

Investigating the relationship between thinking style functions and auditor objectivity (Case study: Audit institutions)

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Abstract

Research shows that personal and situational conditions influence people's judgments and decisions. People decide the presence of others, which may be different from their decision alone. Relationships between individual characteristics and the environment governing people create a unique situation for people at every moment that cannot be repeated. Therefore, it is possible to examine the auditor's objectivity by knowing the characteristics of people, including thinking styles. Therefore, based on this argument, the present study examines the relationship between the functions of thinking styles and the auditor's objectivity. The statistical population studied in this research includes all audit employees working in audit institutions, members of the official accountants of Iran, and audit organizations in 2022. This questionnaire used Svanberg and Öhman's questionnaire [20] and the variable of thinking styles from Sternberg's research questionnaire [19], including 5 items (legislative thinking, internal thinking, external thinking, liberal thinking, and conservative thinking) to measure the auditor's objectivity. SmartPLS third version software was used for data analysis. The results showed that according to the obtained path coefficients, there is a positive relationship between the auditor's thinking styles and the auditor's objectivity because the value obtained was more significant than 1.96, which indicates the existence of a significant positive relationship between the auditor's thinking styles and the auditor's objectivity. Based on this, the first to fifth research hypotheses are accepted. Finally, based on the results, suggestions were made.

Keywords: thinking style, audit objectivity, legislative thinking, internal thinking, external thinking, liberal thinking, and conservative thinking

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1 Introduction

The optimization of workplace performance is a key focus in the study of thinking styles. Individuals can enhance their performance and achieve better results by employing a specific thinking style that aligns with the given conditions

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and situations. The interaction between thinking style and the unique work environment further amplifies the potential for improved performance in that domain [18]. Variances in thinking styles significantly impact various aspects such as learning conditions, problem-solving, decision-making, communication, team participation, and group work [4]. Moreover, Hasan et al. [8] conducted research highlighting the influence of individual characteristics and tendencies on skepticism, a crucial element in judgment during auditing. This study emphasizes the importance of considering different levels of professional doubt in judgment and decision-making processes. Auditing financial statements holds great significance as it provides investors and creditors with reliable information, thereby creating added economic value for a company. The quality of audit services is greatly influenced by the professional experience of the auditor in the relevant field [15]. Experience plays an undeniable role in enhancing the accuracy of an auditor's judgment. It enhances their ability to process information and devise practical solutions in specific situations. Additionally, knowledge forms the foundation for an auditor's decision-making process, and the combination of experience and structured knowledge leads to effective decision-making methods and information interpretation [22]. Akanji et al. [3] demonstrated that auditors specializing in industry audits exhibit enhanced audit quality for two primary reasons. Their extensive familiarity with accounting and audit issues specific to those industries is acquired through continuous engagement in such audits. Secondly, their motivation to establish and uphold a reputable standing within that particular group of industries. The research conducted by Mahdavian Rad et al. [10] and Nematikoshteli [15] supports the notion that a positive correlation exists between an auditor's specialization in a specific industry and the quality of their audit report. In essence, auditors possessing experience and expertise in the relevant industry are better equipped to identify and address industry-specific challenges, thereby conducting audits of higher quality. Furthermore, as an audit firm accumulates more experience in a particular industry, its inclination towards delivering superior quality audit services increases, driven by the desire to cultivate a positive reputation. Auditors with more excellent experience are adept at identifying errors and providing more plausible explanations for discrepancies in financial reports [5]. A company's management typically prepares accounting information and should undergo an audit conducted by an independent individual not affiliated with the company. This process is crucial to cater to the needs of users and decision-makers at both the micro and macro levels. The individuals responsible for conducting audits must possess a sufficient level of knowledge, education, expertise, and skills in the fields of accounting and auditing. The training of specialized human resources in accounting and auditing necessitates the establishment of an effective and efficient educational framework within this domain. The development of the accounting education system in any given country should be tailored to meet the specific local requirements of that country. These individuals must possess the necessary education and experience given the auditors' crucial role. Furthermore, the level of education auditors can impact their dedication and professional judgment. Auditors with higher levels of education tend to possess a more incredible wealth of knowledge and information. At a minimum, auditors should have a university education in accounting and related fields to meet the required knowledge standards. Auditors often encounter numerous challenges and disagreements with accountants and company managers throughout the audit process. Auditors need to make sound decisions by thoroughly analyzing these issues. In this regard, the education of auditors enhances their ability to analyze and resolve problems while equipping them with the necessary skills to manage audit operations and time effectively [5]. Knowledge and education enhance auditors' comprehension, enabling them to identify and understand non-compliance, disagreement, or ambiguity about a company's activities. Moreover, the level of knowledge and education significantly influences the independence of auditors' judgments [16].

Auditors' judgment and decision-making abilities can be affected by their thinking styles. To date, there has been no investigation into how thinking styles can impact the objectivity of audits. However, given the significance of the auditor's integrity in delivering accurate audit findings and results, conducting such research holds great importance.

2 Theoretical foundations

2.1 Thinking style's function

1. Legislative thinking style

Individuals with a legislative thinking style are strongly inclined towards asserting their preferences and making autonomous decisions regarding their actions. They are inclined towards formulating laws and addressing issues that have not been planned or organized. The legislative thinking style encompasses activities such as introducing innovative articles, conceptualizing new projects, developing advanced educational and career programs, and inventing novel creations [21]. This thinking style primarily emphasizes creativity, and individuals with a legislative mindset gravitate towards occupations that allow them to express and fulfill their legislative tendencies. Such works include creative writers, scientists, artists, sculptors, bank investors, politicians, architects, fashion designers, poets, and mathematicians [21].

2. Internal thinking style

These individuals are responsible for handling internal matters. They tend towards introspection, dutifulness, and withdrawal from social interactions. At times, they may lack awareness of social norms. They prefer working independently, relying on their intelligence, and distancing themselves from others to assert their superiority [14].

3. External thinking style

These individuals are characterized by their strong sense of social sensitivity and their ability to empathize with others. They actively engage in collaborative work and value the opportunity to interact and cooperate with their peers [12].

4. Liberal thinking style

These individuals possess a penchant for transcending established regulations and strategies, actively pursuing radical transformations, and embracing intricate and uncertain circumstances. It is worth noting that their inclination towards such thinking does not necessarily align with political libertarianism. It is crucial to acknowledge that thinking styles diverge significantly from political orientations [12].

5. Conservative thinking style

Conservative individuals are loyal to existing laws and programs and seek minimal change. As much as possible, they avoid dealing with unknown situations and tend to familiar situations in their work and life. Such people are satisfied with an organized and predictable environment; when such a structure does not exist, they try to create it [9].

2.2 Auditor objectivity

Like other professions providing professional services to society, the audit profession relies on objectivity to ensure survival. Objectivity has always been a concern for auditors, and its importance continues to grow in the face of changing business environments [2].

It is crucial to understand that independence and objectivity are distinct concepts, although they are often interchangeable. While a person can be independent, they may not possess objectivity, and vice versa. Therefore, it is essential to differentiate between the two and recognize how threats and safeguards impact them. Assessing and ensuring independence is relatively easier than objectivity [2]. The Audit Procedures Board, established in April 2002, plays a significant role in defining and distinguishing objectivity and independence. This board, a part of the Financial Reporting Council, took over from a similar board that had been in operation since 1991. Its responsibilities include the development of audit procedures in England and Ireland. In the following sections, we will introduce this board and summarize the key points discussed in its ethical standard, which defines objectivity independence and examines the factors that threaten objectivity [11].

2.3 Establishment of audit standards

1. Meeting the evolving needs of users of financial statements
2. Gaining public trust in audit procedures
3. Publish guidelines for applying audit standards in specific conditions and industries and timely guidelines for new events.
4. Publication of standards and related guidelines for professional service accountants
5. Publication of professional code of conduct standards in connection with the independence and objectivity of the independent auditor
6. Application of appropriate laws about the development of accounting regulations and standards that affect the implementation of audit and insurance services (both nationally and internationally).

2.4 Literature review

In their research, Moore et al. [13] examined the relationship between thinking styles and emotional intelligence. The literature review findings indicate that thinking styles can be conceptualized as right-brained, left-brained, or whole-brained and can be measured using sub-scales of the MBTI. The results also showed that although emotional intelligence has been measured in various ways in the existing literature, key management processes and awareness correlate strongly with thinking styles. Based on the literature review, several specific hypotheses about the pattern of relationships between thinking styles and emotional intelligence concepts were tested. The analytical findings demonstrated that left- and right-brain thinking styles are significantly associated with expected conceptual directions of emotional intelligence variables.

Abdi [1] examined the association between students' thinking styles and critical thinking abilities. The study utilized a sample of 207 students selected through a multi-stage cluster sampling method. The findings revealed a statistically significant relationship between thinking styles and critical thinking skills, with a significance level of 0.95. This suggests that students' thinking styles can serve as predictors of their critical thinking abilities. Furthermore, a positive and significant correlation was observed between executive thinking style and overall critical thinking skills scores. However, no significant relationship between executive thinking style and critical thinking skills evaluation and analysis components was found. On the other hand, a significant correlation was observed between judicial thinking style and all dimensions of critical thinking. Additionally, the results indicated a significant correlation between legislative thinking style and the total critical thinking skills scores. Nevertheless, no significant relationship was found between legislative thinking style and the evaluation component of critical thinking skills.

Rezaei et al. [17] conducted a study to examine the impact of auditors' thinking styles on their ability to detect asset misappropriation, with the mediating role of professional skepticism, using a sample of 384 individuals. The findings indicate that thinking style functions (legislative, judicial, and executive styles) directly affect the ability to detect asset misappropriation. However, the intensity of the impact of executive thinking style (simple information processing) is weaker compared to judicial and legislative thinking styles (complex information processing). Furthermore, the positive impact of judicial and executive thinking styles on the ability to detect asset misappropriation is significant when mediated by professional skepticism. However, the positive impact of legislative thinking style on the ability to detect asset misappropriation is not significant when mediated by professional skepticism. The study demonstrates that professional skepticism among auditors enhances their detection ability. The findings of this study can contribute to improving the training of auditors in universities, developing better audit standards, and enhancing the implementation of audit work and fraud detection by auditors.

In his research, Garavand [7] modeled the mediating role of thinking styles function in the causal relationship of perception of parenting styles and motivational orientations on a sample consisting of 352 undergraduate students of Ferdowsi University of Mashhad and addressed parenting styles questionnaires. The results showed that authoritative and permissive styles positively and negatively affect intrinsic motivation. Still, the authoritarian parenting style did not directly affect intrinsic motivation. Also, parenting styles did not directly affect extrinsic motivation, but only authoritarian parenting style positively affected demotivation among parenting styles. Also, among the thinking style's functions, only the executive thinking style positively and significantly affected internal and external motivation. The indirect results of paths showed that only an authoritative parenting style with the mediation of the executive thinking style could increase students' internal and external academic motivation. Therefore, it can be concluded that the tendency of families towards authoritative parenting style affects children's choice of thinking style and internalization of academic motivation.

Therefore, based on the proposed principles, the following assumptions are considered:

1. First hypothesis: legislative thinking style affects auditor objectivity.
2. Sixth hypothesis: internal thinking style affects auditor objectivity.
3. Seventh hypothesis: external thinking style affects auditor objectivity.
4. The eighth hypothesis: liberal thinking style affects auditor objectivity.
5. Ninth hypothesis: conservative thinking style affects auditor objectivity.

3 Research methodology

The present study is categorized as applied research in terms of its purpose and the data collection method. Specifically, it is a retrospective quasi-experimental study conducted within the field of accounting evidence research. The data analysis method can be classified as cross-sectional correlational research since it examines data related to a specific period. A combination of library research and fieldwork will be employed to collect the necessary data, utilizing a questionnaire as the primary tool. In addition, data about the variable of auditor objectivity will be gathered by distributing questionnaires to auditors working in audit organizations and audit institutions affiliated with the Certified Public Accountants Society of Iran, serving as a representative sample. The questionnaire used in this study incorporates Svanberg and Öhman's questionnaire [20] and includes the thinking styles variable from Sternberg's research questionnaire [19]. This variable encompasses four dimensions: legislative thinking, internal thinking style, external thinking, and liberal and conservative thinking. These dimensions are utilized to measure auditor objectivity. Various measures were taken to ensure the reliability and validity of the questionnaire. Cronbach's alpha and composite reliability were calculated to assess the questionnaire's internal consistency. Additionally, content validity and face validity were evaluated by experts and standard questionnaires. Construct validity was established through

confirmatory factor analysis, convergent validity, and discriminant validity. Finally, due to the large sample size, the third version of SmartPLS software was employed for data analysis. The socio-statistics examined in this research encompass all employees involved in auditing within audit institutions and members of Iran's official accountants and audit organizations in the year 2022. Consequently, based on the number of items (questions) in the questionnaire utilized in this study, a minimum of 330 samples were required. To achieve this, 500 questionnaires were randomly distributed among the auditors within the statistical community. Out of the 475 returned questionnaires, 455 were deemed usable and subsequently analyzed.

3.1 General structural equation modeling

The structural equation model is a novel statistical technique and a highly influential approach in multivariate analysis. Its primary application lies in the realm of multivariate subjects. Multivariate analysis encompasses a range of analytical methods characterized by the simultaneous examination of multiple independent variables alongside multiple dependent variables. Structural equations belonging to the multivariate regression family enable researchers to test a set of regression equations simultaneously.

$$n_t = \beta_1 + \beta_2 m_t + \beta_3 g_t + \varepsilon_{1t}. \quad (3.1)$$

The model should be named according to the number of parameters of the model, and the parameters should be entered into the model (Eqs. (3.2)–(3.7)):

$$n_t = \beta_{11} + \beta_{12} m_t + \beta_{13} p_t + \varepsilon_{2t} \quad (3.2)$$

$$n_t = \frac{\{(\beta_1 \beta_{13} - \beta_{11} \beta_3) + \beta_{13} \beta_2 g_t - \beta_3 \beta_{12} m_t - \beta_3 \beta_{14} n_{t-1} + (\beta_{13} \varepsilon_{1t} - \beta_3 \varepsilon_{2t})\}}{\beta_{13} - \beta_3} \quad (3.3)$$

$$p_t = \frac{\{(\beta_1 - \beta_{11}) + \beta_2 g_t - \beta_{12} \beta_{12} m_t - \beta_{14} n_{t-1} + (\varepsilon_{1t} - \varepsilon_{2t})\}}{\beta_{13} - \beta_3} \quad (3.4)$$

$$\begin{aligned} erf(x) &= \frac{2}{\sqrt{\pi}} \int_0^x e^{-t^2} dt. \\ n &= \max(n_1, n_2) \end{aligned} \quad (3.5)$$

where:

$$\begin{aligned} n_1 &= \left\lceil 50 \left(\frac{j}{k}\right)^2 - 450 \left(\frac{j}{k}\right) + 1100 \right\rceil \\ n_2 &= \left\lceil \frac{2}{2H} \left(A \left(\frac{\pi}{6} - B + D\right) + H + \sqrt{\left(A \left(\frac{\pi}{6} - B + D\right) + H \right)^2 + 4AH \left(\frac{\pi}{6} + \sqrt{A} + 2B - C - 2D\right)} \right) \right\rceil \end{aligned} \quad (3.6)$$

where:

$$\begin{aligned} A &= 1 - \rho^2 \\ B &= \arcsin\left(\frac{\rho}{2}\right) \\ C &= \arcsin(\rho) \\ D &= \left(\frac{\delta}{z_1 - \alpha/2 - z_1 - \beta} \right)^2 \end{aligned}$$

where j is the number of observed variables, k is the number of latent variables, ρ is the estimated Gini correlation for a normal random vector of variables, δ is the predicted effect size, α is the corrected type I error rate, β is the type II error rate, and z is a standard score.

$$F(x; \mu, \sigma^2) = \frac{1}{2} \left[1 + erf\left(\frac{x - \mu}{\sigma\sqrt{2}}\right) \right], \quad (3.7)$$

where μ is the mean, σ is the standard deviation, and erf is the error function. Now, the same steps can be done using the software.

3.2 The Goodness-of-fit tests

As their name suggests, goodness-of-fit tests determine whether a particular distribution is well-fitted. Calculating goodness-of-fit statistics also helps to rank the fitted distributions according to how well they fit the data.

- The first index- RMESA

$$RMESA = \frac{\sqrt{(\chi^2 - df)}}{\sqrt{[df(N - 1)]}} \quad (3.8)$$

- The second index- GFI

$$GFI = 1 - \frac{F(S, \sum(\theta))}{F(S, \sum(\cdot))} \quad (3.9)$$

- The third index – AGFI

$$AGFI = 1 - \frac{k(k + 1)}{2d}(1 - GFI) \quad (3.10)$$

3.3 The conceptual model of the present study and how to measure research variables

Based on the theoretical underpinnings of the study, the conceptual model for the present research is illustrated in Figure 1, employing the structural equation modeling approach. They are depicted in Figure 1, considering the research's theoretical underpinnings. This model has been constructed using the structural equations approach, which provides a systematic framework for measuring and analyzing research variables.

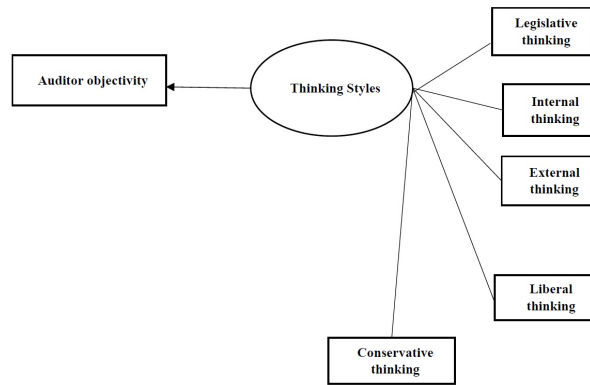


Figure 1: Conceptual model of the research

3.4 Independent variable: thinking styles

The current study focuses on thinking styles as the independent variable. The researchers utilized the Sternberg questionnaire [19] to measure these thinking styles. This questionnaire consists of 5 test items, namely legislative thinking, internal thinking, external thinking, liberal thinking, and conservative thinking. Each test item comprises 4 questions and serves as a measure of a specific thinking style. The questionnaire includes 20 questions, and participants must provide their responses on a 7-point Likert scale. The scale ranged from 1, indicating the lowest level of a thinking style, to 7, representing the highest level of a thinking style.

3.5 Dependent variable: auditor objectivity

To assess objectivity, concise scenarios were formulated, and participants were instructed to contemplate them to the primary employer of the organization. The focus lies on instances where the auditor and the employer hold conflicting views. Participants are then requested to express the likelihood of relinquishing their stance and embracing the employer's perspective using a 7-point Likert scale. A greater number of options on the scale signifies an increased probability of the auditor succumbing to the employer's request and disregarding their judgment. Conversely, a limited number of options indicates a higher level of objectivity on the auditor's part.

4 Research findings

1. Descriptive Statistics

Table 1 presents the statistical summary of the variables under investigation, encompassing various central tendency and dispersion measures.

Table 1: Descriptive statistics related to research variables

Variable	Mean	Median	Maximum	Minimum	Standard deviation
Legislative thinking style	2.986	2.948	5.000	1.000	0.816
Internal thinking style	3.021	2.541	5.000	1.000	0.671
External thinking style	3.106	2.706	5.000	1.000	0.812
Liberal thinking style	3.511	2.953	5.000	1.000	0.953
Conservative thinking style	3.174	2.415	5.000	1.000	0.779
Auditor objectivity	3.566	2.206	5.000	1.000	0.506

Table 1 shows the descriptive statistics of research variables, which include some central tendencies. The results show that the average score of legislative thinking style in the studied sample group was lower than the test average. This means that the level of legislative thinking style is high.

2. Data analysis

Before analyzing the data as a research model, it is imperative to address the assessment of the research questionnaire. As indicated in the research methodology section, the reliability assessment of the questionnaire was conducted by calculating both Cronbach's alpha coefficient and the composite reliability index. To establish the reliability of the questionnaire, it is necessary for both Cronbach's alpha coefficient and the composite reliability index to exceed 0.7. Experts and convergent validity (AVE) were utilized to evaluate the questionnaire's validity. The desirable criterion value (AVE) for confirming the validity of the measurements is greater than 0.5. The outcomes of these assessments are presented in Table 2. Based on the recorded values, the validity and reliability of the data collection instrument have been confirmed.

Table 2: Cronbach's alpha coefficient, composite reliability, convergent validity

Variable	Cronbach's alpha coefficients	Composite reliability (CR)	Convergent validity (AVE)
Legislative thinking style	0.81	0.920	0.741
Internal thinking style	0.78	0.884	0.690
External thinking style	0.72	0.851	0.852
Liberal thinking style	0.852	0.947	0.578
Conservative thinking style	0.79	0.910	0.661
Auditor objectivity	0.88	0.846	0.752

Furthermore, when examining the divergent validity of constructs, the Fornell-Larcker theory [6] suggests comparing the root square of Average Variance Extracted (AVE) for each construct with the correlation coefficient between constructs and assessing convergent validity. In Table 3, bold numbers in the main diagonal denote the square root of the Average Variance Extracted. Suppose the values in the main diagonal for each latent variable exceed the correlation with other reflective latent variables in the model. In that case, it confirms the presence of divergent validity at the construct level. The results from the Fornell-Larcker test conducted using SmartPLS software confirm the existence of divergent validity.

Table 3: Divergent validity assessment matrix

Variable	Thinking styles	Auditor objectivity
Thinking styles	0.7641	
Auditor objectivity	0.4215	0.7228

Confirmatory factor analysis was employed to assess the validity of the research tool and identify the constituent factors of each observable variable. The validity of the research tool was also confirmed after removing items with low factor loading based on the software output.

3. Model fit

One of the fit criteria is the Goodness-of-Fit (GOF). This criterion was proposed by Tenenhaus et al. [23], which is used to measure the overall performance of the model. Wetzels et al. [24] have introduced three values of 0.01, 0.25, and 0.36 as weak, medium, and strong for this criterion. The test results of this criterion are presented in Table 4.

According to the results in Table 4, the obtained value for the GOF criterion is 0.425, indicating an acceptable fit of the research model.

Table 4: Goodness-of-Fit criterion

Variables	The coefficient of determination (R^2)	Community shared value	GOF
Thinking styles	0.312	0.602	0.441
Auditor objectivity	0.176	0.425	0.409
Mean	0.244	0.513	0.425

4. Checking the measurement model

A measurement model refers to a model that considers and measures the relationships between variables. Three criteria are utilized to assess the suitability of measurement models: reliability, convergent validity, and divergent validity. The diagram below displays the number of factor loadings and t coefficients between all questions. The criterion value for determining the appropriateness of factor loading coefficients is set at 0.4, while t coefficients are expected to be greater than 1.96. The diagram indicates that all questions' factor load and t-coefficient values exceed the thresholds of 0.4 and 1.96. Consequently, there is no need to modify the questionnaire or the model.

Table 5: Results of factor loading and t coefficient of variables

Variables	Factor loading	T-coefficient
Legislative thinking style	0.560	12.14
Internal thinking style	0.771	9.12
External thinking style	0.569	21.69
Liberal thinking style	0.775	10.25
Conservative thinking style	0.6012	21.58
Holism	0.883	9.333
All-round	0.950	10.208
Documentation	0.887	8.314

5. Testing hypotheses

To test the hypotheses, it is necessary to assess both the path coefficients and the significance of these coefficients. The confirmation of hypotheses relies on the significant values of the path coefficients, which should exceed 1.96. The research model is presented in two formats, path coefficients and significance, as depicted in Figures 2 and 3.

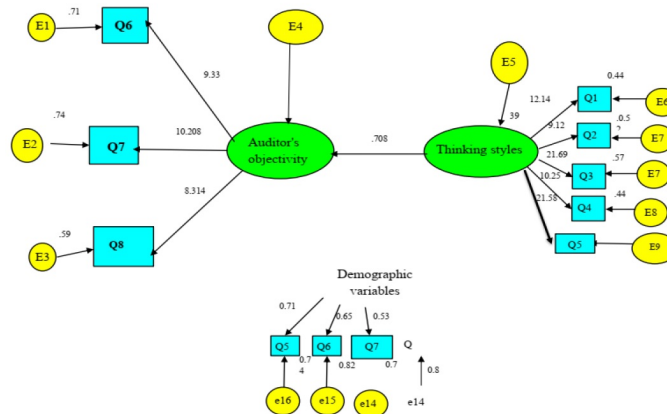


Figure 2: Research model in path coefficients mode

Table 6: A summary of the results of the model analysis and research hypotheses

Path	Symbol	Path coefficient	T-statistics	The result of the hypothesis test
Legislative thinking style → Auditor objectivity	LTS → AO	0.56	12.14	Accepted
Internal thinking style → Auditor objectivity	ITS → AO	0.771	9.12	Accepted
External thinking style → Auditor objectivity	EXTS → AO	0.569	21.69	Accepted
Liberal thinking style → Auditor objectivity	FTS → AO	0.775	10.25	Accepted
Conservative thinking style → Auditor objectivity	CTS → AO	0.6012	21.58	Accepted

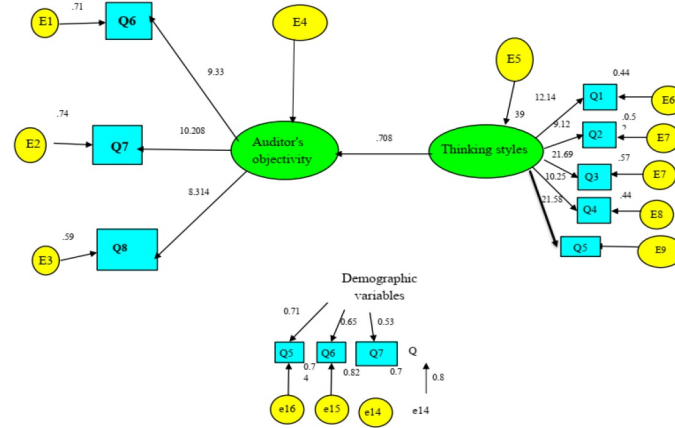


Figure 3: Research model in significance mode

According to the findings presented in Table 6, it is evident that a positive relationship exists between auditor thinking styles and auditor objectivity. This conclusion is drawn from the obtained value surpassing the threshold of 1.96, signifying a statistically significant positive relationship between these two variables. Consequently, the first to fifth research hypotheses are accepted.

5 Conclusion

The audit profession shares similarities with the judicial system, as both involve examining claims and evaluating supporting evidence to make informed decisions. The reliability of audit reports is enhanced when auditors base their judgments on professional principles and standards, free from any bias or prejudice.

This study aims to explore the influence of thinking styles on auditor objectivity. The research comprehensively examines various aspects of thinking styles and their impact on auditor objectivity. The findings reveal that all dimensions of thinking styles affect auditor objectivity. These results align with Sternberg's mental self-management theory, which suggests that individuals utilize different approaches to harness their abilities, similar to how societies are managed in diverse ways.

Individuals with a legislative thinking style (creative) tend to make decisions independently. Those with an executive thinking style prefer adhering to rules and regulations and seeking guidance from others. Individuals with an internal thinking style enjoy tasks they can accomplish autonomously, while those with an external thinking style thrive in assignments involving interaction with others. Individuals with a liberal thinking style are inclined towards novel and ambiguous tasks, whereas those with a conservative style prefer following established rules and methods. Overall, individuals' thinking styles significantly influence auditor objectivity.

This research agrees with the studies conducted by Moore et al. [13], Rezaei et al. [17], and Garavand [7], further supporting the findings presented here.

5.1 Research suggestions

1. Practical suggestions

- The results suggest that accounting and audit education and the audit profession should consider thinking styles and learning.
- Policymakers in education are advised to enhance auditors' objectivity in decision-making by incorporating the necessary thinking styles required in audits.
- The findings of this research regarding the correlation between thinking styles and auditor objectivity can provide valuable insights for the development of accounting and audit regulations and standards, as well as the training of auditors for legislators, institutions, and audit organizations.
- By evaluating and recognizing the thinking styles and documenting methods of job applicants, organizations and audit institutions can recruit auditors with diverse styles, thereby enhancing efficiency, improving judgment and decision-making, increasing objectivity, and elevating the quality of audits. Ultimately, this will enhance the reputation of auditors among users of audit services.

- (e) Given the inherent susceptibility of social life to individual conflicts, managing conflicts in personal life is crucial despite the availability of various resources. Therefore, it is recommended that in such situations, maintaining a logical approach in relationships and avoiding emotional encounters, even in complex situations, can facilitate better resolution of interpersonal conflicts.
- (f) Conflict management skills, particularly for managers, are vital at the organizational level. Incorporating exercises that promote logical thinking, problem-solving, and systematic thinking in human resource development and training programs can increase the likelihood of employees relying on logical thinking methods in decision-making.
- (g) More than relying on accumulated experiences in conflict management cases is required. A logical examination of the conditions and rational decision-making will undoubtedly lead to more reliable decision-making.

2. Future research suggestions

To enhance the quality and elevate the theoretical level of research in the realm of individuals' thinking styles and personality traits, researchers have proposed several areas for investigation based on the relevant theoretical foundations. These areas include:

- (a) Developing a comprehensive model to assess the impact of thinking styles on the individual attitudes of independent auditors.
- (b) Exploring the influence of auditor objectivity on auditors' judgment and decision-making processes.
- (c) Constructing a model that links auditors' thinking styles with their decision-making styles in the context of audit judgments.
- (d) Investigating the impact of auditors' thinking styles on the charisma exhibited by entrepreneurs in their management practices.

3. Limitations of the study

- (a) Besides thinking style, auditor objectivity is influenced by various other factors which should be considered.
- (b) The findings of this study, which was conducted on a small community in Tehran, may require further examination and investigation to ensure their applicability to other communities.

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