



## INVESTIGATING AND IDENTIFYING EFFECTIVE FACTORS IN MEASURING OF META-COMPETENCE IN ACCOUNTANTS

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### **Abstract:**

The qualifications needed by professions are changing rapidly in today's changing world, and the accounting system, as the vital artery of companies, requires employees with specific skills and capabilities to carry out their profession and career. All accountants need professional competencies to effectively implement their job and profession, and measuring and evaluating these competencies is of great importance to employers. The purpose of this study is to Investigating and Identifying Effective Factors in Measuring of accountants' meta-competence in Iran considering the accountants' role in the success of companies. The statistical population of the present research is consisted of the experts including university professors in the field of accounting as well as public accountants in Iran. The randomized sampling method was used to select the sample. This present study is a fundamental research in terms of the purpose, and qualitative in term of the data type. Also, the interview method and the questionnaire were used in data collection. In the first step of this research, a questionnaire was drafted using theoretical foundations and interviews with experts. Then, by completing 252 questionnaires by experts in the second and third quarter of 2017, relevant data was collected and this data were analyzed using exploratory and confirmatory factor analysis. The main question of the research is that 'what factors are

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appropriate and important for measuring the accountants' meta-competence?'. According to the research findings, Influencing/Persuading, Teamwork/relationship building, Critical/analytical thinking, Self/time management, Leadership, See bigger picture, Presentation, and Communication are appropriate for the measurement of the accountants' meta-competence and the effect of these factors on the accountants' meta-competence is significant and positive.

**JEL:** M40, M41, M49

**Keywords:** meta-competence, influencing/persuading, teamwork/relationship building, critical/analytical thinking, self/time management, leadership, see bigger picture, presentation, and communication

## 1. Introduction

One of the factors playing a significant role in the survival and sustainability of the organization in the competitive environments is to recognize and develop the capacities, competencies and capabilities of human resources. As the strategic and knowledge capital resources, any neglect of these capabilities and competencies of human resources will lead to the loss of competitive advantage.

In today's world, one of the fundamental principles and the success factors of organizations, in moving towards dynamism and transformation, is meritocracy and the use of efficient forces. In other words, meritocracy is the key to the success of developmental moves within organizations (Alvani et al., 2015). Today's intense competition and technological changes have imposed increasing pressure on organizations and their various ways of increasing their human resource productivity. Today, it is expected that the organizations workforce have a greater impact on the products and services they offer to the market. This is exactly what causes the importance of competence in the competitive environment. These changes have also affected the human resources environment in Iran, and the goals of this area are also changing in line with global developments. The advantages and benefits of this approach have the great effects on the rapid acceptance and development of the competence-based approach and its application in employee development plans. Different benefits for organizations and managers at different levels result from the use of competencies, and the organizations also utilize the competencies for a variety of reasons, such as the transfer of valuable behaviors and organizational culture, effective performance for all employees, emphasis on individual capacities (rather than their job) as a way of acquiring competitive advantage, reinforcing team and mutual behavior (Dianati and Erfani, 2009). Various definitions have been presented so far for competency each of them expresses the concept of competency from different aspects. Following the important paper by Lowler (1994), the importance of competency has become widespread in the organizations. He examined the evolution of organizations,

from the organizations with job analysis approach to competency-based organizations and he found that many organizations today use competency-based HRM approaches.

In each company and organization, the accounting unit is considered as the company's heart and the vital artery. Individuals, corporations and institutions are interconnected in today's world, where every day a new form of communication is introduced and this causes interactions of financial changes and make them more sophisticated every day. All these factors together determine the role of accounting as the provider of financial information using accounting standards for users. Accordingly, correct and up-to-date information is one of the inevitable needs of institutions and organizations to apply them in the managers' decision-making process. The management information system is the main source of providing information in this regard. As the most important subset of this system, the accounting information system provides a variety of financial information to the users of this type of information, especially the managers of each organization. In general, to be able to use them in the decision making process, accounting information should have specific features. Qualitative characteristics of such information such as their timeliness and relevancy is among the characteristics affecting the just in time use of information. From the point of view of university professors, practitioners and accounting students, the study of importance and adequacy of the knowledge and skills required for accounting graduate students is essential. Because of the changes in the business environment including rapid technological advancement and globalization of markets, the role of current accountants has changed from providing financial information to the preparation and interpretation of various financial and nonfinancial data for the users inside and outside the organization. Due to such changes in the business environment, graduates need to acquire knowledge accounting knowledge and skills needed to meet the changing demands of the business community (Mojtahedzade et al., 2010).

## **2. Problem Statement**

Manpower or human resource is undoubtedly the most sublime, most important, and most valuable factor among various factors and resources in an organization. The goals and desires of an organization are realized by the agent of human resources along with other factors and resources (Abdolahzade, 2000). The staff of each organization forms the basis of the wealth of each organization by their knowledge, skills and motivations. In the next decade, and perhaps the next century, the initiative, creativity, commitment and ability of human resources rather than the new technology will be the main source of competitive advantage and hence, such wealth is important (Mohamadi, 2001). Because of thinking and feeling, the human agent needs to be aware of its position in order to achieve the determined goal in an organization so that can recognize his strengths and weaknesses, and then apply measures to further effectiveness. Organizations, on the other hand, need to know how their forces are working to achieve their goals so that they can improve their functions and create positive developments in

the organization (Abdolazade, 2000). Accordingly, the accounting field can be considered to be the only area that is related to all other areas of the organization and precisely evaluates all of their activity. Therefore, this area is essentially based on discipline and should act continuously and accurately and reflect the effects of the activity of a field in other areas and ultimately the entire organization. Therefore, it is important to examine the merit and competence of the personnel in the field in line with the goals of the business unit. Competence, as defined by the International Society of Performance Improvement, refers to improving the performance of a set of knowledge, skills, and attitudes that enable employees to effectively perform occupational or career activities in accordance with expected standards. Competency, in terms of Spencer (1993), is the underlying attribute of an individual that is generally related to the performance of the criterion or superior performance in a job or situation. According to Boyatzis (1982, 1995), competency generally emphasizes the person's basic features and characteristics. These attributes can be the motivation, behavior, skill and imagination of a person from a social role or set of knowledge that the person uses them in his work and activities. Sopegina et al. (2016) believe that meta-competency is considered as the comprehensive knowledge, free and critical thinking, and preparedness to use a personal approach in working, and the development of a professional and personal development strategy, as well as capacity for self-actualization. On the accountants' role in the workplace, the following items can be summarized: executive capabilities, communications, knowledge and skills concepts, group dynamics, information management, learning, theories of creating relationships with the organization, and self-management skills (Marprogo, 2015). Anderson and Krathwohl (2001) suggest that metacognitive knowledge plays an important role in learning. An example of metacognitive knowledge is students' understanding and control of their own cognition. In the context of cognition, "*the prefix meta is added to extend metacognition 'above' or to 'transcend' cognition*" (Anderson et al., 2001, p. 43). In the same way, the prefix meta was added to competencies to suggest that MCs are above or transcend other competencies pertaining to technical knowledge and skills. This assertion of a higher level of competencies supports Brown's (1994) definition of MCs as knowledge in all its multi-layered strands while competences are skills which are task specific. Meta-competences are those abilities, skills and capacities which exist above and beyond [i.e. overarch] any competences which an individual may develop, guiding and sustaining them, and from which they originate (Marprogo, 2015). The MCs to which Brown (1994) refers encompass a "*range of general education skills that are not domain- or practice-specific, which include communication and interpersonal skills, problem-solving skills, conceptual/analytical and critical skills, visual, oral and aural skills, and judgment and synthesis skills*" (Boyce, at all 2001). Brown's (1994) notion of MCs as overarching other competencies is eloquently reflected in Cheetham and Chivers' (1996) model of professional competence which illustrates how MCs such as problem solving, analysis, creativity, self-development, and communication – which were the focus of this study – influence the development and application of other functional, cognitive, personal, and

ethical competencies. The earliest work related to MC development appears to be that of Bethell-Fox (as cited in Bolton et al., 1999), who identified 20 generic competencies that differentiate between average and superior performers, and grouped them into four broad categories.

There are many MCs classified in a number of different ways, and these contribute to a high degree of ambiguity in the definition and classification of MCs. This MC conflation makes it more difficult to align graduate MC development to the expectations of employers and the workplace. However, it appears that there are commonalities amongst the different MCs and the challenge is to classify the MCs, based on their commonalities, in a meaningful manner to allow for effective and focused research. Communication skills, Team working and Relationship building, Self and time management, Ability to see the bigger picture, Influencing and persuading abilities, Analysis, Problem-solving abilities, Leadership abilities, Presentation skills, Mobilizing innovation and change, ability to conceptualize, Mental agility, Creativity, innovation, and change, Risk taking, Learning, Demonstrating ethical awareness, and Reflection are different MCs identified by researchers over the past two decades (Marprogo, 2015). The company's competitive advantage has mostly been physical capital in the past. However, over the past half century, the importance of physical capital has been diminished and intellectual capital has been replaced with our progress, and today, most of our capital is made up of intellectual rather than physical capital. Therefore, today, companies must pay more attention to intellectual and intangible assets, along with attention to physical assets for their survival and future success to the best of our knowledge, no research been conducted to directly measure the accountants' meta-competence in Iran. The purpose of the present study is to investigate variables such as Influencing/Persuading, Teamwork/relationship building, Critical/analytical thinking, Self/time management, Leadership, See bigger picture, Presentation, and Communication, to determine the importance of them in the formation of accountants' meta-competence in Iran. Accordingly, the main issue of the present study is that how to measure the accountants' meta-competence? And to answer this question, other questions should be answered including: What is meta-competence in accountants? What is the importance of accountants' meta-competence? And what are the factors affecting accountants' meta-competence?

### **3. The Importance and Necessity of the Research**

The accounting unit, in every company and organization, is considered as the company's heart and the main lifeline. The qualifications needed by professions are changing rapidly in today's changing world, and the employees of the organizations need specific skills and capabilities to carry out their profession and career. All evaluators need professional competencies to effectively implement their job and profession. Developing countries face problems with regard to human resources including rapid population growth, rising unemployment in advanced industrial

sectors and quasi-unemployment in different sectors, the shortage of skilled and competent personnel for real national development, weakness or lack of competence organizations and lack of motivation in individuals. On the other hand, the inflationary economy of our country is an important issue that should be carefully considered in selecting resources, standards and procedures, and the type of service. Training of skilled human resources with scientific and practical abilities in different fields is as one of the main goals of human resource development plans around the world, especially in developing countries like Iran. In this regards, the success of any organization to achieve its goals depends on the effective mix of human and physical resources. Meanwhile, considering human resources as the largest and most important asset and capital of the organization is a phenomenon that has grown dramatically in recent decades. Knowledge is constantly changing and evolving along with constant changes in our environment. It is by knowledge and training development when needed that each organization can preserve its intellectual capital. Organizations have to improve their personnel capacities. Both managers and employees need to change their traditional roles and implement new duties. Considering the above points shows us the necessity for research in the field of professional competencies. Therefore, the present research aimed to achieve this goal. It is emphasized that if the professional capabilities required by accountants become clear and feedback is provided to staff and managers, this research will lead to improved performance in financial activities.

### **3.1 Research Questions**

- 1) What is the effect of 'Influencing/Persuading' in accountants' meta-competence?
- 2) What is the effect of 'Teamwork/Relationship building' in accountants' meta-competence?
- 3) What is the effect of 'Critical/analytical thinking' in accountants' meta-competence?
- 4) What is the effect of 'Time management' in accountants' meta-competence?
- 5) What is the effect of 'Self-management' in accountants' meta-competence?
- 6) What is the effect of 'Leadership' in accountants' meta-competence?
- 7) What is the effect of 'See bigger picture' in accountants' meta-competence?
- 8) What is the effect of 'Presentation' in accountants' meta-competence?
- 9) What is the effect of 'Communication' in accountants' meta-competence?

### **3.2 Research Methodology**

The present study is a fundamental research in terms of the purpose and a qualitative research in terms of the process. It is also a qualitative research in terms of data type and a cross-sectional research in terms of implementation time. The implementation logic of research is inductive-deductive and descriptive-survey and quasi-experimental in terms of its implementation. At first, the initial design of the accountants' meta-competence model is prepared, and then using the observations, the accountants' meta-competent framework is formulated. Survey research has been conducted to observe

phenomena in order to interpret different aspects of the data. More precisely, these surveys are conducted about what a group of people know and think. Due to the fact that the quasi-experimental research is used in real social conditions, it is not possible to control all variables. So, the researcher exclusively controls some of them and it can be done about humans. The strategies used in this research are interviews and questionnaire. In general, the grounded theory will be used for the purpose of the present research.

#### **4. Method and Tools for Data Gathering**

A combination of library and field method is used in the present study. The literature and research background, as the subject of the second chapter of this research, has been gathered through library studies. Data collection tool is through focal group interviews and taking notes from archival documents such as books, articles, and thesis, which are further described in more detail. The research process is conducted in two parts:

- 1) The information relating the basic principles and research literature and expresses the fundamental concepts and research framework, are extracted in the form of a study model that contains a research gap. This information is obtained using the exploratory method (library study and the use of available and updated articles in accounting databases and other appropriate databases related to the subject matter under study).
- 2) The extracted model is utilized using a the grounded research method including 4 steps: 1- extraction of statements 2- extraction of concepts 3- extraction of categories and 4- extraction of the theory. Due to the fact that the purpose of the present research is to find the categories of accountants' meta-competences, therefore, the Snowball Sampling method and the statistical population of experts have been used in this regards. After the extraction of the categories, a questionnaire is developed and provided to professors and experts in the field of accounting and the applied research objectives are discussed. After collecting the questionnaires, quantitative statistical methods are used to analyze the data and the framework was developed for the purpose of this study using the LISREL software.

The method for collecting data in this study is using the interview method and the questionnaire. We first use the interview with the experts so that we can reach the codes and concepts and then, the work is progressed by questionnaire. So, after determining the factors by the experts in the focus group interviews, a questionnaire is set to determine the importance of the factors in the accountants' meta-competence by the sample members.

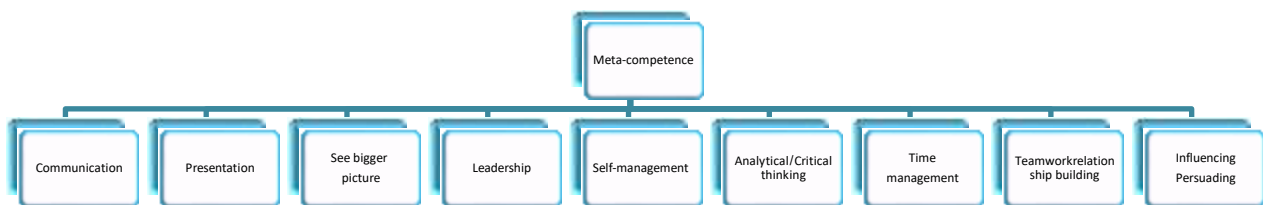
##### **4.1 Research Statistical Population and Sampling Method**

The statistical population of this research, in the issues and variables related to the accountants' meta-competence, consists of practitioners and experts in the field of accounting, including the professors of accounting and public accountants in Iran. This

research collects the initial data required by the Focal Group interview method focusing the professors and accounting instructors at universities. The group has been selected to take account the certain issues and items related to the accountants' meta-compliance from a particular point of view and to clarify the various dimensions of the meta-compliance for accountants. This research examines the state of accountants' meta-competence and the variables affecting it and relies on the purposeful sampling method.

#### 4.2 Research Variables

The variables examined in the form of a conceptual model are as follows:



**Figure 1:** Initial Conceptual Model (Source: Research Findings)

Determining and defining any of the research variables is a necessity for each research. Based on the role played by the research, variables can be divided into two groups of independent and dependent variables. The independent variable is measured by the researcher, manipulated or selected to determine its impact or relation with another variable. The dependent variable is also observed or measured to determine the impact of the independent variable on it. The dependent variable is meta-competence. The meta-competence is a person's readiness for self-actualization and self-knowledge, and this means the creation and development of the inner world of the individual, the ability to understand people, emotional states and the ability to manage emotional and mental states. There are nine variables associated with this variable in the present study, each of which is measured to determine the importance of each of them for the accountants' meta-competence.

The first independent variable is Influencing/Persuading. The ability to communicate at all levels using influencing techniques and negotiating skills to influence positively others. Convincing others is one of the basic skills of management. In this way, managers can articulate their demands without resistance from others and get positive results. Teaching and learning strategies which may be utilised to advance student competency in this area include: group work; tutorials; classroom discussions



and debates; real-life learning techniques; and work-based learning (Azevedo et al. 2012).

The second independent variable is Teamwork/relationship building. The ability to work in teams and to utilise appropriate interpersonal skills to build relationships with colleagues, team member and external stakeholders. Individuals interacting with each other will have a different level of interdependence to achieve learning goals. In collaborative groups, there is a great deal of dependency among the members of the group to carry out learning activities. Cooperative groups have a common goal, and activities are organized in a way that all members of the group are involved in all important aspects of the workgroup. Skills in this area include focused learning, the development of a team-oriented culture, group-based motivation and reward systems, top management, effective management of organizational policies, supporting others in the team, using empowerment effectively, developing their own teams and using Effective from process improvement teams to improve organizational effectiveness (Kirkman et al., 2004).

The third independent variable is Critical/analytical thinking. The ability to analyse problems and situations in a critical and logical manner and to apply workable and logical solutions to such problems. Numerous learning and teaching strategies may be utilised to promote problem-solving abilities including: case-study learning techniques; critical essay writing; problem-based assignments and projects; and work-based learning (Azevedo et al., 2012). Anis defines critical thinking as a logical and sensible thought that focuses on decision-making and judgment about beliefs and practices. He believes that when one attempts to accurately analyze the issues, search for credible evidence and reach a credible conclusion, his thinking will be critical (Azevedo et al., 2012).

The fourth independent variable is time management. Effective and effective use of time is an unavoidable necessity for success in the field of work and life. Time management involves a set of skills for controlling and using time better. Time management is a set of skills that help in effective use of time (Aomidvar, 2005).

The Fifth independent variable is Self-management. One of the most important skills that is considered essential in the knowledge economy is self-management skills. This skill is essential to solidifying the foundations of success (whether individual or corporate). Self-management is one of the areas of emotional intelligence. Time management depends on several factors, including internal factors, personality, environments, and so on.

The sixth independent variable is Leadership. The ability to lead a team whilst taking responsibility for a task, giving direction, providing structure and assigning responsibility to others (Azevedo et al., 2012). Some scholars have seen leadership as the link between a group of people, in which one man tries to push others toward a specific goal. Simply put, leadership can be defined as a process in which organization management strives to motivate and communicate effectively by encouraging

employees to take on organizational tasks and facilitating organizational goals (Alwani, 2003).

The seventh independent variable is See bigger picture. The ability to see how things are interconnected and to approach work-related issues in a strategic and innovative manner (Azevedo et al., 2012). A great image thinking provides a platform for creating and empowering a person to create value at work. Strategies to overcome traditional strategies and think big picture include assigning time to thinking, choosing an advisor, choosing specific goals, identifying practical steps, and producing ideas (Rosenstein, 2014).

The eighth independent variable is Presentation. The ability to prepare and deliver effective presentations to different audiences in a wide-range of circumstances. Verbal Presentation skills may developed across the curricula, particularly during formal lectures and tutorials where undergraduates should be encouraged to develop and practice making oral presentations in front of peers and teachers (Azevedo et al., 2012). Lecture skills are some of the key skills that can play a significant role in our career success and academic achievement.

The ninth independent variable is Communication. The ability to communicate clearly and concisely using a range of verbal and written methods (Azevedo et al., 2012). Effective communication competencies include demonstrating appropriate emotional intelligence, active listening, non-defensiveness, appropriate and skillful use of language, and body language, effective interviewing, effective negotiation, rumor control, techno-etiquette, and presentational skills, (Tubbs and Moss, 2003).

The factors identified by the experts for each variable are used to measure them and using the questionnaire for each of the sample members, one of the options of "totally agreed, agreed, no comment, disagreed and totally disagreed" are determined to quantify the significance of each of the variables on the accountant's meta-competence.

### **4.3 Data analysis**

Exploratory factor analysis and confirmatory factor analysis using SPSS and LISREL software are used to analyze the data obtained from interviews, the questionnaire and other sources. Data is obtained from information sources (interviews, documents and questionnaires). In the content analysis method, it would be tried to extract valid impression from extent texts and extract valid views. The questionnaire is set according to the important factors determined by the experts. After completing the questionnaires by the sample individuals, the data obtained using the structural equation method is used as one of the new statistical methods and the most powerful methods of multivariate analysis. Structural equation is a multivariate analysis technique of the multivariate regression category. In fact, modeling structural equations is a comprehensive statistical approach for testing the relationships between observed and hidden variables.

#### 4.4 Descriptive Statistics

The demographic variables of respondents such as gender, age, education, and work experience are presented in great detail to learn more about the sample.

**Table 1:** Frequency distribution of respondents based on demographic variables

Variable	Traits	Frequency	Percentage of frequency	The cumulative percentage
Sex	Male	188	74/6	74/6
	Female	64	25/4	100
Age	25 - 30	38	15/1	15/1
	30 - 40	123	48/8	63/9
	40 - 50	67	26/6	90/5
	Upper 50	24	9/5	100
Education	MA	137	54/4	54/4
	PhD student	82	32/5	86/9
	PhD	33	13/1	100
Work experience	Lower 5 years	57	22/6	22/6
	5-10 years	93	36/9	59/5
	10-15 years	49	19/4	79
	Upper 15 years	53	21	100

#### 4.6 Standardization of Research Concepts Measurement Tools

The measurement and structural models of the variety of research variables are analyzed in this section. For this purpose, firstly, the constructive structures of the variables of the conceptual framework of the research are identified using exploratory factor analysis. Then the identified factor structure is considered as the basis for defining questions which shows the confirmation of relations between structures and components. Answers to these questions are provided through confirmatory factor analysis and with the help of the LISREL software. The validity and reliability of the measurement tools of the research variables are examined in this way. The structural fitness model is performed on the collected data and its results are presented in the following.

In this section, we first introduce the conceptual framework of the research and then, the results of the analysis of the validity and reliability of the research tools, the study of the structural fitness model and the answers to the research questions are presented separately. Since the purpose of this study is to achieve a framework for causal relationships between variables, it is necessary to use the causal modeling method. This method explains the relationships between variables and provides a basis for inference by combining cognitive and causal information based on a certain theory. The goal in Casual Modeling is to obtain quantitative estimates of causal relationships between a set of variables.

The structural equation modeling is used in the present research which is based on the causal relationships between variables in order to achieve the research model. The most important feature of this technique is its flexibility in terms of application which makes it possible the participation of hidden variables, the application of

multiple dimensions, the possibility of error, the compatibility of distributed assumptions, and the ability to work with data types as a broad theoretical framework. In order to apply the structural equation modeling technique, it is necessary to first determine the modeling variables of the model.

The first stage in the causal model induction is the determination of the variables forming the theoretical framework of the research. The variables of the model are categorized into two groups of endogenous and exogenous and are located in the model. The definition of model variables is based on the studies and examinations required in previous studies. In this way, a set of variables related to the objectives and research questions are identified and prepared for further studies. Next, it is necessary to identify the structures associated with the variables.

By collecting data related to the model variables through research tools, we can use a combination of exploratory factor analysis methods to reduce the number of dependent variables to a smaller number of variables. The shared factors among the research variables are identified and defined in this phase as the constituent structures of the research concepts. Definition of structures must be psychologically meaningful. For this purpose, exploratory factor analysis is performed first on different variables of the model using SPSS software to identify the existing structures. Then, the appropriate names are defined for each of the structures according to the meanings of the evident variables associated with the structures.

The independence or dependence between the factors is determined by studying the research background, and, accordingly, the proper factors rotation method is detected. The factor loading, which represent the contribution of explaining the variance of the evident variables by factors, are extracted in this way, and are considered as the basis for defining the factors. In the next step, the results of exploratory factor analysis are subjected to the confirmatory factor analysis with the purpose of double assurance of accuracy and correctness.

Confirmatory factor analysis is considered as one of the methods to estimate the parameters and test the hypotheses based on the number of underlying factors and relationships among the set of factors. In other words, it is a test of the theory in which the researcher begins his analysis based on previous assumptions. The results of the confirmatory factor analysis answer this question that whether the data is consistent with a given factor structure or not. For this purpose, the researcher needs to formulate certain hypotheses and specify the number of extracted factors and variables with loads on each factor before analysis. At this stage, the researcher is able to reach several competing models by releasing or stabilizing certain parameters such as factor coefficients, factor correlation coefficients, and variance of the covariance of the measurement error. It is possible to determine how much each proposed model explains the degree of Co-variation between the variables using the LISREL software.

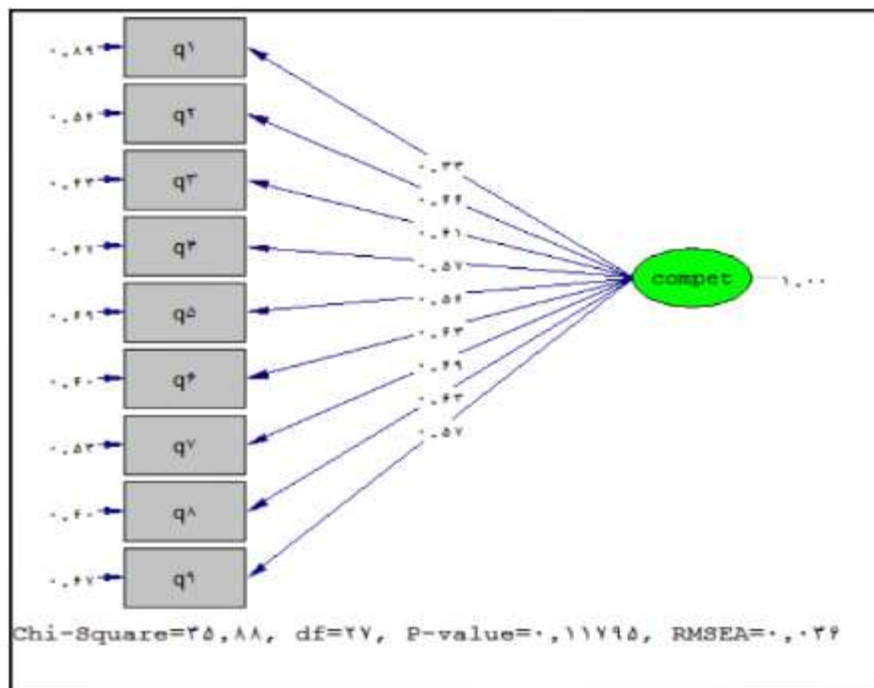
#### 4.7 Structural Model

The sampling adequacy is measured by Kaiser-Meyer-Elkin index or the Bartlett test. The results of the test for meta-competence was .891 respectively. According to the results, we can perform the exploratory factor analysis on the data. The value of the Kaiser-Meyer-Elkin index indicates the sampling adequacy and proves the suitability of the cited factor model.

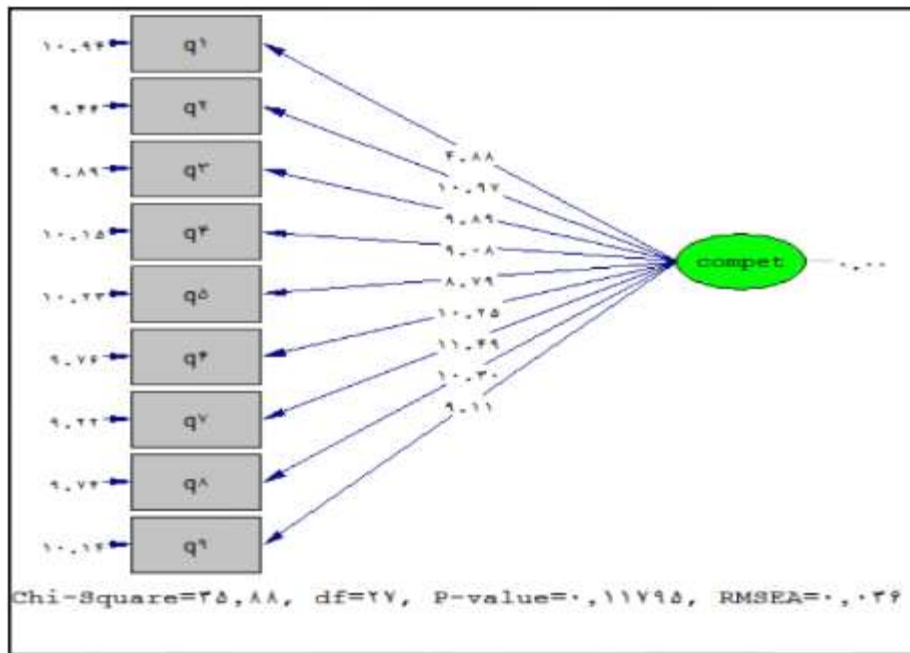
Cronbach's alpha coefficient is used for internal consistency of meta-competence. The reliability of the questionnaire is acceptable if the Cronbach's alpha coefficient is more than 0.7. The results of the test for the meta-competence is 0.817 respectively.

#### 4.8 Studying the Confirmatory Factor Analysis of Research Variables and Presenting the Model

In this section, the confirmatory factor analysis of each of the research variables is discussed. The factor confirmation of meta-competence variable and its dimensions is studied. In Fig. 2 and Fig. 3, the significance of factor loadings of the items constructing meta-competence is shown. The suitability of the fitted model can be recognized by the value of root-mean-square error of estimation and the significance of the coefficients.



**Figure 2:** The standardized coefficients of meta-competence construct  
 (Source: Research findings)



**Figure 3:** The significance of factor loadings of meta-competence construct  
 (Source: Research findings)

## 5. Conclusion

**5.1 The first question analysis:** How effectiveness of 'Influencing/Persuading' in accountants' meta-competence?

According to the previous discussion, the proposed model and the significance of the coefficients, it can be said that the Influencing/Persuading have a significant and positive relationship with the accountants' meta-competence. In other words, it is concluded that considering that the t-statistic obtained for this coefficient is 4.88, which is larger than the critical value of 1.96, the significance of Influencing/Persuading on accountants' meta-competence is significant and 0.33.

**5.2 The second question analysis:** How effectiveness of 'Teamwork/relationship building' in accountants' meta-competence?

According to the previous discussion, the proposed model and the significance of the coefficients, it can be said that Teamwork/relationship building has a significant and positive relationship with the accountants' meta-competence. In other words, it is concluded that considering that the t-statistic obtained for this coefficient is 10.97, which is larger than the critical value of 1.96, the significance of Teamwork/relationship building on accountants' meta-competence is significant and 0.66.

**5.3 The third question analysis:** How effectiveness of 'Critical/analytical thinking' in accountants' meta-competence?

According to the previous discussion, the proposed model and the significance of the coefficients, it can be said that Critical/analytical thinking have a significant and positive

relationship with the accountants' meta-competence. In other words, it is concluded that considering that the t-statistic obtained for this coefficient is 9.89, which is larger than the critical value of 1.96, the significance of Critical/analytical thinking on accountants' meta-competence is significant and 0.61.

**5.4 The fourth question analysis:** How effectiveness of 'Time management' in accountants' meta-competence?

According to the previous discussion, the proposed model and the significance of the coefficients, it can be said that time management have a significant and positive relationship with the accountants' meta-competence. In other words, it is concluded that considering that the t-statistic obtained for this coefficient is 9.08, which is larger than the critical value of 1.96, the significance of time management on accountants' meta-competence is significant and 0.57.

**5.5 The Fifth question analysis:** How effectiveness of 'Self-management' in accountants' meta-competence?

According to the previous discussion, the proposed model and the significance of the coefficients, it can be said that Self-management has a significant and positive relationship with the accountants' meta-competence. In other words, it is concluded that considering that the t-statistic obtained for this coefficient is 8.79, which is larger than the critical value of 1.96, the significance of Self-management on accountants' meta-competence is significant and 0.63.

**5.6 The sixth question analysis:** How effectiveness of 'Leadership' in accountants' meta-competence?

According to the previous discussion, the proposed model and the significance of the coefficients, it can be said that the Leadership have a significant and positive relationship with the accountants' meta-competence. In other words, it is concluded that considering that the t-statistic obtained for this coefficient is 10.25, which is larger than the critical value of 1.96, the significance of Leadership on accountants' meta-competence is significant and 0.63.

**5.7 The seventh question analysis:** How effectiveness of 'See bigger picture' in accountants' meta-competence?

According to the previous discussion, the proposed model and the significance of the coefficients, it can be said that See bigger picture have a significant and positive relationship with the accountants' meta-competence. In other words, it is concluded that considering that the t-statistic obtained for this coefficient is 10.30, which is larger than the critical value of 1.96, the significance of See bigger picture on accountants' meta-competence is significant and 0.69.

**5.8 The eighth question analysis:** How effectiveness of ' Presentation ' in accountants' meta-competence?

According to the previous discussion, the proposed model and the significance of the coefficients, it can be said that the Presentation have a significant and positive relationship with the accountants' meta-competence. In other words, it is concluded that considering that the t-statistic obtained for this coefficient is 10.30, which is larger than the critical value of 1.96, the significance of Presentation on accountants' meta-competence is significant and 0.63.

**5.9 The ninth question analysis:** How effectiveness of ' Communication ' in accountants' meta-competence?

According to the previous discussion, the proposed model and the significance of the coefficients, it can be said that the Communication have a significant and positive relationship with the accountants' meta-competence. In other words, it is concluded that considering that the t-statistic obtained for this coefficient is 9.11, which is larger than the critical value of 1.96, the significance of Communication on accountants' meta-competence is significant and 0.57.

## 6. Conclusion

When the organization uses competency models in choosing and developing individuals for key roles, the losses caused by new labor recruitment costs, poor employee morale, customer dissatisfaction, and loss of opportunities associated with Hires and improperly uses the person, and thus increases the chances of choosing people who act at a very high level and can help the company succeed. If accounting precursors are not taken into account in the selection of accountants and the issue of accounting overhead can be ignored, it can lead to large financial scandals. Managers of organizations can, by building (developing existing talent), buying new talent, borrowing (accessing think tanks through unity or participation), abandoning (weak talents), attaching (keeping the best Talent), advancement (promotion of appropriate talent) to the talents and important competencies.

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