

Auditors' Wise Tactfulness in Professional Judgments by Total Interpretive Structural Modeling (TISM)

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Abstract

Since the auditing profession is a process engaged in judgment activities, knowing the reasoning concepts to achieve a level of rationale in audit judgment is the theoretical and fundamental concept in this profession. In this regard, tactfulness is one of the decision-making components in an auditor's judgment that assigns a level of reasoning for making an intellectual decision and promotes the level of judgment quality in auditing. Accordingly, the purpose of this research is Auditors' Wise Tactfulness in Professional Judgments by Total Interpretive Structural Modeling (TISM). The mixed-methods approach was used for the research in which, in the qualitative part, two experts population as panel members, and, in the quantitative part, 30 independent auditors as the statistical population participated. In the qualitative part, the meta-analysis approach was used to identify the themes related to wise tactfulness in professional judgment, and then, the basic themes selected were examined based on two criteria, concordance coefficient and average, in three rounds reciprocally until theoretical saturation was met. At this point, 14 themes were accepted among 20 basic themes. In the quantitative part, the themes accepted were coded first and then were distributed among the respective population, based on a matrix questionnaire, to identify the most

effective trait of auditor's wise tactfulness in professional judgment using the Total Interpretive Structural Modeling approach. According to the results, the theme adherence to the principles of professional ethics as a basic theme of professional thinking was selected as the most influential trait of wise tactfulness.

Keywords: Wise tactfulness, Professional judgment, Total Interpretive Structural Modeling

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Introduction

Looking for wisdom has a history, almost as old as human life, built by the efforts of philosophers and thinkers in various science areas such as philosophy, social sciences, management, and psychology, and recently, it has entered into the auditing profession because of its importance in decision-making (Paranoan et al., 2018). Although this area is developing, wisdom is a far-reaching human quality that hardly is conceptualized and operative because it is very difficult and lasting to recognize the dimensions of wisdom in an individual's decision due to its internal complexity (Sternberg, 2004). On the other hand, tactfulness in decision-making is a kind of insight and philosophical and social cognition about the issue under consideration that may bring responsibility for the individual. The integration of tactfulness and wisdom is a kind of individual's (auditor's) internal perception in decision-making, facilitating the individual to achieve cognition in making a decision accepted by intuitive feeling to be the best option (Windhorst, 2011). Decision-making in auditing is a kind of reasoning before a judgment causing the auditor's judgment to be shaped based on the auditor's internal and external approaches. Indeed, judgment and decision-making are the basic elements of auditing that paying attention to their unknown content dimensions can help to develop the science in this area (MashayekhiFard et al., 2019). In other words, decision-making and consequently professional judgment, which is the vital and important part of all auditing processes, as well as identifying the traits such as wise tactfulness, which is based on auditor's philosophical insight, can help to improve the quality of financial statements review by auditors. Consequently, the level of transparency in beneficiaries' decisions is increased. Wise tactfulness is a kind of maturity in decision-making based on thought and

internal characteristics of auditing, which in the idiomatic sense is called more elaborate decision-making (Valiyan et al., 2019). In this regard, Small (2004) argued that in today's atmosphere that lacks transparency, the need for wise tactfulness in decision-making is felt to understand the nature of wisdom and knowledge completely to review financial statements by auditors. Indeed, wisdom is a multifaceted concept originating from cognition, act, and human emotions and combines subjectivity with objectivity (Valentine and Godkin, 2019). Wise tactfulness exhibits itself through turning interests, values, beliefs, and judgments into content to realize the goals. From another perspective, wisdom exploits the individual's strengths in the scope of judgment and selection through subjective frameworks and enriches decision-making (Rooney et al., 2013). In recent years, researchers tend to conduct empirical researches on the role of wise tactfulness in decision-making in the areas of human sciences such as decision-makers internal and external approaches, and they argue that wise tactfulness helps auditors correctly judge when making decisions. Despite the recent emphasis on the vital role of wisdom in decision-making, existing studies in the area of wisdom and intuition in auditing scope do not provide analysts and theorists of auditing with sufficient and appropriate information concerning making proper decisions in this profession due to neglecting the importance of wisdom in decision-making. Nevertheless, the theoretical perception of the concept of wise tactfulness in auditor's decision-making can be considered as a pivot in judgmental contexts of auditors (Csikszentmihalyi and Rathunde, 1990). While there is increasing attention to the theory of wisdom in various fields, integrating wisdom into professional methods such as auditing, especially in their decision-making and professional assertions about financial statements, is yet vague. This gap is expanded regarding the lack of an empirical and explicit understanding of the relationship between wisdom and auditors' decision-making (Mollanazari and Esmailikia, 2014). Therefore, this research aims to conceptualize wise tactfulness in auditor's professional behaviors along with auditing standards to make the best decision for audit judgment. First, it is tried to identify the research components and indicators based on the meta-synthesis method through a content analysis of relevant researches and studies. Then, the most important dimensions of an auditor's wise tactfulness in professional judgment are prioritized using Total Interpretive Structural Modeling. Regarding the discussions above, this research aims to identify and prioritize the factors of auditor's wise tactfulness in professional judgment. Accordingly, in Section 2, along with theoretical foundations, the motivation for conducting the research is explained, and conceptual expansion of the research with applied and researched arguments are stated. In Section 3, the methodology, participants,

and data collection and research validation tools are described to provide a more coherent path of research contents. In Section 4, the research model is presented using Total Interpretive Structural Modeling through matrix questionnaires. Finally, discussions on the results, along with recommendations, are provided in Section 5.

Research Background

Wisdom in contents of the auditing profession

From the classic perspective, wisdom is a feature that examines the correctness of judgments in critical conditions (Melé, 2010) related to itself or other ones. Wisdom, which is associated with correct judgment and the use of knowledge in life, is conceptualized in two ways:

- ≠ Sophia (Pure or theoretical wisdom)
- ≠ Phronesis (Prudence or practical wisdom)

While theoretical wisdom addresses internal truth, practical wisdom deals with behaviors and considers the right behavior in a specified condition and time. In other words, theoretical wisdom investigates that what is the true work to do, while practical wisdom entails an ability to do the work. The origin of the concept of wisdom has attracted the attention of many researchers in various fields in recent academic studies. First, in the field of philosophy, and then in Psychology, leadership, organizational studies, management, auditing, and other scopes, researchers pursue the conceptualization and content of the word wisdom. In the area of auditing, the concept of wisdom and wise decision-making based on individual capabilities have been discussed in recent years, and this issue mostly has been originated from the perspective of auditors' judgments in financial statements review (Baltes and Smith, 1990). Note that wisdom in auditors' decision-making is defined as the integration of cognitive and reflective features, and it is not considered a public characteristic and is not necessarily based on an individual's skill and technical and expert knowledge. In other words, Bergsma and Ardelt (2012) stated that wisdom is specific to wise and aware individuals, and it should not be considered as an individual feature. On the other hand, auditing research on the role of wisdom in auditors' decision-making concerning financial statements have shown a tendency to critic the Berlin school that says wisdom is not always stable, and a person may, sometimes, make a decision out of wisdom. Therefore, it is implied that individuals may not behave wisely in all situations (Richardson and Pasupathy, 2005; Sternberg, 2004). Sternberg's balance theory shows that wisdom in auditors' decision-making is the use of intelligence and experience

based on values to realize a win-win relationship through building a balance among auditor's intrapersonal, interpersonal, and extrapersonal interests in the short and long term to create a balance among adaptation of the existing environment, shaping the existing environment, or choosing a new environment. In other words, balance theory regards wisdom as individuals' consistency with different situations.

Wise tactfulness in judgment

Rational thinking, which is the basis of individuals' advancement, is a background for the presence of wise tactfulness to achieve maturity in decision-making. In other words, an individual chooses a kind of thinking for his/her professional challenges through wise tactfulness based on step-by-step and intellectual processes (Dunn, 2005). Indeed, wise tactfulness is an effective factor in an auditor's subjective inferences to make a more useful and relevant to realities. Radcliffe (1998) introduced wise tactfulness as a subjective philosophy and defined it based on a step-by-step process to achieve a desired level of decision-making and thought. On the other hand, Lenz (2008), in line with wise tactfulness, discussed rationality in decision-making and audit judgment and defined auditors' tactful attitude with features such as comprehensiveness, scrutiny, and flexible attitude toward the auditing profession. Accordingly, an auditor, who benefits from rational tactfulness, always tries to adopt a comprehensive and generalizable thought based on which he/she analyzes the issues and challenges of the auditing profession concerning multidimensional contexts to reach a comprehensive interest. Besides, he/she selects a more path beyond his/her subjective assumptions and clichés without prejudice by questioning the trivial issues in the auditing profession (Lam and Mensah, 2016). On the other hand, the auditor's wise tactfulness causes the individual to investigate the cases of a decision based on thought approaches such as theosophy and intuition through contemplation in auditing challenges and flexible attitude to use more behavioral and professional coherence in their judgment. Indeed, wise tactfulness cause auditors to, besides paying attention to making a satisfactory decision through a gradual process, try to achieve the best decision for judgment based on rational decision-making principles step-by-step. This is because decision-making refers to a set of mental activities occurring when making a decision about creating or selecting among various solutions (Schraagen et al., 2008), and it can be wise (intellectual) or gradual (satisfactory), depending on the individual's approach (Ejabi et al., 2012). Therefore, presently, one of the intricacies of accounting and auditing needing attention is to consider the criteria of decision-making by auditors, which has not been addressed in any

standard document. Decision-making is an activity included in all auditing processes, and the necessity of attention to features such as professionalism leads to an increase in the expected quality of auditors' judgments. From the perspective of behavioral theories of auditing, the auditor is a special individual with technical knowledge in a special environment, time, and place and different from all his/her previous reviews. In these situations, the auditor should focus on special and behavioral scopes with a macro perspective and try to maintain its communications with clients from the business viewpoints (Lynch et al., 2009). It is believed in professional decision-making or judgments that auditors can make realistic statements based on ethical behaviors to increase transparency using their technical knowledge experience (Zsombok, 1997). While traditional theories believed that, according to wise approaches and based on normative models, optimal decisions should be made based on step-by-step decision-making principles, behavioral and cognitive approaches believed in the impact of complex environments in decision-making processes and built the decision based on auditors' internal powers such as intuition. Indeed, decision-making changes its direction from a step-by-step process to judgmental processes that are based on auditors' perceptions, and focus more on practical aspects of decision-making. Decision-making always faces concepts such as pragmatism (Windhorst, 2011). Indeed, "pragmatic," "practical," "problem-solving," and "responding to an environment" are similar concepts that can be considered in the conceptualization of the expression "wise decision-making" in the auditing profession. Lam and Mensah (2016) stated that when one says an auditor takes a decision, three concepts occur in our mind:

1. He/she has started a set of actions in line with doing the work.
2. He/she has prepared its mind for doing a special task free from the previous frameworks.
3. He/she presented an opinion or viewpoint concerning the point that, in a special condition, an individual should take action after proposing alternative solutions.

Therefore, understanding the decisions of an auditor in reviewing financial statements based on a conceptualization of wisdom can help mental concepts to be more in line with the practical realities of the companies because decision-making has received little attention in the auditing context.

Methodology

In recent years, with an increase in the number of researches in various fields of sciences and the emergence of information explosion to the scientific

community, there is a rapid growth in the use of mixed researches in which the essence of researches published on a special issue is extracted systematically and scientifically (Azkia and Tavakkoli, 2016). One of the approaches developed to investigate, combine, and conceptualize scientific content is the meta-analysis approach. This approach is one of the dimensions of the meta-study approach that analyzes the findings of relevant previous researches (Stirling, 2001). The present study, which is mixed research, uses the meta-analysis approach in the qualitative part. The meta-analysis includes steps to find the components and factors. Maybe, the most important steps in this approach are the seven steps of Sandelowski and Barroso (2008) that consist of several stages from recognizing the problem origin through formulating the research question to providing a clear model based on the identification of components and factors using the previous researches (Andrel et al., 2009). Then, in the quantitative part, the most influential factors are identified using Total Interpretive Structural Modeling and presented by a hierarchical model. Accordingly, the research approach used in this research is inductive-deductive regarding the data collection process. In short, first, the factors related to auditor's wise tactfulness in professional judgment are identified by investigating the theoretical foundations based on the meta-analysis approach, and then, the factors are accepted or rejected using the Delphi method based on two criteria, namely, average and concordance coefficient. Finally, in the quantitative part, the levels identified are prioritized in the form of a model and explained in terms of driving power and influence power in the auditing profession.

Research questions

The research is centered on the following questions:

In the qualitative part: What are the factors of an auditor's wise tactfulness in professional judgment?

In the quantitative part: What is the most influential factor of an auditor's wise tactfulness in professional judgment?

Statistical population

Regarding the type of research, participants are divided into two groups in qualitative and quantitative parts. In the qualitative part, the population consists of relevant researches and 16 experts in the accounting field that contribute to the analysis and identification of components and factors. In other words, these participants cooperated in two parts of meta-analysis and Delphi analysis. These participants, as the members of the panel group, were selected through homogeneous sampling in which the researcher, aiming at acquiring a deep, centralized and elaborated knowledge, chooses the members among those who

experience the phenomenon and may provide the researcher with valuable information (Sadeghi Fasaei and Nasser Rad, 2012). In the quantitative part, the population consisted of 30 independent auditors. Regarding the requirements of Total Interpretive Structural Modeling, the size of the statistical population is acceptable and, it is expected that the population help to explain the results of the qualitative part in the auditing profession. Since Total Interpretive Structural Modeling is an analysis based on a resolution of complex systems at a specified level that is required to be conducted based on a specified criterion such as experience or expert knowledge by participants, cross-matrix questionnaires were used with 15 to 30 participants to avoid from the accumulation of insensible responses. Singh and Kant (2011), Malone (2014), Ramesh et al. (2010), Attri et al. (2013) introduced the range 15 to 30 for the desired size of the sample and suggested Convenience Sampling regarding the filters relevant to the nature of the study.

Research Findings

Results of the meta-analysis

To conduct the meta-analysis, first, the total number of valid and reliable researches is determined according to the following process using the databases and scientific archives such as SID, MAGIRAN, NOORSOFR, Sciencedirect, Emeraldinsight, and OnlineLibrary. The relevant researches are identified using the above databases.

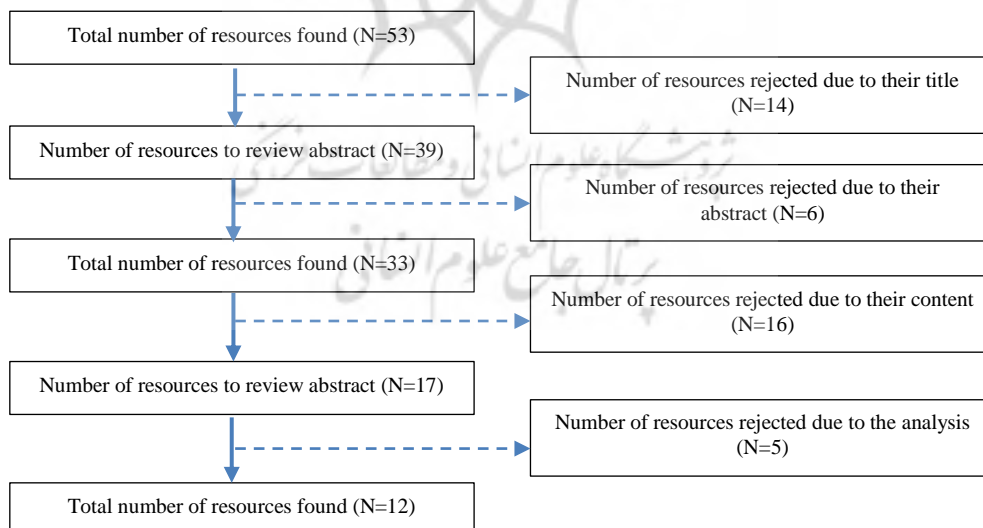


Figure 1. Determining the appropriate studies and articles to identify the components and factors

As seen in Figure 1, 12 pieces of research were accepted concerning the content. In the next step, the themes are classified and discriminated as the components and factors related to the research subject according to the approach proposed by Stirling (2001). First, the researches accepted are fitted again by 16 members of the research panel to achieve a more coherent perception regarding the nature of the research through 10 criteria of the critical appraisal including research purposes, the rationale of research method, research design, sampling, data collection, reflectivity, precise analysis, theoretical and transparent statement of findings, and research value.

Table 1. Critical appraisal of researches identified

Critical appraisal criteria/Research	Valentine and Godkin (2019)	Paranoan et al. (2018)	Kadous and Zhou (2018)	Yang et al. (2018)	Elangovan and Suddaby (2018)	Lam and Mensah (2016)	Sweeney et al. (2014)	Bergsma and Ardelt (2012)	Melé (2010)	Vatlyan et al. (2019)	Mashayekhi et al. (2019)	Javidi et al. (2019)
Research purpose	4	3	3	2	3	4	3	3	3	4	5	3
The rationale of the research method	3	4	3	3	2	3	3	3	3	3	3	4
Research design	3	5	3	2	2	4	3	4	3	4	3	4
Sampling method	4	4	4	3	3	4	4	3	3	3	3	4
Data collection method	4	4	3	3	3	4	3	3	4	5	3	3
Generalization	3	3	3	2	2	4	3	4	3	3	4	3
Ethical approaches	4	4	4	3	2	4	4	3	3	4	3	4
Statistical analysis of results	4	3	4	3	3	4	3	3	3	3	4	3
Research value	3	4	4	1	1	3	4	5	5	5	5	4
Total	32	34	31	22	20	34	30	31	30	34	33	32

As observed in Table 1, the two research of Yang et al. (2018) and Elangovan and Suddaby (2018) gain a score less than 30 by the panel members, and consequently, these two pieces of research are removed. Now, the themes are extracted from the accepted researches based on the Stirling method (2001). First, the texts selected from the resources of studies should be coded as the basic themes to be able to combine these various and seemingly irrelevant themes properly. The total codes obtained from the researches accepted by the critical appraisal process amount to 88 themes that part of which are presented in Table 2.

Table 2. Some basic themes of the research

Content extracted	Basic theme
1. Although in the auditing profession, decision-making has specific rules and should be in line with corresponding standards, based on individual differences, auditors' decision-making should be based on social motives such as accountability and responsiveness (Kadous and Zhou, 2018).	1. Accountability 2. Responsiveness
6. Self-awareness causes auditors not only to have a realistic image of themselves but also realize the relationships between managers and the surrounding environment by appropriately integrating abilities and strengths for decision-making (Valiyan et al., 2019).	7. Self-awareness
9. Audit judgment is efficient when the auditor be able to balance his/her subjectivities with professional performances in the auditing path (Sweeney et al., 2014).	11. correlation between subjectivity and professional performances
17. Being active in several works simultaneously and beyond the specified time is a fact contrary to professional thinking and attention to the interests of the majority of the stakeholders (Javidi et al., 2019).	21. Considering the interests of the majority of the stakeholders
24. Achieving cognition in the auditing profession is an important factor in an auditor's judgment. Cognition is created gradually in the career path by breaking the subjective reference frameworks and causes the individual to be more committed to justice in this profession (Valiyan et al., 2019).	27. Breaking the subjective reference frameworks 28. Committing to justice in the auditing profession
25. The decision-maker should benefit from a deep perception beyond the target matter to be able to act with wise tactfulness and bring the most interest to him/her and others (Melé et al., 2010).	29. Deep perception beyond the target matter
33. Professional auditors should have the capability to recognize their perceptual features to reduce tensions in critical situations to be able to eliminate judgment biases (Lam and Mensah, 2016).	36. Recognizing the perceptual faults
39. Intuition in decision-making is necessary to succeed in achieving the goals (Valentine and Godkin, 2019)	43. Intuition in decision-making
51. An auditor having intuitive thinking, to make the best decision, should acquire sufficient knowledge related to the changes in the capital market and clients' characteristics based on his/her experiences (Lam and Mensah, 2016).	53. intuitive thinking 54. Knowing the capital market 55. Knowing the clients
54. Libby and Luft (1993) considered the audit judgment performance as a function of environmental, experience and recognition motivations that increase the auditor's effectiveness level (Mashayekhi Fard et al., 2019)	59. Environmental knowledge 60. Auditor's experience
57. Individuals' abilities, even if they are exclusive, have an important role in learning and the promotion of audit judgment level to deal with critical situations in the auditing profession (Mashayekhi Fard et al., 2019).	63. Individual abilities in professional complexities
59. Auditors having experience and technical knowledge consider multidimensional viewpoints, appraise expansionary interpretations, find common meanings, and attain a combined viewpoint that solves the problem (Valiyan et al., 2019).	65. Experience in auditing 66. Having inferential interpretations
66. A professional norm in auditing is to move inside the framework of ethical rules and elements that, if observed properly, represent the congruence between perceptions and professional features of auditing and its maturity (Paranoan et al., 2018).	69. Moving in line with regulations 70. Obeying the ethical elements 71. Congruence between perceptions and professional features of auditing
69. Auditor's tactfulness and accordance to wisdom in audit judgment are	74. Maintaining emotions

not realized easily, and these are idealistic and theosophical senses that are achieved gradually and relatively by maintaining emotions and emotional balance, and it ends in insight and intuition in making the best decision (Paranoan et al., 2018).	75. Emotional balance 76. Insight and intuition in decision-making
77. Since one of the individual characteristics is the mental and intuitive power, in each testing and reporting process such as auditing that includes judgment, breaking the subjective presumptions is necessary to achieve the best judgment (Mashayekhi Fard et al., 2019).	79. Mental and intuitive power 80. Breaking the subjective presumptions
79. Recognition in auditing is a vague issue and is based on a free understanding specific to each individual. However, achieving recognition in auditing requires an elaborated thought and is beyond the auditing profession (Sweeney et al., 2014).	82. Recognition in auditing 83. Looking beyond 84. Deepening the thought
81. One of the features of wisdom in decision-making is to recognize the subjective contradiction of realities. This feature is seen in the form of perceptual faults and biases in decision-making (Bergsma and Ardelt, 2012).	87. Recognizing the subjective contradictions 88. Recognizing the perceptual biases in decision-making

Due to restriction on the pages of the journal, we present a part of the themes. It should be noted that among 118 contents extracted, 88 initial themes are determined that, among all, ultimately 20 basic themes are selected and summarized as three organizing themes (components) as presented in Table 3.

Table 3. The themes identified for factors of auditor's wise tactfulness in professional judgment

Organizing theme (component)	Basic themes (factors)
Professional thinking	Learning in the career path
	Considering the interests of the majority of the stakeholders
	Evaluating individual abilities in professional complexities
	Evaluating the values of the auditing profession
	Developing individual knowledge in the career path
	Creating a congruence between subjectivity and professional performance
	Having inferential interpretations
Social thinking	Committing to professional ethics
	Focusing on social and responsive approaches related to society
	Moving in line with regulations and standards defined
	Respecting qualitative elements such as uncertainty and neutrality in the auditing profession
	Respecting fairness and justice
Cognitive thinking	Responsiveness and sobriety
	Recognizing the special features of the capital market (such as culture and the type of industry)
	Deepening the thoughts beyond the scope of the auditing profession
	Recognizing the judgment biases in the auditing profession
	Looking ahead when making decisions
	Breaking the subjective reference frameworks to achieve professional recognition
	Controlling the emotions when facing complexities of the auditing profession
Balanced reliance on insight and intuition in professional decision-making	

Now, the following checklist is designed and distributed among the population in the qualitative part to control the quality of the themes using the validity and reliability analysis and Delphi analysis of the themes selected.

Table 4. Seven-point checklist

Organizing theme (component)	Basic themes (Factors)	1	2	3	4	5	6	7
Professional thinking	Learning in the career path							
	Considering the interests of the majority of the stakeholders							
	Evaluating individual abilities in professional complexities							
	Evaluating the values of the auditing profession							
	Developing individual knowledge in the career path							
	Creating a congruence between subjectivity and professional performance							
	Having inferential interpretations							
	Committing to professional ethics							
Social thinking	Focusing on social and responsive approaches related to society							
	Moving in line with regulations and standards defined							
	Respecting the qualitative elements such as uncertainty and neutrality in the auditing profession							
	Respecting fairness and justice							
	Responsiveness and sobriety							
Cognitive thinking	Recognizing the special features of the capital market (such as culture and the type of industry)							
	Deepening the thoughts beyond the scope of the auditing profession							
	Recognizing the judgment biases in the auditing profession							
	Looking ahead when making decisions							
	Breaking the subjective reference frameworks to achieve professional recognition							
	Controlling the emotions when facing complexities of the auditing profession							
	Balanced reliance on insight and intuition in professional decision-making							

The Delphi technique is a method of decision-making based on experts' opinions that performed in several rounds reciprocally until theoretical saturation is met wherein the reliability of the themes identified is confirmed. Accordingly, at this stage, the Delphi technique is performed using two criteria, namely, average and concordance coefficient. Table 5 represents the Delphi analysis of the themes identified.

Table 5. Delphi analysis

Organizing theme (component)	Average	Concordance coefficient	Basic themes	Average	Concordance coefficient	Accept/Remove
Professional thinking	5	0.7	Learning in the career path	5.10	0.75	Accepted
			Considering the interests of the majority of the stakeholders	5.20	0.8	Accepted
			Evaluating individual abilities in professional complexities	5	0.7	Accepted
			Evaluating the values of the auditing profession	3.50	0.30	Removed
			Developing individual knowledge in the career path	4	0.45	Removed
			Creating a congruence between subjectivity and professional performance	5	0.7	Accepted
			Having inferential interpretations	5.10	0.75	Accepted
			Committing to professional ethics	5	0.7	Accepted
Social thinking	5.15	0.78	Focusing on social and responsive approaches related to society	4	0.45	Removed
			Moving in line with regulations and standards defined	5	0.71	Accepted
			Respecting qualitative elements such as uncertainty and neutrality in the auditing profession	5.10	0.75	Accepted
			Respecting fairness and justice	3	0.25	Removed
			Responsiveness and sobriety	6	0.9	Accepted
Cognitive thinking	5.70	0.86	Recognizing the special features of the capital market (such as culture and the type of industry)	4	0.45	Removed
			Deepening the thoughts beyond the scope of the auditing profession	5	0.7	Accepted
			Recognizing the judgment biases in the auditing profession	5.50	0.88	Accepted
			Looking ahead when making decisions	3	0.25	Removed
			Breaking the subjective reference frameworks to achieve professional recognition	6	0.9	Accepted
			Controlling the emotions when facing complexities of the auditing profession	5.20	0.8	Accepted
			Balanced reliance on insight and intuition in professional decision-making	5.80	0.86	Accepted

In the analysis of Table 4, since the Likert scale used consists of seven points, the themes whose average are greater than or equal to 5 and their concordance coefficient are greater than or equal to 0.5 are accepted as guided

by Mohammad beigi et al. (2015), Soleimani and Bashash (2013), Valiyan et al. (2018), and other researches. Six themes are removed because their averages are less than 5, and their concordance coefficient is less than 0.5. These themes are represented in Table 6.

Table 6. Themes removed

Organizing theme (component)	Basic themes
Professional thinking	Evaluating the values of the auditing profession
	Developing individual knowledge in the career path
Social thinking	Focusing on social and responsive approaches related to society
	Respecting fairness and justice
Cognitive thinking	Recognizing the special features of the capital market (such as culture and the type of industry)
	Looking ahead when making decisions

Now, the second round of the Delphi analysis is performed by distributing the revised checklists among experts. In this round, all 14 themes that remained from the first round are accepted. Therefore, in addition to the reliability of the themes selected, the theoretical saturation point for validating the concepts related to the auditor's wise tactfulness in professional judgment is achieved. Accordingly, the model extracted from the meta-analysis and Delphi technique can be drawn as Figure 2.

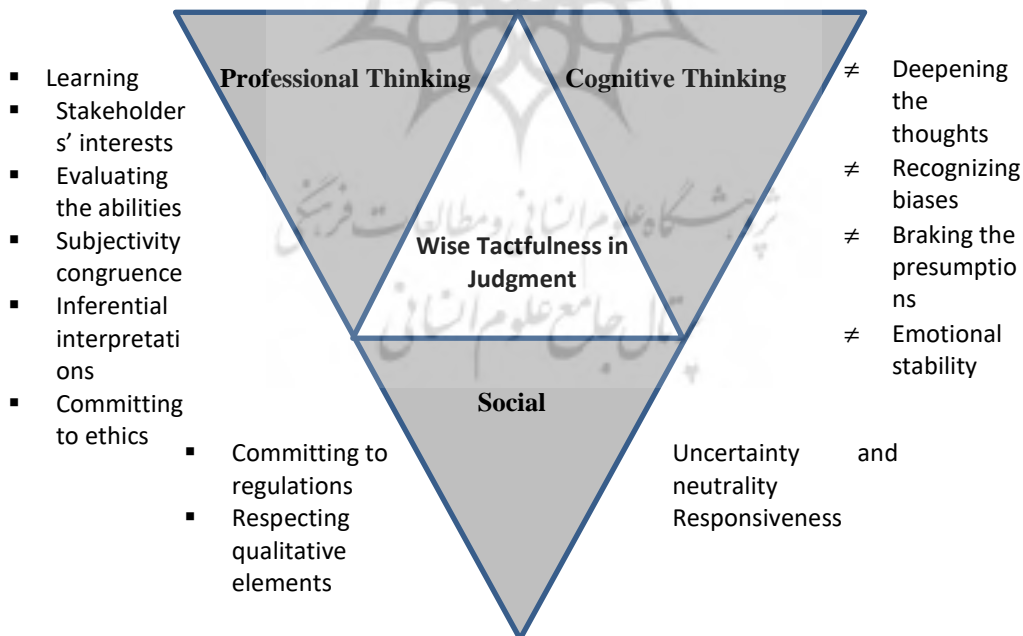


Figure 2. The model of factors of auditor's wise tactfulness in professional judgment

As seen in Figure 2, wise tactfulness in professional judgment comprises three components, namely, professional, cognitive, and social thinking, which are measured through the themes specified. In other words, the research enters into the phase of Total Interpretive Structural Modeling to determine the hierarchy for prioritizing the themes.

Total Interpretive Structural Modeling (TISM)

In this phase, the panel members participated, and the scores were determined by the matrix questionnaires. Since TISM is an extended Interpretive structural modeling (ISM) and a more comprehensive method, it can specify the layers of the interactive relationship between the research factors. Figure 3 represents the main steps of TISM.

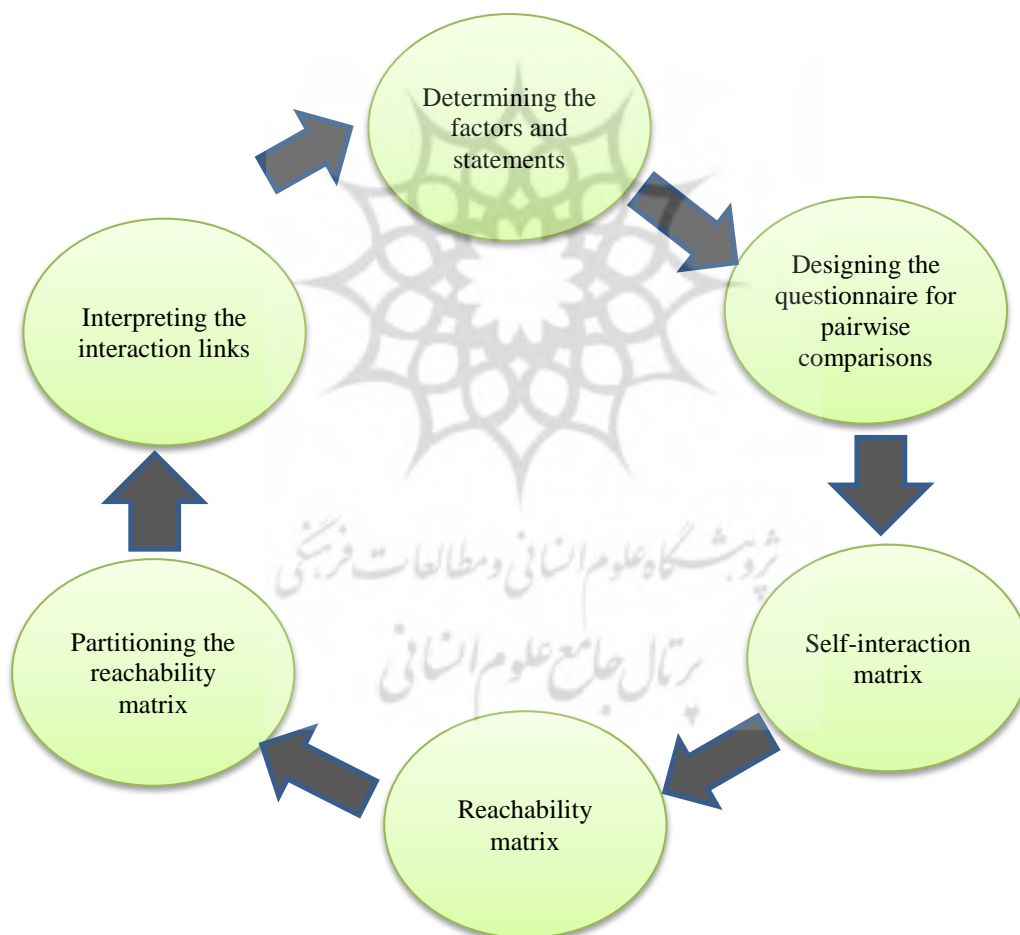


figure 3: The main steps of the TISM process

The steps represented in Figure 3, which are specific to the themes of wise tactfulness in an auditor's professional judgment, are described as follows.

Step 1: At this step, the themes related to wise tactfulness in auditors' professional judgment are specified based on qualitative approaches such as meta-analysis and Delphi technique (carried out at the first part of research findings)

Step 2: In this step, questionnaires are designed as pairwise comparisons and distributed among the members of the target population to get the self-interaction matrix. Pairwise comparisons are performed between factors in rows and columns to specify whether the row factor *i* leads to the factor in column *j* or not, and vice versa or the reciprocal relationship exists, or there is no relationship. It also shows the extent of symmetry in relationships between factors.

Step 3: At this step, the self-interaction matrix is built and interpreted. Indeed, pairwise comparisons of the elements are performed with a structural self-interaction matrix (SSIM) that specifies the only relationship path in Interpretive Structural Modeling (ISM). However, in TISM, each pairwise comparison is interpreted by responding to the interpretive question in the previous step. For pairwise comparison, factor *i* is compared with factors (*i*+1) to *n* as paired. For each relationship, the response is specified by a Y (Yes) or N (No), and if the response is positive (Y), the reason is stated. In this way, the interpretive rationale of pairwise relationships is presented as a scientific and rational basis of interpretation. Table 7 represented the form used for the pairwise comparison of the factors.

Table 7. A sample form of pairwise comparison based on TISM

Factors	Question	Response	
		Yes	No
A1.A2	Learning in the career path leads to considering the stakeholders' interests.	<input type="checkbox"/>	<input type="checkbox"/>
A2.A3	Considering the stakeholders' interests shows the level of maturity of the abilities.	<input type="checkbox"/>	<input type="checkbox"/>
A1.A3	Learning in the career path shows the level of maturity of the abilities.	<input type="checkbox"/>	<input type="checkbox"/>
A3.A4	Evaluating individual abilities leads to a congruence of the individual's subjectivities to professional performance.	<input type="checkbox"/>	<input type="checkbox"/>
A2.A4	Considering the stakeholders' interests is a cause for recognizing the congruence of the individual's subjectivities to professional performance.	<input type="checkbox"/>	<input type="checkbox"/>

Note that, due to the restricted number of pages of the paper, only a part of the pairwise comparison form is presented.

Step 4: At this step, the reachability matrix is obtained using 0 and 1 values by pairwise comparisons conducted by the target population. The relationships used to build the matrix are defined as follows.

If i leads to j, the ij element is 1, and the ji element is 0.

If j leads to i, the ji element is 0, and the ij element is 1.

If i is equivalent to j, both the ij element and ji element are 1.

If there is no relationship between i and j, both the ij element and ji element are 0.

Step 5: At this step, the hierarchical partitioning of the reachability matrix is carried out. To identify the relationship between the variables, first, one should identify the output set, input set, and common elements. The level scores and priorities of the variables are specified using the reachability set and antecedent set. The reachability set for each variable consists of variables that can be reached through the target variable. The antecedent set for each variable also consists of variables through which the target variable can be reached. Then the intersection of the reachability set and antecedent set is obtained for each factor. The factors whose reachability set and antecedent set are the same are considered as the priority level. The level refers to the designed layers of the final model. To obtain the other levels, one should eliminate the previous levels and replicate the process. After the levels are specified, the output matrix should be ordered according to levels. The new matrix is called the conic matrix.

Step 6: At this step, a hierarchical graph is gotten. First, factors of the hierarchical levels are ordered, and then, the relationships between the factors are linked using the reachability matrix.

Analysis of the findings

Interpretive Structural Analysis (ISM/TISM)

To conduct the analysis, we should first code the factors accepted by the Delphi technique.

Table 8. Coding of the statements accepted

Factor	Code
Learning	A1
Stakeholders' interests	A2
Evaluating individual abilities	A3
Creating a congruence between subjectivities and professional performance	A4
Having inferential interpretations	A5
Committing to professional ethics	A6
Observing the standards	A7
Uncertainty and neutrality	A8
Responsiveness and sobriety	A9
Forethought	A10
Recognizing the perceptual faults	A11
Breaking subjective reference frameworks	A12
Emotional stability	A13
Insight and intuition	A14

As seen in Table 8, the factors accepted by the experts have been coded to build the structural self-interaction matrix. To develop the ISM approach to the TISM approach, we should interpret each paired comparison with responding to the interpretive question in the previous step. Each factor, say i , is compared with all elements from $(i+1)$ to n . For each relationship, the response is a Y or N, and if the response is positive, the reason should be stated. However, if the response is negative, the participants should declare their opinions about the corresponding variables.

Table 9. Pairwise comparisons between the statements in matrix form

No.	Pair	Yes/No	Relationship
1	A1-A2*	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Learning in the career path leads to considering the stakeholders' interests.
2	A2-A1	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
3	A1-A3	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
4	A3-A1	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
5	A1-A4	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
6	A4-A1	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
7	A1-A5	Yes <input type="checkbox"/> No <input type="checkbox"/>	Learning in the career path helps to interpret inferential interpretations.
8	A5-A1	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
9	A1-A6	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Learning in the career path leads to a commitment to professional ethics.
10	A6-A1	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
11	A1-A7	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Learning in the career path leads to observing the standards.
12	A7-A1	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
13	A1-A8	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Learning in the career path fosters uncertainty and neutrality.
14	A8-A1	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
15	A1-A9	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Learning in the career path increases responsiveness and sobriety.
16	A9-A1	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
17	A1-A10	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
18	A10-A1	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
19	A1-A11	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
20	A11-A1	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
21	A1-A12	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Learning in the career path leads to breaking the presumed frameworks.
22	A12-A1	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
23	A1-A13	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Learning in the career path leads to emotional stability.
24	A13-A1	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
25	A1-A14	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Learning in the career path fortifies insight and intuition.
26	A14-A1	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	

* A1 represents "Learning in the career path."

Note that due to the restriction on the number of pages of the paper, only some of the pairwise comparisons were presented.

The pairwise comparisons of auditor's wise tactfulness in professional judgment are given in Table (10) to obtain the structural self-interaction matrix

(SSIM). For pairwise comparison, factor i is compared with factors $(i + 1)$ to n as paired. For each relationship, the response is specified by a Y (Yes) or N (No), and if the response is positive (Y), the reason is stated. In this way, the interpretive rationale of pairwise relationships is presented as a scientific and rational basis of interpretation.

Phase 3: Building the reachability matrix

At this phase, relations between the variables turn into 0 or 1 entries in such a way that cells marked with Y take a value of 1, and those marked with N take a value of 0. Indeed, the reachability matrix is obtained by converting the structural self-interaction matrix into a matrix with binary entries. The matrix is given in Table 10.

Table 10. The reachability matrix

Factors	A1	A2	A3	A4	A5	A6	A7	A8	A9	A10	A11	A12	A13	A14
A1	1	0	1	1	1	0	1	1	1	1	1	1	1	1
A2	1	1	1	1	1	0	1	1	1	1	1	1	1	1
A3	0	0	1	1	1	0	1	1	1	1	1	1	1	1
A4	0	0	0	1	1	0	1	1	1	1	1	1	1	1
A5	0	0	0	0	1	0	1	1	1	1	1	1	1	1
A6	1	1	1	1	1	1	1	1	1	1	1	1	1	1
A7	0	0	0	0	0	0	1	1	1	1	1	1	1	1
A8	0	0	0	0	0	0	0	1	1	1	1	1	1	1
A9	0	0	0	0	0	0	0	0	1	1	1	1	1	1
A10	0	0	0	0	0	0	0	0	0	1	1	1	1	1
A11	0	0	0	0	0	0	0	0	0	0	1	1	1	1
A12	0	0	0	0	0	0	0	0	0	0	1	1	1	1
A13	0	0	0	0	0	0	0	0	0	0	1	1	1	1
A14	0	0	0	0	0	0	0	0	0	0	0	0	0	1

Next, the scores are obtained based on the interaction between the factors compared to build a transitive reachability matrix.

Table 11. The transitivity of the relationships between the factors

Factors	A1	A2	A3	A4	A5	A6	A7	A8	A9	A10	A11	A12	A13	A14	Driving power
A1	1	0	1	1	1	0	1	1	1	1	1	1	1	1	12
A2	1	1	1	1*	1	0	1	1*	1*	1	1	1	1	1	13
A3	0	0	1	1	1	0	1	1	1	1	1	1	1	1	11
A4	0	0	0	1	1	0	1*	1	1	1	1	1	1*	1	10
A5	0	0	0	0	1	0	1	1	1	1	1	1	1	1	9
A6	1	1	1	1	1	1	1	1	1	1	1	1*	1	1	14
A7	0	0	0	0	0	0	1	1	1	1	1	1	1	1	8
A8	0	0	0	0	0	0	0	1	1	1	1	1	1	1	7
A9	0	0	0	0	0	0	0	0	1	1	1	1	1	1	6

A10	0	0	0	0	0	0	0	0	0	1	1	1	1	1	5
A11	0	0	0	0	0	0	0	0	0	0	1	1	1	1*	4
A12	0	0	0	0	0	0	0	0	0	0	1	1	1	1	4
A13	0	0	0	0	0	0	0	0	0	0	1	1	1	1	4
A14	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
Dependence power	3	2	4	5	6	1	7	8	9	10	13	13	13	14	
* Transitive relationship															

As seen in table 11, conceptual notations assigned based on the mode criterion have been converted into the values 0, 1, and 1*, according to the definitions given. Table 11 shows the driving power (total 1 scores in the corresponding row) and dependence power (total 1 scores in the corresponding column).

Table 12. Driving power/Dependence power

Factor	Code	Driving power	Dependence power
Learning	A1	12	3
Stakeholders' interests	A2	13	2
Evaluating individual abilities	A3	11	4
Congruency between subjectivities and professional performance	A4	10	5
Having inferential interpretations	A5	9	6
Commitment to professional ethics	A6	14	1
Observing the standards	A7	8	7
Uncertainty and neutrality	A8	7	8
Responsiveness and sobriety	A9	6	9
Forethought	A10	5	10
Recognizing the perceptual faults	A11	4	13
Breaking the subjective reference frameworks	A12	4	13
Emotional stability	A13	4	13
Insight and intuition	A14	1	14

Determining the relationships between the variables and building the conic matrix

In this section, first, the output set, input set, and common elements should be identified to determine the relationship between the variables. The level scores and priorities of the variables, as well as the reachability set and antecedent set, are obtained. The reachability set for each variable consists of variables that can be reached through the target variable. The antecedent set for each variable also consists of variables through which the target variable can be reached. Then, the intersection of the reachability set and antecedent set is obtained for each factor. The factors with the same reachability set and antecedent set are

considered as the priority level. The level refers to the designed layers of the final model. To obtain the other levels, one should eliminate the previous levels and iterate the process. After the levels are specified, the output matrix should be ordered according to levels. The new matrix is called the conic matrix.

Level partitioning

At this stage, the input set and output set are obtained for each variable through the final reachability matrix. The output set for a component/dimension is consists of the variable itself along with other variables that affected by it, i.e., the variables that can be reached through the target variable. The input set for each variable also includes the variable itself along with the variables that affect the target variable. Finally, the common elements as the high-level variables refer to the dimensions belonging to the intersection between the output set and input set in the TISM process, i.e., those variables that do not affect any other variable. After input elements, output elements, and common elements are determined, factors that have the same output elements and common elements are known as the first level and most ineffective outcome of internal auditing effectiveness. After determining this level, the corresponding factors are eliminated, and the common elements between the input set and output set are specified and selected as the next level. This process is replicated until the components constituted all the levels of the system are specified.

Table 13. The output set, input set, and common elements

Factor	Code	Output factor	Input factor	Intersection	Level
. Determining the first level					
Learning	A1	1, 3, 4, 5, 7, 8, 9, 10, 11, 12, 13, 14	1, 2, 6	1	
Stakeholders' interests	A2	1, 2, 3, 4, 5, 7, 8, 9, 10, 11, 12, 13, 14	2, 6	2	
Evaluating individual abilities	A3	3, 4, 5, 7, 8, 9, 10, 11, 12, 13, 14	1, 2, 3, 6	3	
Creating a congruence between subjectivities and professional performance	A4	4, 5, 7, 8, 9, 10, 11, 12, 13, 14	1, 2, 3, 4, 6	4	
Having inferential interpretations	A5	5, 7, 8, 9, 10, 11, 12, 13, 14	1, 2, 3, 4, 5, 6	5	
Committing to professional ethics	A6	1, 2, 3, 4, 5, 7, 8, 9, 10, 11, 12, 13, 14	6	6	
Observing the standards	A7	7, 8, 9, 10, 11, 12, 13, 14	1, 2, 3, 4, 5, 6, 7	7	

Uncertainty and neutrality	A8	8, 9, 10, 11, 12, 13, 14	1, 2, 3, 4, 5, 6, 7, 8	8	
Responsiveness and sobriety	A9	9, 10, 11, 12, 13, 14	1, 2, 3, 4, 5, 6, 7, 8, 9	9	
Forethought	A10	10, 11, 12, 13, 14	1, 2, 3, 4, 5, 6, 7, 8, 9, 10	10	
Recognizing the perceptual faults	A11	11, 12, 13, 14	1, 2, 3, 4, 5, 7, 8, 9, 10, 11, 12, 13	11, 12, 13, 14	
Breaking subjective reference frameworks	A12	11, 12, 13, 14	1, 2, 3, 4, 5, 7, 8, 9, 10, 11, 12, 13	11, 12, 13, 14	
Emotional stability	A13	11, 12, 13, 14	1, 2, 3, 4, 5, 7, 8, 9, 10, 11, 12, 13	11, 12, 13, 14	
Insight and intuition	A14	14	1, 2, 3, 4, 5, 7, 8, 9, 10, 11, 12, 13, 14	14	I
Factor	Code	Output factor	Input factor	Intersection	Level
. Determining the second level					
Learning	A1	1, 3, 4, 5, 7, 8, 9, 10, 11, 12, 13	1, 2, 6	1	
Stakeholders' interests	A2	1, 2, 3, 4, 5, 7, 8, 9, 10, 11, 12, 13	2, 6	2	
Evaluating individual abilities	A3	3, 4, 5, 7, 8, 9, 10, 11, 12, 13	1, 2, 3, 6	3	
Creating a congruence between subjectivities and professional performance	A4	4, 5, 7, 8, 9, 10, 11, 12, 13	1, 2, 3, 4, 6	4	
Having inferential interpretations	A5	5, 7, 8, 9, 10, 11, 12, 13	1, 2, 3, 4, 5, 6	5	
Committing to professional ethics	A6	1, 2, 3, 4, 5, 7, 8, 9, 10, 11, 12, 13	6	6	
Observing the standards	A7	7, 8, 9, 10, 11, 12, 13	1, 2, 3, 4, 5, 6, 7	7	
Uncertainty and neutrality	A8	8, 9, 10, 11, 12, 13	1, 2, 3, 4, 5, 6, 7, 8	8	
Responsiveness and sobriety	A9	9, 10, 11, 12, 13	1, 2, 3, 4, 5, 6, 7, 8, 9	9	
Forethought	A10	10, 11, 12, 13	1, 2, 3, 4, 5, 6, 7, 7, 8, 9, 10	10	
Recognizing the perceptual faults	A11	11, 12, 13	1, 2, 3, 4, 5, 7, 8, 9, 10, 11, 12, 13	11, 12, 13	II
Breaking subjective reference	A12	11, 12, 13	1, 2, 3, 4, 5, 7,	11, 12, 13	II

frameworks			8, 9, 10, 11, 12, 13		
Emotional stability	A13	11, 12, 13	1, 2, 3, 4, 5, 7, 8, 9, 10, 11, 12, 13	11, 12, 13	II
Factor	Code	Output factor	Input factor	Intersection	Level
. Determining the third level					
Learning	A1	1, 3, 4, 5, 7, 8, 9, 10	1, 2, 6	1	
Stakeholders' interests	A2	1, 2, 3, 4, 5, 7, 8, 9, 10	2, 6	2	
Evaluating individual abilities	A3	3, 4, 5, 7, 8, 9, 10	1, 2, 3, 6	3	
Creating a congruence between subjectivities and professional performance	A4	4, 5, 7, 8, 9, 10	1, 2, 3, 4, 6	4	
Having inferential interpretations	A5	5, 7, 8, 9, 10	1, 2, 3, 4, 5, 6	5	
Committing to professional ethics	A6	1, 2, 3, 4, 5, 7, 8, 9, 10	6	6	
Observing the standards	A7	7, 8, 9, 10	1, 2, 3, 4, 5, 6, 7	7	
Uncertainty and neutrality	A8	8, 9, 10	1, 2, 3, 4, 5, 6, 7, 8	8	
Responsiveness and sobriety	A9	9, 10	1, 2, 3, 4, 5, 6, 7, 8, 9	9	
Forethought	A10	10	1, 2, 3, 4, 5, 6, 7, 8, 9, 10	10	III
Factor	Code	Output factor	Input factor	Intersection	Level
. Determining the fourth level					
Learning	A1	1, 3, 4, 5, 7, 8, 9	1, 2, 6	1	
Stakeholders' interests	A2	1, 2, 3, 4, 5, 7, 8, 9	2, 6	2	
Evaluating individual abilities	A3	3, 4, 5, 7, 8, 9	1, 2, 3, 6	3	
Creating a congruence between subjectivities and professional performance	A4	4, 5, 7, 8, 9	1, 2, 3, 4, 6	4	
Having inferential interpretations	A5	5, 7, 8, 9	1, 2, 3, 4, 5, 6	5	
Committing to professional ethics	A6	1, 2, 3, 4, 5, 7, 8, 9	6	6	
Observing the standards	A7	7, 8, 9	1, 2, 3, 4, 5, 6, 7	7	
Uncertainty and neutrality	A8	8, 9	1, 2, 3, 4, 5, 6, 7, 8	8	
Responsiveness and sobriety	A9	9	1, 2, 3, 4, 5, 6,	9	IV

		7, 8, 9			
Factor	Code	Output factor	Input factor	Intersection	Level
. Determining the fifth level					
Learning	A1	1, 3, 4, 5, 7, 8	1, 2, 6	1	
Stakeholders' interests	A2	1, 2, 3, 4, 5, 7, 8	2, 6	2	
Evaluating individual abilities	A3	3, 4, 5, 7, 8	1, 2, 3, 6	3	
Creating a congruence between subjectivities and professional performance	A4	4, 5, 7, 8	1, 2, 3, 4, 6	4	
Having inferential interpretations	A5	5, 7, 8	1, 2, 3, 4, 5, 6	5	
Committing to professional ethics	A6	1, 2, 3, 4, 5, 7, 8	6	6	
Observing the standards	A7	7, 8	1, 2, 3, 4, 5, 6, 7	7	
Uncertainty and neutrality	A8	8	1, 2, 3, 4, 5, 6, 7, 8	8	V
Factor	Code	Output factor	Input factor	Intersection	Level
. Determining the sixth level					
Learning	A1	1, 3, 4, 5, 7	1, 2, 6	1	
Stakeholders' interests	A2	1, 2, 3, 4, 5, 7	2, 6	2	
Evaluating individual abilities	A3	3, 4, 5, 7	1, 2, 3, 6	3	
Creating a congruence between subjectivities and professional performance	A4	4, 5, 7	1, 2, 3, 4, 6	4	
Having inferential interpretations	A5	5, 7	1, 2, 3, 4, 5, 6	5	
Committing to professional ethics	A6	1, 2, 3, 4, 5, 7	6	6	
Observing the standards	A7	7	1, 2, 3, 4, 5, 6, 7	7	VI
Factor	Code	Output factor	Input factor	Intersection	Level
. Determining the seventh level					
Learning	A1	1, 3, 4, 5	1, 2, 6	1	
Stakeholders' interests	A2	1, 2, 3, 4, 5	2, 6	2	
Evaluating individual abilities	A3	3, 4, 5	1, 2, 3, 6	3	
Creating a congruence between subjectivities and professional performance	A4	4, 5	1, 2, 3, 4, 6	4	
Having inferential interpretations	A5	5	1, 2, 3, 4, 5, 6	5	
Committing to professional ethics	A6	1, 2, 3, 4, 5	6	6	VII
Factor	Code	Output factor	Input factor	Intersection	Level

. Determining the eighth level					
Factor	Code	Output factor	Input factor	Intersection	Level
Learning	A1	1, 3, 4	1, 2, 6	1	
Stakeholders' interests	A2	1, 2, 3, 4	2, 6	2	
Evaluating individual abilities	A3	3, 4	1, 2, 3, 6	3	
Creating a congruence between subjectivities and professional performance	A4	4	1, 2, 3, 4, 6	4	VIII
Committing to professional ethics	A6	1, 2, 3, 4	6	6	
. Determining the ninth level					
Factor	Code	Output factor	Input factor	Intersection	Level
Learning	A1	1, 3	1, 2, 6	1	
Stakeholders' interests	A2	1, 2, 3	2, 6	2	
Evaluating individual abilities	A3	3	1, 2, 3, 6	3	IX
Committing to professional ethics	A6	1, 2, 3	6	6	
. Determining the tenth level					
Factor	Code	Output factor	Input factor	Intersection	Level
Learning	A1	1	1, 2, 6	1	X
Stakeholders' interests	A2	1, 2	2, 6	2	
Committing to professional ethics	A6	1, 2	6	6	
. Determining the eleventh level					
Factor	Code	Output factor	Input factor	Intersection	Level
Stakeholders' interests	A2	2	2, 6	2	XI
Committing to professional ethics	A6	2, 6	6		
. Determining the twelfth level					
Factor	Code	Output factor	Input factor	Intersection	Level
Committing to professional ethics	A6	6	6	6	XII

As seen in Table 13, the first level, which is the less effective factor of wise tactfulness in auditor's judgment, is insight and intuition in the auditing profession, coded as A14. The last level shows that committing to professional ethics, which was coded as A6, was the most effective factor of auditor's wise tactfulness in professional judgment. Other levels also can be seen in Table 15.

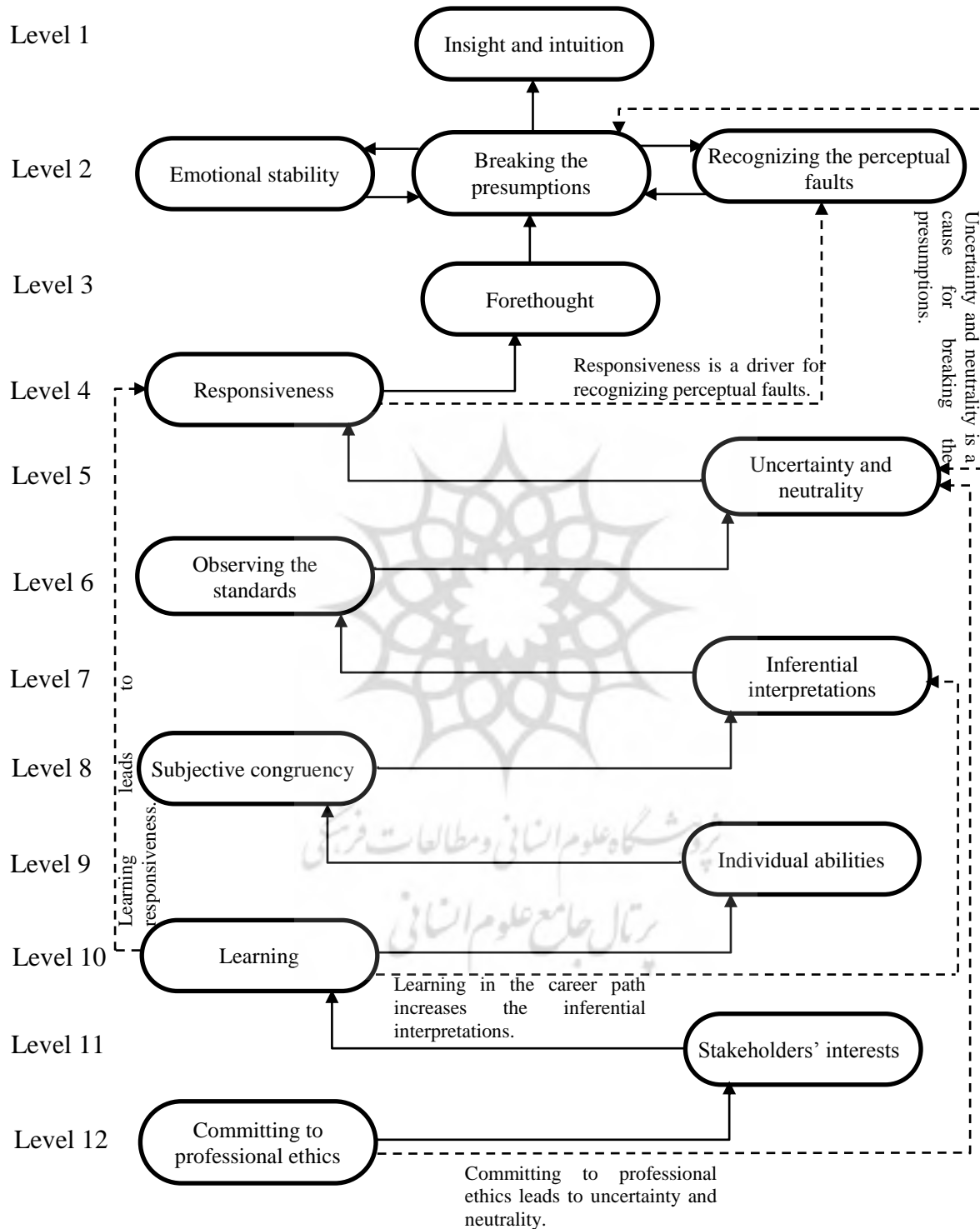


Figure 3. The model of prioritized factors of wise tactfulness in professional auditing

Conclusion and Suggestions

Tactfulness, in line with wisdom, is a concept based on an understanding of inferential complexities that involves some aspects of individual knowledge and perception. Since auditors should judge the performance of clients according to inferences and evidence, knowing the components of wise tactfulness as an inferential element in decision-making is important and necessary to decision-making. More clearly, if the auditor achieves a level of wise tactfulness, he/she can better imply from the evidence provided by clients. Indeed, wise tactfulness is a step-by-step process to reach a level of judgment that probably is mixed with the auditor's intuition power and forms the auditor's comments. The purpose of this research was to know the factors of an auditor's tactfulness in professional judgment and prioritizing them based on the importance degree. In this research, first, meta-analysis is applied to identify the themes related to the factors of wise tactfulness. Regarding the lack of relevant research, finally, 12 pieces of research were selected to extract the themes related to the purpose. Then, to validate the researches, we again conducted a critical appraisal of researches found using the panel members based on ten criteria. At this stage, two out of 12 research papers were deleted, and ten pieces of research were accepted. Then, through content analysis and comprehensive review of the texts, the themes of the auditor's wise tactfulness in professional judgment are determined. Consequently, 20 basic themes (factors) in three groups of organizing themes (components) were identified and applied in Delphi analysis to reach a stable level. The analysis removed six basic themes, and 14 themes remained to enter into a Total Interpretive Structural Modeling. At this stage, committing to professional ethics was identified to be the most influential theme of wise tactfulness to increase the quality of professional judgment in auditing. Indeed, regarding the concept of wise tactfulness, the decision-maker (auditor) should commit to the principles of professional ethics free of any dependence to can judge realistically in line with standards of behavioral and performance independence in auditing. Indeed, commitment to ethical principles is one of the behavioral factors in the auditing profession often emphasized along the intellectual decision-making process that shapes the wise decision-making framework. Commitment to professional ethics causes the auditor to think and decide independently of others' influence and power. Furthermore, at the eleventh level, as an impressive level, recognizing the stakeholders' interests and observing their rights was identified to be another important factor affecting the auditor's wise tactfulness in decision-making that makes the auditor as the decision-maker to give priority to stakeholders' interests and to not be enticed with profit-seeking

temptations by mediators. Considering the stakeholder's interests is a significant factor in presenting wise tactfulness because if the decision-maker does not discriminate between the interest of majority and minority, he/she can better direct realities along a wise path. This principle, as one of the rules of wise decision-making, is not excluded from the auditing profession, and the auditor should be sensitive to other individuals' interests. On the other hand, at the tenth level, learning in the career path was identified as a theme of professional thinking to have a substantial importance in shaping auditor's wise tactfulness. Learning in the career path causes the auditor to acquire abundant experiences and better understand the potential challenges in the professional environment and decide more quickly and reasonably. Indeed, learning has a key role in creating wise tactfulness because it provides a kind of acquisition in the inferential processes of auditor's judgment gradually, and causes that auditors have a better perception of their decision-making and remarks according to the evidence and documents. On the other hand, the ninth level implied that evaluating individual abilities in dealing with complexities of the auditing profession is a theme of professional thinking that plays a considerable role in auditor's wise tactfulness. An auditor possessing the wise tactfulness trait, first, investigates his/her abilities to comment on the performance of clients to decide based on realities. Auditors having wise tactfulness usually first consider their abilities for auditing reviews to be able to carry out their social responsibilities related to stakeholders correctly. At the eighth level, the creation of congruence between subjectivities and professional performance found as a theme of professional thinking. This feature means that an auditor possessing wise tactfulness tries to adjust his/her interpretive subjectivities to performances according to auditing standards, thereby avoiding one-dimensional viewing and dependence on clients, because this issue may severely harm intellectual thought frameworks and lead to a disruption in auditors' professional judgments. At the seventh level of the Total Interpretive Structural Modeling process, the theme inferential interpretations, as the last theme of professional thinking, has relative importance regarding the 12 layers of the thematic influence. In other words, inferential interpretations as a factor of wise tactfulness help the auditor to act related to clients more dominantly with a clear perception of the issue and rational judgment. Inferential interpretations help the auditor to review clients' documents and performance from different perspectives through wise tactfulness and not to comment regarding only a one-dimensional approach without any inference. On the other hand, at the sixth level, the theme of observing the standards (moving in line with regulations and standards set) is a medium-effect theme in wise tactfulness that causes the auditor to adhere to regulations and instructions

based on which he/she should decide. The results obtained are somewhat consistent with those of Lam and Mensah (2016), Sweeney et al. (2014), and Valiyan et al. (2019) regarding the concepts and theories presented.

Indeed, this research demonstrates that the presumptions of attitude and professional thinking are required to move along wise tactfulness to promote judgment quality because, without a professional attitude that is achieved through experience, he/she cannot decide with a comprehensive approach for audit judgment regarding either the content or performance. An auditor can select true reasons and inferences for decisions resulting in judgment in his/her career path due to observing the professional behavior. Other features such as cognitive and social features, even important, receive less priority regarding the nature of wise features that are based on a step-by-step process to achieve an intellectual decision. Achieving a level of professional judgment that is greatly important in terms of commitment to ethical principles and observance of standards was conformed as a basis for wise tactfulness by the results of this paper. The research implied that the capacity of auditors' effective decisions could be effloresced through integrating wise tactfulness into professional and social attitudes, and cognitive skills, and it may increase the social values and benefits affecting the decisions of shareholders. Although the research is concerned about decisions based on data solely and real evidence, it cannot be noted certainly that wise tactfulness can be institutionalized in auditors, because this work needs continuous learning and acquiring experience from various challenging auditing environments. It is suggested for future research to study how the factors identified can contribute effectively in various environments of the capital market, such as managers' behavioral areas and internal control. Indeed, the current research is one of the first empirical studies in the area of philosophy of auditing career based on wise tactfulness that can greatly help to create high-level viewpoints in auditors' professional judgment. In this way, they avoid deciding based on apparent realities solely and somewhat can benefit from other strengths such as intuition, internal and external searches, emotional stability, and cognitive values to bring more interest for stakeholders. The outcomes of the research also help shareholders to decide on companies' performances with a deeper perception and lead to more attractive investments in the capital market. Auditors' wise tactfulness also, through empowering the interaction of stakeholders with the surrounding environment, extends the role of emotions, intuition, and continuous learning to go beyond technical knowledge. The research is limited, especially because it does not explain the factors of wise tactfulness in the population of auditors engaged in empirical work. This can be recommended for future research.

Although the components of wise tactfulness in data of the meta-analysis are presented, it is significantly necessary to regard other unknown factors in this area, which are identified only through discussing and interpreting the rationale behind the auditor's professional judgments. This limitation needs further research because researchers who are interested in studying the topic of wise tactfulness are required to identify other dimensions of the concept, such as external dimensions not considered, to generalize the results of this study. Furthermore, the results can be generalized further by conducting quantitative research.

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