
 31. Teddlie, C. and Yu, F. (2007). Mixed methods sampling: A typology with examples. *Journal of Mixed Methods Research*, 1(1), pp. 77-100. <https://doi.org/10.1177/1558689806292430> .
 32. Tricky, G. Jubb, C. and Kend, M.. (2017). Investigate the relationship between Machiavellianism, moral orientation (idealism, relativism), anti-intellectualism, and social bias in Canadian accountants, *European Accounting and Management Review*, 18(12), pp. 135-149.
 33. Wells, J. T. (2001). Why employees commit fraud. *Journal of Accountancy*, 191(2), p. 89.
 34. Wells, J. T. (2004). New approaches to fraud deterrence. *Journal of Accountancy- New York*, 197(2), pp. 72-76.
 35. Wijayanti, R. (2018). Studi determinan perilaku etis mahasiswa akuntansi. *Jurnal Ekonomi Modernisasi*, 14(3), pp. 142-156. <https://doi.org/10.21067/jem.v14i3.2817>
 36. Zettler, I. and Solga, M. (2013). Not enough of a ‘dark traits? Linking Machiavellianism to job performance. *European Journal of Personality*, 27(6), pp. 545-554. <https://doi.org/10.1002/per.1912>