

Identifying the Dimensions, Components, and Indicators of Employee Talent Management in the Aim of Improving the Iranian Administrative System

Mehrdad Yazdani¹, Serajoddin Mohebi^{2*}, Mahdi Bagheri³, Mohammad Hossein Ranjbar⁴

¹PhD student in Public Administration, Human Resources Management Department, Qeshm Branch, Islamic Azad University, Qeshm, Iran.

²Assistant Professor, Department of Management, Qeshm Branch, Islamic Azad University, Qeshm, Iran (Corresponding Author).

³Associate Professor, Department of Management, Bandar Abbas Branch, Islamic Azad University, Bandar Abbas, Iran.

⁴Assistant Professor, Department of Accounting and Finance, Bandar Abbas Branch, Islamic Azad University, Bandar Abbas, Iran.

Article Received: 18 Sept 2024,

Revised: 26 Oct 2024,

Accepted: 17 Nov 2024

Abstract: The present article aims to present a talent management model in the aim of improving the country's social and administrative system. The research method is applied in terms of purpose and mixed in terms of data type. The statistical population in this section consists of 292 managers and experts of the Hormozgan Governorate, and the sample size is estimated to be 166 people using the Cochran formula. The presentation of the model in this research has been carried out qualitatively-quantitatively, so that in the qualitative section, the relevant codes were extracted through library studies and interviews with experts, then the Delphi technique was used to determine the indicators affecting talent management. In the quantitative part, confirmatory factor analysis and structural equations were used to validate the model. Finally, the final research model was formed, including 2 dimensions (individual and organizational) and 8 components (retention and maintenance, skill, effective leadership, labor relations, knowledge and training and improvement, commitment, supply and adjustment of human resources).

Keywords: talent, talent management, social and administrative system, human resources

INTRODUCTION AND STATEMENT OF THE PROBLEM

The current period of human life is accompanied by amazing developments and transformations. Organizations, as a subset of human life, must prepare themselves in the face of these huge developments for survival and development; otherwise, they will be left out of the competitive world. This preparation does not mean technological and equipment readiness, but they must prepare employees, the main and valuable capital of the organization. Modern organizations consider their progress to be dependent on changes and are trying to guide their employees' talents towards ultimate success (Zikriaei, 1401: Collings and Malehi, 2009). In fact, today, the most important concern of organization managers is the development of human resources, preservation and promotion of organizational talents, so that the organization's productivity can reach its maximum. However, how human resources are utilized or their productivity increases is a problem that has existed for a long time and has been of interest to management and organization experts (Eslami et al., 1401). One of the methods of preserving and maintaining talented people in the organization is to create high cohesion and solidarity among the workforce in the organization, which is discussed in the field of social sciences under the title of social capital. Social capital is a new concept that plays a much more important role than human and physical capital in organizations and societies, and one of the factors affecting the physical mobility of elites and knowledge forces is social capital. In fact, social capital is a part of the social environment that is a combination of different elements such as social networks, social norms and values, trust, and shared resources. It can be said that social capital is a dense feature that can help describe the characteristics of a social system (Mignon et al., 2011). Social capital leads to improved

creativity and innovation through access to information resources and improving the quality of information, creating unity and solidarity among intra-organizational networks, creating mutual relations between groups, and advocating strong social values and norms that support local laws and traditions and, as a result, reducing the need for formal controls. Because by creating solidarity and trust networks, richer and more accurate information is exchanged between individuals (Pierres-Lono et al., 2011).

In the absence of social capital, other organizational assets, including human capital, which is at the forefront of this type of organizational talent capital, lose their effectiveness and the paths of economic and cultural development and evolution become uneven and difficult (Krius et al., 2007:528). There are two major challenges in relation to talent management. The first challenge, which is most often seen in organizations, is that organizations do not do anything to manage talent. In other words, the needs of the organization are not predicted and, accordingly, a plan is not determined for it. As a result, based on this approach, the organization relies on hiring talented human resources from outside the organization (Carla, 2018, Karami Gilavand et al., 1400). The second challenge is more common among large organizations. These organizations use complex models for forecasting and succession planning to manage talent within themselves, which are a remnant of systems designed for predictable environments, and these systems are costly and inaccurate for today's environment. Accordingly, the issue of talent management can be considered from different perspectives (Krishnan and Scullion, 2017; Karami Gilavand et al., 1400). Considering the increasing importance of human resources and its effective role in the success of organizations, the issue of attracting, continuous training, and retaining human resources that are capable of growth and value creation has become one of the important issues of concern to organizational managers (Tashker Jahromi et al., 1401). The country's social system also faces the consequences of the way organizations are managed. In addition to producing goods and services, organizations provide job opportunities for citizens and affect the distribution of income in a region. For this reason, it is argued that talent management also affects the social system. The country's organizations are also facing the phenomenon of talent depletion, and the preservation and maintenance of key talents has become a problem for human resource managers. In fact, in the recruitment and use of new forces in the country's executive agencies, the traditional method and general and specialized tests are used, and the aspect of talents and talent management is not considered. This problem prevents talented people from being easily attracted to organizations, and even if they are attracted, their talents are not used in a specialized way. Perhaps a study that identifies the factors affecting talent management and provides a model for it can be useful. Given the importance of this issue and the necessity of preserving organizational capital and the major role that these capitals play in the country's social and administrative system, this study has attempted to identify the dimensions, components, and indicators that affect employee talent management in line with the social and administrative system and present a model for it.

THEORETICAL FRAMEWORK OF TALENT MANAGEMENT

Today, talent management has become a basic need for organizations, and most organizations agree on the capital and talented human resources that create competitive advantage. Talent management is a professional term that became popular in the late 1960s and is still in its growth period. Based on empirical research, there is no clear and stable definition of the core structure of talent management, its defined territory, and its conceptual framework. Also, no topic has received as much attention in the human resource management literature as talent management in the past 15 years; however, the lack of clarity about the definition, scope, and overall goals of talent management has been one of the key challenges for management scholars over the past decade (Khaleeq and Ranjbarian, 2000).

The term talent management was first introduced in the late 1990s, when researchers at the McKinsey Group found that talent management was the best practice that led companies to high performance (Zakriyai et al., 1998; Preced, 1998).

In 1997, the term talent war was first introduced by the McKinsey consulting firm. In a McKinsey study, it was observed that organizations that were more successful in attracting, developing, and retaining talented managers had higher profitability. This has changed the attitude of organizations towards talented individuals and has led to them being viewed as a source of competitive advantage (Guy et al., 2009). A review of the theoretical foundations

of talent management shows that different definitions have been proposed. Talent management is a human resources strategy designed to increase an organization's ability to attract, develop, and retain individuals to empower and achieve current and future business goals (Sutileh, 2021). In another definition, talent management was defined as identifying, developing, and having high-potential employees who help the organization achieve its goals. This includes a wide range of skills, including technical and managerial abilities. (Abdul Azam Mustafa et al., 2021). Al-Mohtasb and colleagues (2020) and Adro and Ive (2020) state that effective talent management requires a comprehensive strategy that specifies methods and tools for identifying, developing, communicating, and retaining talented employees. Organizations must be global and systematic in their human capital management to gain and maintain competitive advantage in the coming years (Al-Mohatseb et al., 2020; Adro and Ive, 2020).

REVIEW OF EMPLOYEE TALENT MANAGEMENT MODELS

Various models in the field of talent management have been presented by researchers, students, researchers, experts and various domestic and foreign theorists, some of which are mentioned as examples:

Phillips and Roper's Talent Model(2009)

This model (Figure 1), which was designed for the real estate industry, includes 5 factors:

- ✓ ☐ Attract
- ✓ ☐ Select
- ✓ ☐ Engage
- ✓ ☐ Develop
- ✓ ☐ Retain employees

At the center of this model are the organization's core competencies and values. These factors are interconnected through a continuous process, strategy, execution and implementation, and evaluation. Talent management begins and develops from the core of this model. High-performing organizations have a strong culture and history. Culture includes the values, characteristics, behaviors, and operations of organization members (Phillips and Roper, 2009).

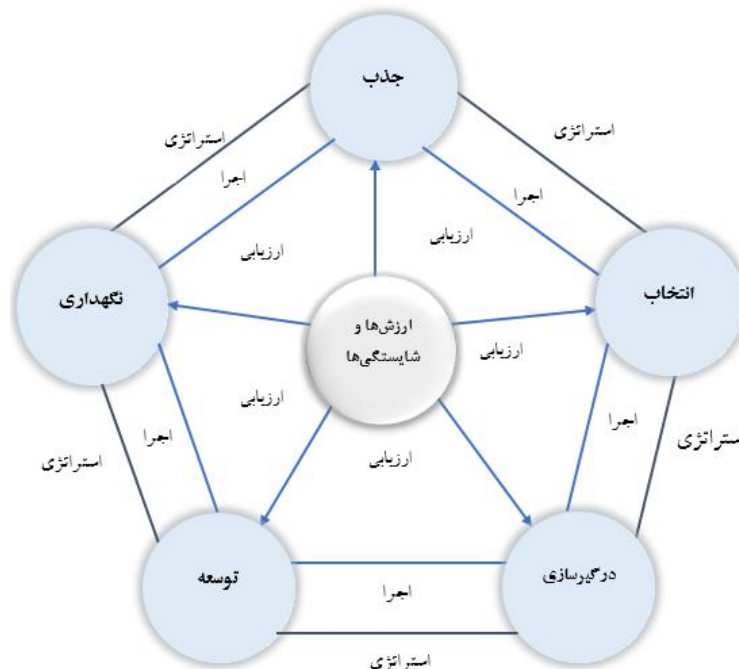


Figure 1- Talent Model (Phillips and Roper, 2009)

Strategic Talent Management Model (Collings and Mollahi, 2009)

A theoretical model of talent management has been presented by (Collings and Mollahi, 2009). One of the methods of retaining talented individuals in an organization is to create high cohesion and cohesion among the workforce in the organization, which is referred to in the fields of management, social sciences, and political sciences as social capital. Improving the level of social capital in an organization promotes cooperation, empathy, and trust,

increases cooperation between individuals in the organization, especially talented and capable individuals, and strengthens human and ethical interaction and communication (Ahmadi et al., 2012). Social capital is a part of the social environment that is a combination of different elements such as social networks, social norms and values, trust, and shared resources. Social capital can be said to be a dense feature that can help describe the characteristics of a social system (Mignon et al., 2011).

This model (Figure 2) consists of two general parts that include the following processes:

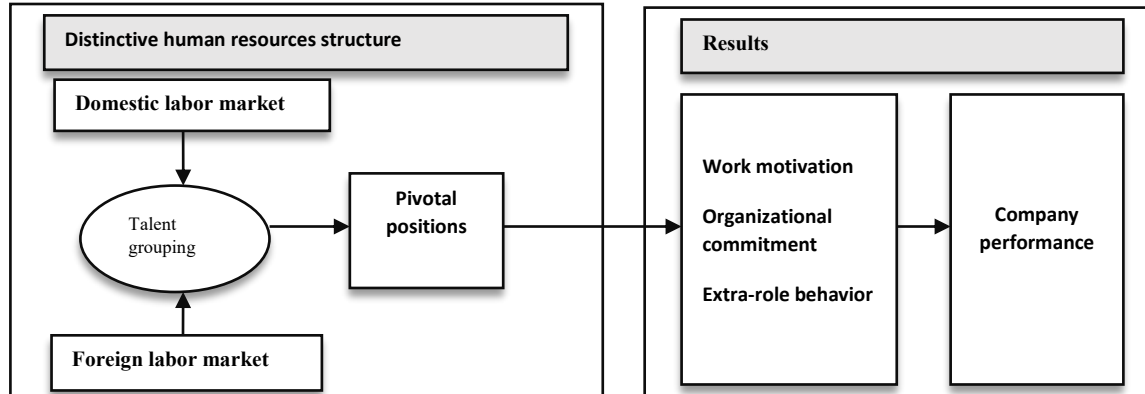


Figure 2 - Strategic Talent Management Model (Collings and Mollahi, 2009)

Talent Management Process Model (Mehmet et al., 2013)

This model was presented by Mehmet et al. (2013) (Figure 3). The basis of this model is the use of talents within the organization. In other words, this model tells organizations how to use talents within the organization to achieve their goals and if there is a gap between the talents needed by the organization and the talents available in the organization, it can be resolved through the training process.

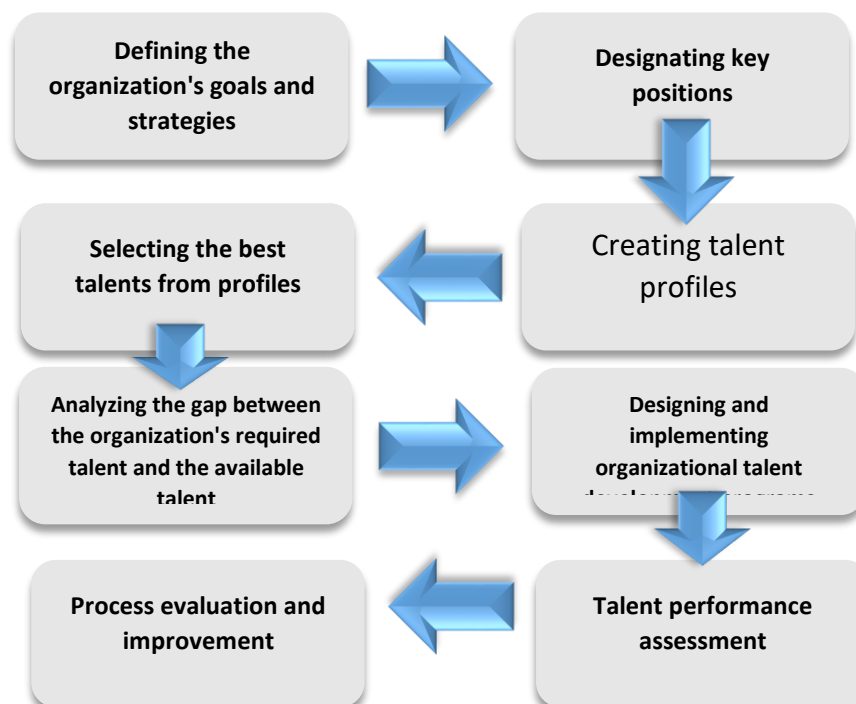


Figure 3 - Talent Management Process Model (Mehmet et al., 2013)

Armstrong Model(2006)

One of the models that has studied various aspects of talent management in a complete and comprehensive manner is the Armstrong Model (2006). In this model, the business process is mentioned as a roadmap. He believes that by studying the scarcity of talented employees and by retaining and managing talents that are attracted from inside and outside the organization, a talent pool can be formed, including a skilled, specialized and committed workforce. The elements of this model include activities related to talent attraction, talent retention and retention, and activities related to talent development.



Figure 4 - Armstrong's Talent Management Model(2006) Jeffrey's Comprehensive Talent Management Model (2006)

This model is designed based on the organization's vision and goals and the demand for talent, which is determined based on the organization's cultural and strategic priorities. After determining the required talents, it enters the talent management stage, which manages the organization's talent inventory and includes 5 stages as follows:

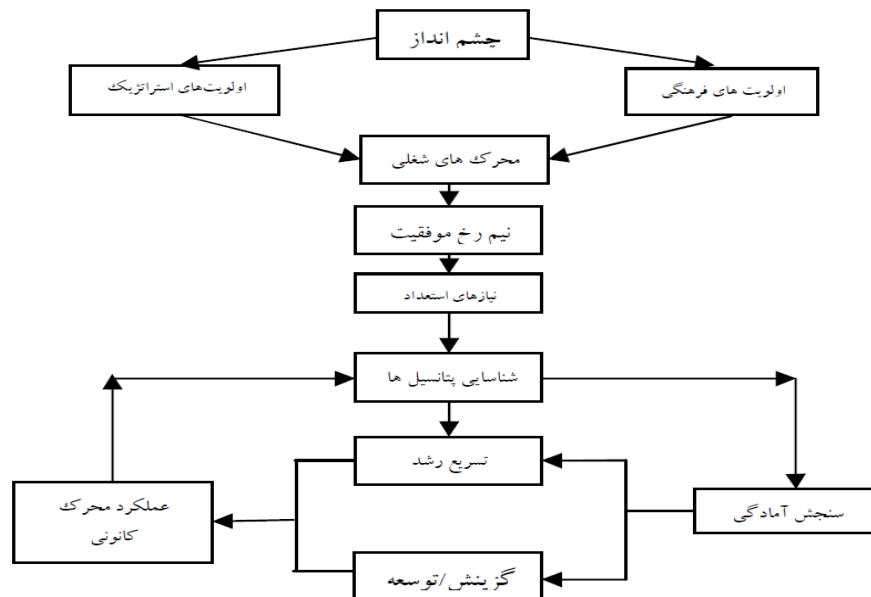


Figure 5 - Comprehensive Talent Management Model (Jeffrey, 2006)

Behaviors that are associated with a certain level of performance are defined as competencies and when they are combined with the organization's core characteristics, they are called values. Competencies are, in fact, the characteristics of an individual that are related to his or her high and desirable performance. In this framework, the competency model, along with shared values, is at the center of the organization. Based on this model, all talent management activities can be guided.

RESEARCH BACKGROUND

According to the topics discussed, there are studies related to the present topic, some of which are mentioned.

Research results, Jonas et al. (2020) on the topic of "The Relationship between Talent Management Practices and Retention of Generation Y Employees" showed that talent management practices including strategic leadership, coaching, and social media have an impact on the intention to stay of Generation Y employees.

Pawan et al. (2020) in a study titled "Strengthening Talent Management in Increasing Organizational Commitment in Developing Countries" stated that talent management has a significant and positive effect on employees' organizational commitment.

Swaim (2009) conducted a study titled "Investigating the Talent Management System and How to Utilize This System". This study, which was a mixed type (qualitative-quantitative), was conducted in one of the units of service companies in the United States of America. The results showed that continuous improvement of the work environment, an open atmosphere, and clear and unambiguous relationships at the top level of the organization are important components of a talent management system.

Eslami et al. (1401), in a study titled "Designing a Talent Management Model in the Public Sector", stated that the talent management process plays a role in the success of organizational performance by being influenced by structural, content, and external factors.

Yousefpour (1401), in a study aimed at designing a comprehensive talent management model with an approach to improving career planning in a military organization, which was conducted using a mixed exploratory method, showed that in the field of talent management, the performance management component and in the field of career planning, the employee retention component have the most impact.

The results of the study by Tashr Jahromi et al. (1401), which was titled "Investigating the Role of Talent Management and Succession Management in Developing the Performance of Iranian Audit Institutions", showed that talent management through succession management has a positive and significant impact on the performance of audit institutions at the level of individual and organizational competence. Talent management through succession management also has a positive and significant impact on the performance of audit institutions in terms of knowledge creation and application of knowledge. Therefore, it can be stated that increasing talent management through the establishment of succession management dimensions can lead to improving the performance of audit institutions.

Khaliq et al. (1400) conducted a study titled "The Effect of Talent Management and Knowledge Management on Employee Job Satisfaction" using a descriptive-survey method. The findings of the study showed that talent management and its components, namely talent recruitment and development, have an impact on job satisfaction.

The results of the study by Ranjbarian and Shokri (2014), titled "The Effect of Talent Management and Succession Planning on Preventing Administrative Corruption (Case Study: West Azerbaijan Province Judiciary)" and conducted with a descriptive-survey method, showed that talent management and succession planning (with emphasis on the 27-article guideline on managerial cadre development in the judiciary in 2019) have a positive and significant impact on preventing administrative corruption in the judiciary of West Azerbaijan Province.

Karami Gilavand et al. (1400) in a study titled "Designing a Strategic Model of Talent Management System in the Petrochemical Industry" conducted with a qualitative data-based method stated that talent management includes a complete set of processes for identifying the talents needed by the organization, employing and managing individuals in order to successfully implement the business strategy required by the organization, developing the knowledge, skills, and capabilities of talents to deal with new situations and the complexities of the business environment, and also using incentives to retain and maintain talent.

RESEARCH QUESTIONS

-1What are the dimensions, components, and indicators of employee talent management in order to improve the social and administrative system?

-2What model is suitable for employee talent management in order to improve the social and administrative system?

-3How is the proposed model validated?

Research Methodology

The present study is a mixed research type in which two approaches used in behavioral sciences, namely quantitative and qualitative, have been used. In the first stage or qualitative stage of the research, to design the research model, finding the dimensions and components of talent management begins with a qualitative approach. The researcher, while reviewing the literature on the subject and studying the records of previous research, and interviewing experts in the field of human resource management, identified a list of these components and dimensions and indicators (as described in Table 1). Subsequently, these dimensions, components, and indicators were examined using the Delphi method. The Delphi method is a structured process used to collect and classify the opinions of a group of experts and experts, which is done through interviews and distribution of questionnaires among individuals and controlled feedback of the opinions and responses received. In this method, 30 experts in the field of human resource management, including faculty members and instructors in the field of human resource management in universities and educational institutions, were used in a targeted snowball method.

To examine the face validity of the qualitative part, the method of validation by experts and review by researchers was used. In this way, the opinions of the expert group were initially obtained and they were asked to reflect their suggestions to the researcher if there were any ideas, suggestions or ambiguities in the components. Thus, the questionnaire framework designed by the expert members was revised and approved.

In the quantitative section, the model was validated using confirmatory factor analysis and structural equations. The statistical population in this section consisted of 292 managers and experts from the Hormozgan Governorate, and the sample size was estimated to be 166 using the Cochran formula.

The following formula was used to determine this sample size:

$$n = \frac{\frac{z^2 pq}{d^2}}{1 + \frac{1}{N} \left(\frac{z^2 pq}{d^2} - 1 \right)}$$

$$= \frac{\frac{1.96^2 * 0.05 * 0.95}{0.05^2}}{1 + \frac{1}{292} \left(\frac{1.96^2 * 0.05 * 0.95}{0.05^2} - 1 \right)} = 166$$

N: Size of the research population

z: The value of the test statistic, which is determined based on the level of confidence and by standard normal probability tables.

d: Test error level

P: Proportion of possession of the desired attribute

q=1-p

RESEARCH FINDINGS

a) Qualitative section findings

Through library studies and interviews with experts, 74 indicators were identified, which are listed in Table 1, along with the relevant sources. It should be noted that many indicators, for example, the level of education, training, expertise and other indicators, have been discussed in several references, but in the following table, it is sufficient to mention only one reference in summary. Next, the Delphi method was used to determine the components that have the greatest impact on employee talent management. Delphi questionnaires were prepared

with a five-point Likert scale (strongly agree, agree, somewhat, disagree and strongly disagree) and were presented to the experts in three rounds.

Table 1 - Sources and references of talent management indicators

Source	Index	Row	Source	Index	Row
Ashrafi et al. (2018)	Employee Safety and Health	38	Hadi and Rastaghi (2016)	Race	1
Rostamzadeh et al. (2018)	Job Rotation	39	Hadi and Rastaghi (2016)	Gender	2
Interview with experts	Creating Organizational Well-Being	40	Naketehtdan and Mousavi (2016)	Psychological and psychological characteristics	3
Shiman (2014)	Job Security	41	Ahmadi et al. (2015)	Marital status	4
Sidi Amir et al. (2012)	Training	42	Shaemi Ali et al. (2013)	Age	5
Phillips and Robert (2009)	Developing Intellectual Capital	43	Interview with experts	Level of general study	6
سیدی امیر و همکاران (1391)	جانشین پروری	44	نکته دان و موسوی (1395)	Level of education	7
Seydi Amir et al. (2012),	Employee development system	45	Eva Gallardo et al., (2013)	Innate talent	8
Wang-Cawham (2012)	Knowledge management	46	Rahimi (2016)	On-the-job training	8
Interview with experts	Creating a suitable mental image of the organization	47	Welens et al. (2009)	Communication skills	10
Moradi and Aini	Developing information technology	48	Moradi and Aini	Information technology proficiency	11
Razavi Seyed (2013)	Job evaluation	49	Welens et al. (2009)	General skills	12
Seydi Amir et al. (2012)	Performance evaluation	50	Naketehtdan and Mousavi (2016)	Experience	13
Ghomri Azadeh et al. (2016)	Resolving complaints and objections	51	Naketehtdan and Mousavi (2016)	Decision-making	14
Interview with experts	Inhibitory political behaviors	52	Naketehtdan and Mousavi (2016)	Specialization	15
Asheghi et al. (2017)	Facilitating communication in the organization	53	Asheghi et al. (2017)	Foreign language proficiency	16
Interview with experts	Managers' attention to subordinates	54	Nikpour Amin (2017)	Ethical commitment	17
Asheghi et al. (2017)	Work discipline	55	Pirmoradian and Mostahezian	Organizational commitment	18
Seydi et al. (2017)	Optimal recruitment	56	Ahmadi et al. (2012)	Religious commitment	19
Lari and Moradi (2016)	Dismissing inefficient employees	57	Ahmadi et al. (2012)	Behavioral commitment	20
Hosseinzadeh et al. (2015)	Buyback	58	Ahmadi et al. (2012)	National commitment	21

Source	Index	Row	Source	Index	Row
Hadi and Rastaghi (2016)	Planning	59	Nikpour Amin (2017)	Emotional commitment	22
Mozaffari and Mahmoudishenas (2017)	Organization Size	60	Hadi and Rastaghi (2015)	Organizational culture heterogeneity	23
Ghaffarii (2017)	Employee Needs Assessment	61	Serrat (2017)	Creativity	24
Shaemi et al. (2013)	Service History	62	Krishnan and Skuleonb (2017)	Organizational Dynamics	25
Rostamzadeh and Moradi Berenjabad (2018)	Job Comfort	63	Honkanen and Zhou(2018)	Type of Management	26
Heinen and O'Neill (2004)	Job enrichment	64	Asheghi et al. (2017)	Work discipline	27
Ashrafi et al. (2018)	Employee well-being	65	Marjani and Safaei (2016)	Meritocracy	28
Sidi Amir et al. (2012)	Motivation	66	Tafsiri et al. (2016)	Consistency in organizational performance	29
Ahmadi et al. (2012)	Clarifying career advancement path	67	Fact Sheet (2016)	Foresight	30
Shiman (2014)	Employee job satisfaction	68	Sohrabi et al. (2016),	Organizational flexibility	31
Lari and Moradi (2016)	Utilizing a fair reward system	69	Dezer (2010)	Ideology	32
Asheghi et al. (2017)	Organization's commitment to employees	70	Seydi Amir et al. (2012)	Employee productivity rate	33
Irfani et al. (2018)	Clarifying goals and visions	71	Asheghi et al. (2017)	Time management	34
Interview with experts	Creating value in the organization	72	Lari and Moradi (2016)	Transparency of payments	35
Amiri and Esmaili (2016)	Participatory leadership	73	Shabane (2017)	Management stability	36
Interview with experts	Types of insurance, including medical, retirement, and supplementary	74	Shiman (2014)	Job attractiveness	37

Delphi Method Results

In the qualitative section, the Delphi method was used to determine the indicators with the greatest impact on employee talent management. Delphi method questionnaires were prepared with a 5-point Likert scale and presented to the informants in three rounds. The criterion for selecting the component in each stage using descriptive statistics is to have an average of opinions higher than 3 and a standard deviation less than 1, and finally 65 indicators were selected at the end of the third round (Table 2).

Table 2 - Delphi method results on factors affecting talent management

Kendall	Standard deviation of responses	Average responses	Number of responses	Factor Description	row
2.39	0.533	4.21	30	Race	1
2.19	0.717	4.03	30	Gender	2
2.57	0.692	4.53	30	Psychological and Psychological Characteristics	3
2.32	0.821	4.09	30	Age	4
2.08	0.534	4.24	30	Education Level	5
1.33	2.59	4.43	30	Innate Talent	6
1.16	2.91	4.32	30	On-the-Job Training	7
2.28	0.616	4.24	30	Communication Skills	8
2.34	0.529	4.32	30	Information Technology Proficiency	9
2.06	0.574	4.03	30	Experience	10
2.45	0.442	4.37	30	Decision Making	11
2.19	0.616	4.09	30	Specialization	12
2.61	0.539	4.46	30	Foreign Language Proficiency	13
2.26	0.863	4.14	30	Ethical Commitment	14
2.31	0.625	4.28	30	Organizational Commitment	15
2.37	0.579	4.33	30	Religious Commitment	16
2.13	0.916	4.03	30	National Commitment	17
2.52	0.628	4.39	30	Emotional Commitment	18
2.16	0.636	4.19	30	Organizational Culture Heterogeneity	19
2.09	0.745	4.06	30	Creativity	20
2.29	0.662	4.38	30	Organizational Dynamics	21
2.42	0.713	4.47	30	Management Type	22
2.19	0.696	4.25	30	Work Discipline	23
2.47	0.673	4.53	30	Meritocracy	24
2.31	0.562	4.39	30	Consistency in organizational performance	25
2.03	0.729	4.03	30	Foresight	26
2.44	0.826	4.51	30	Organizational flexibility	27
2.14	0.795	4.14	30	Ideology	28
2.54	0.663	4.56	30	Employee productivity rate	29
2.33	0.847	4.40	30	Time management	30
2.52	0.754	4.54	30	Management stability	31
2.11	0.641	4.11	30	Organization's commitment to employees	32
2.25	0.498	4.36	30	Clarifying goals and visions	33
2.37	0.694	4.46	30	Creating value in the organization	34
2.22	0.883	4.29	30	Existence of participatory leadership	35
2.58	0.741	4.34	30	Types of insurance including medical, retirement and supplementary	36
2.19	0.715	4.06	30	Job attractiveness	37
2.34	0.804	4.15	30	Job enrichment	38
2.46	0.506	4.32	30	Employee welfare	39
2.16	0.659	4.03	30	Creating motivation	40
2.55	0.754	4.48	30	Clarifying the career path	41
2.22	0.554	4.11	30	Employee job satisfaction	42
2.39	0.673	4.28	30	Utilizing a fair reward system	43

Kendall	Standard deviation of responses	Average responses	Number of responses	Factor Description	row
2.42	0.550	4.29	30	Employee safety and health	44
2.52	0.902	4.41	30	Job rotation	45
2.36	0.878	4.23	30	Creating organizational happiness	46
2.28	0.609	4.09	30	Job security	47
2.12	0.616	4.00	30	Training	48
2.37	0.532	4.33	30	Developing intellectual capital	49
2.19	0.564	4.26	30	Succession management	50
2.43	0.572	4.48	30	Employee development system	51
2.34	0.685	4.29	30	Creating a suitable mental image of the organization	52
2.49	0.561	4.51	30	Developing information technology	53
2.29	0.716	4.34	30	Performance evaluation	54
2.43	0.823	4.48	30	Resolving complaints and objections	55
2.16	0.612	4.26	30	Inhibitory political behaviors	56
2.03	0.895	4.19	30	Facilitating communication in the organization	57
2.32	0.746	4.39	30	Managers' attention to subordinates	58
2.30	0.674	4.21	30	Work discipline	59
2.22	0.832	4.15	30	Optimal recruitment	60
2.34	0.716	4.23	30	Dismissing inefficient employees	61
2.06	0.674	4.06	30	برنامه ریزی	62
2.39	0.639	4.29	30	اندازه سازمان	63
2.09	0.745	4.11	30	نیاز سنجی کارکنان	64
2.41	0.842	4.38	30	سابقه خدمت	65

B) Findings of the quantitative section

Determining the indicators affecting employee talent management

In this section, a single-sample t-test was initially used to confirm the dimensions and components considered by the experts. This can be seen in Table 3. In examining the individual dimension, the calculated t-statistic in the model in question is 6.46. And it is significant at the 0.001 level. Also, in examining the organizational dimension, it shows that the organizational dimension is significant at the 0.001 level. In fact, individual and organizational dimensions are among the dimensions affecting employee talent management.

Table 3 - Results of a single-sample t-test to identify the impact of the individual dimension

%95confidence interval		Significance level	t-test statistic	Average difference	Name Later
Upper limit	Lower limit				
0.43	0.23	0.001	6.46	0.33	Individual
0.5	0.24	0.001	5.6	0.37	Organization

The results obtained from examining the personal data component show that this component is not significant at the 0.087 level. Comparing the mean difference of these factors (-0.01) with the mean difference of the population (zero) shows that personal data is not one of the components that affect employee talent management. Also, the results obtained from Table 4 show that the components of knowledge, skills, commitment, effective leadership,

retention, training and improvement, labor relations, and the supply and adjustment of labor component are significant at the 0.001 level and are among the components that affect employee talent management.

Table 4- Results of a one-sample t-test to identify the personal data component

%95confidence interval		Significance level	t-test statistic	Average difference	Component Name Personal Data
Upper limit	Lower limit				
0.1	-0.12	0.87	-0.17	-0.01	Knowledge
0.5	0.19	0.001	4.45	0.34	Skills
0.62	0.34	0.001	6.93	0.48	Commitment
0.64	0.36	0.001	6.83	0.5	Effective Leadership
0.56	0.3	0.001	6.39	0.43	Retention
0.61	0.3	0.001	5.71	0.46	Training and Development
0.41	0.12	0.001	3.54	0.26	Labor Relations
0.5	0.24	0.001	5.47	0.37	Manpower Supply and Adjustment
0.45	0.17	0.001	4.3	0.31	Component Name

Based on the information obtained from the analysis in the quantitative phase of the research, the steps to complete the conceptual model are completed and displayed as follows. (Hint: The red variables are removed in the next step)

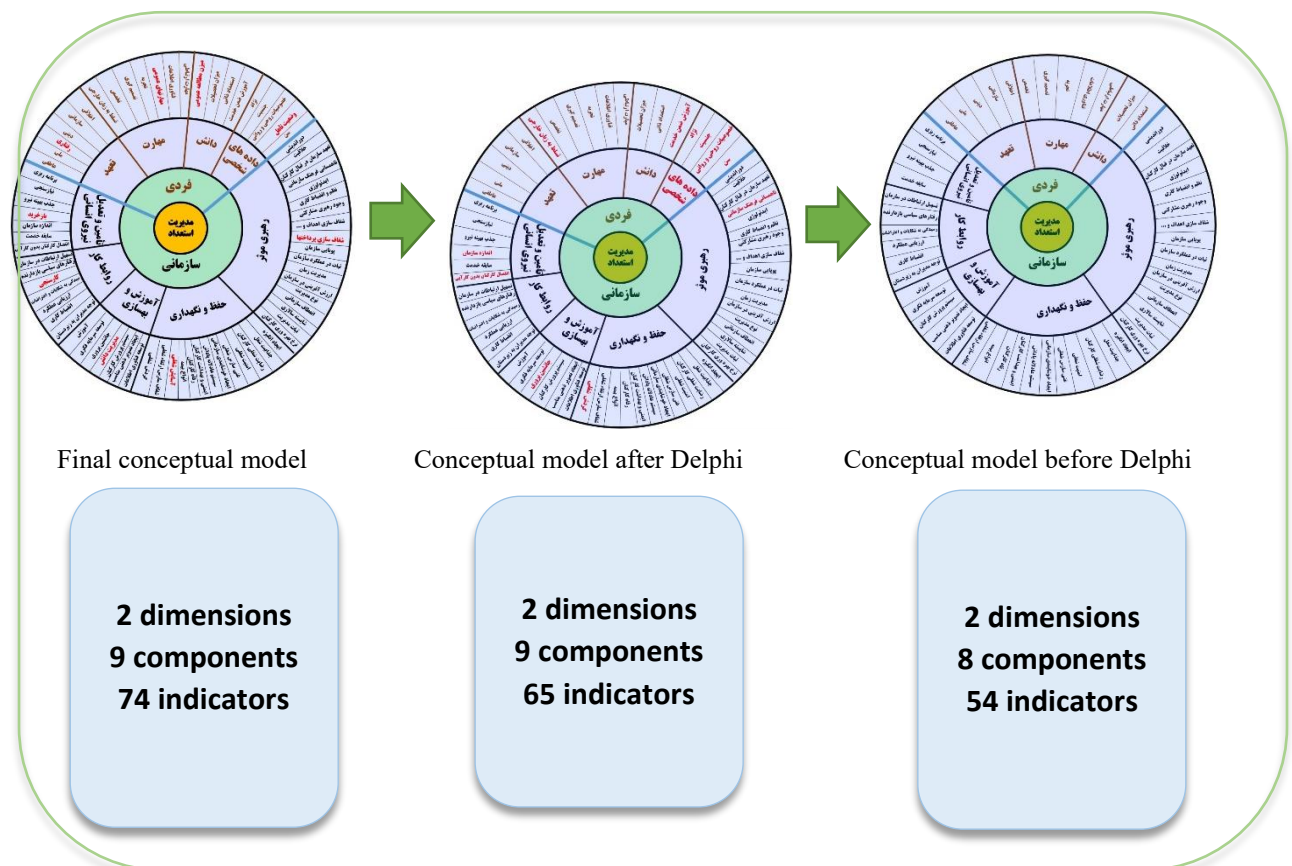


Figure 6 - Comparison of the conceptual model before, after and after the Delphi technique

Factor analysis

Factor analysis (FA) is a general term for a number of different mathematical and statistical techniques that are related to each other and are used to investigate the nature of the relationships between variables in a given set. Factor analysis is a multivariate method in which independent and dependent variables are not considered because

all variables are related to each other. This method is used to convert a large number of main variables into a smaller set of variables with the least amount of information loss. In other words, factor analysis is used to find out the underlying variables of a phenomenon or to summarize a set of data. The initial data for factor analysis is the correlation matrix between variables. According to the above explanations, the factor analysis of the present study is a confirmatory factor analysis type and the KMO and Bartlett tests are examined first.

Sampling adequacy test

As stated in the research methodology section, using the Cochran formula, the sample size was determined as $n=166$ people, which were extracted stratified and the questionnaire was distributed among them in the field, and the impact of the components and indicators affecting employee talent management was questioned. Now we want to test whether this sample size is sufficient for factor analysis and extracting the results of inferential statistics and generalizing it to the population? For this purpose, we use the KMO test, the results of which are as shown in Table 5.

Table 5 - Sampling adequacy (KMO)

Result	Test
/912	KMO

The closer the KMO value is to 1, the better the "sampling adequacy" in selecting the obvious variables. The cut-off point of the KMO index for "sampling adequacy" is stated as 0.6, meaning that if the KMO index is higher than 0.6, the "sampling adequacy" criterion is met, and if it is lower than 0.6, it means that the "sampling adequacy" criterion is not met. (Mulaik, 1987).

Considering the above and that the extracted KMO statistic is equal to 0.912, which is greater than 0.6, it indicates the adequacy of the sample size.

Bartlett's sphericity test

The Bartlett's sphericity test is to show the fact that there is enough correlation in the data matrix to perform factor analysis or not?

Table No. 6-Bartlett's sphericity test

Result	Test	
6745.26	Chi- Square	Bartlett's Test
0.0001	Sig.	

In the present study, the Bartlett's kurtosis test is significant at a level of less than 0.05, which indicates that the data correlation matrix in the population is not zero and the test is significant. Therefore, factor analysis can be performed.

CONFIRMATORY FACTOR ANALYSIS

Confirmatory factor analysis is the same as the measurement model. In the measurement model, it measures the relationship between the apparent variables and the latent variables and shows whether the apparent variable is correctly selected to explain the latent variable or not.

Factor loading

The strength of the relationship between the latent variable and the apparent variable is shown by the factor loading. The value of the factor loading is between zero and one and shows the direction and intensity of the relationship. If the factor loading is less than 0.3, the relationship is considered weak and is ignored. A factor loading between 0.3 and 0.6 is acceptable, and if the factor loading is greater than 0.6, it is very desirable (Klein, 2001). The larger the factor loading, the better the choice of the variables or indicators. If the sign is positive, it means a direct relationship, and if it is negative, it means an inverse relationship.

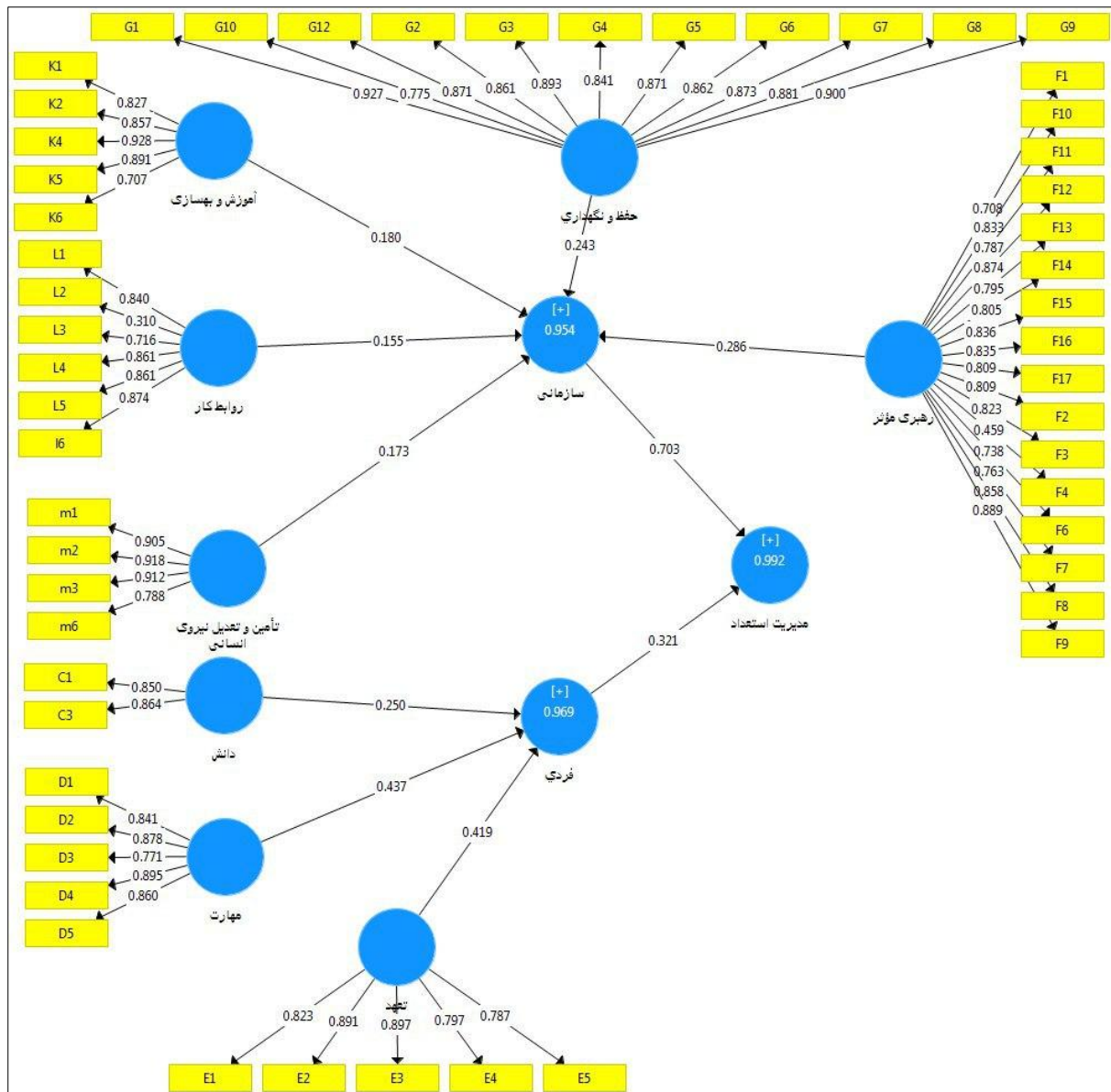


Figure 7 - Standard Calculations of Factor Loadings of Variables - Confirmatory Factor Analysis

Given that in the above figure all factor loadings are greater than 0.3, the model is desirable and shows that the obvious variables, which are indicators in this study, have been correctly selected to explain the latent variables, which are dimensions and components, and therefore the final stage is implemented.

Structural Equation Testing and Design of the Final Model

The structural equation testing is performed in order to extract the impact of each of the dimensions, components and indicators in the final model. In this section, the outputs of the model implemented by SmartPLS software are displayed. The following output includes the weights obtained for the final research model, which indicate how much each of the indicators left in the research affects employee talent management

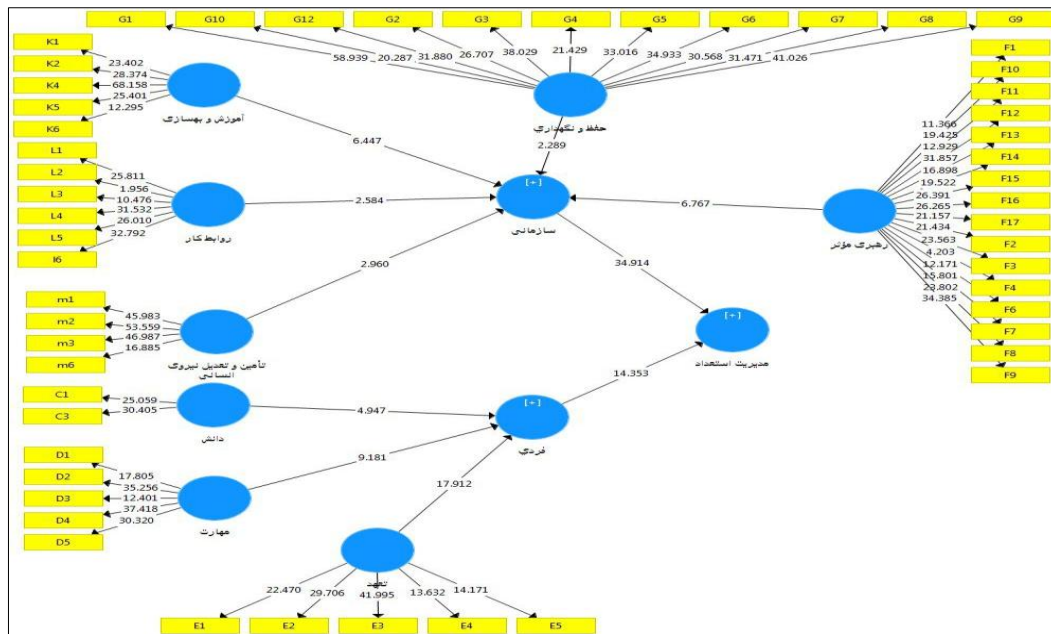


Figure 8 - Structural Equation Model - t-value calculations of standard factor loadings

Given that all t-values are greater than the t-statistic at the 0.05 error level, i.e. greater than 1.96, the test is significant

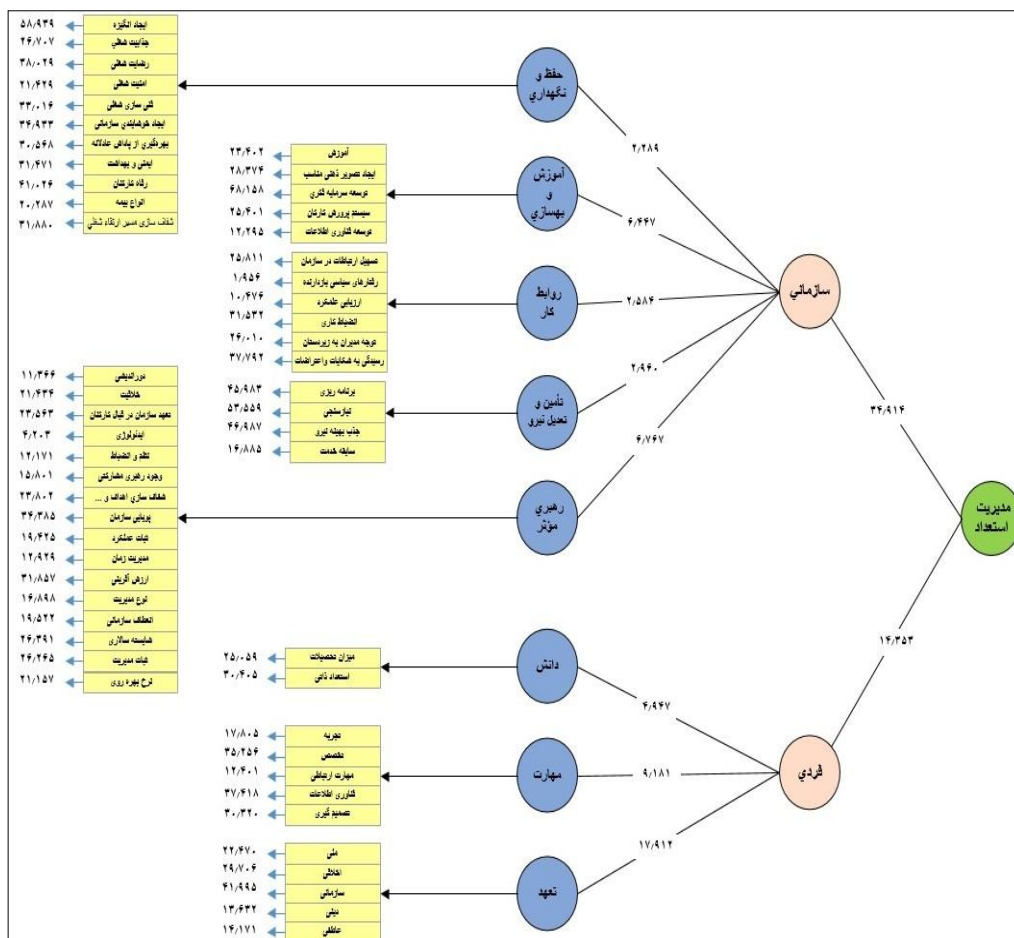


Figure 9 - Final Structural Equation Model

DISCUSSION AND CONCLUSION

Human resources play an important and vital role in the growth and development of organizations in today's changing and challenging environment. Attracting, retaining and employing talented and capable people in any organization will play a very important role in the success and development of that organization. Therefore, the processes of identifying, diagnosing and selecting the right talented people in organizations are among the most important tasks of relevant officials because talented, specialized and knowledgeable human resources are part of the assets of an organization and are the most important competitive advantage and the rarest resource in today's knowledge-based economy. The administrative system and the set of national laws also attach special importance to attracting talented and elite people. Therefore, given the importance of the subject and the issues discussed above, complete awareness of talent variables and factors affecting talent management in line with the country's social and administrative system can be a good way to attract, develop, retain and use talented people.

Therefore, in this study, an attempt was made to explain the dimensions, components and indicators of employee talent management in line with the promotion of the country's social and administrative system using a mixed research method. Thus, in the qualitative part, relevant codes were extracted through library studies and interviews with experts, then the Delphi method was used to determine the indicators with the greatest impact on talent management, which ultimately approved 65 indicators. In the quantitative part, the model was validated using confirmatory factor analysis and structural equations. Finally, the final research model was formed, including 2 dimensions (individual and organizational) and 8 components (supply and adjustment of human resources, commitment, retention and maintenance, skill, effective leadership, labor relations, knowledge and training and improvement). (Figure 10)

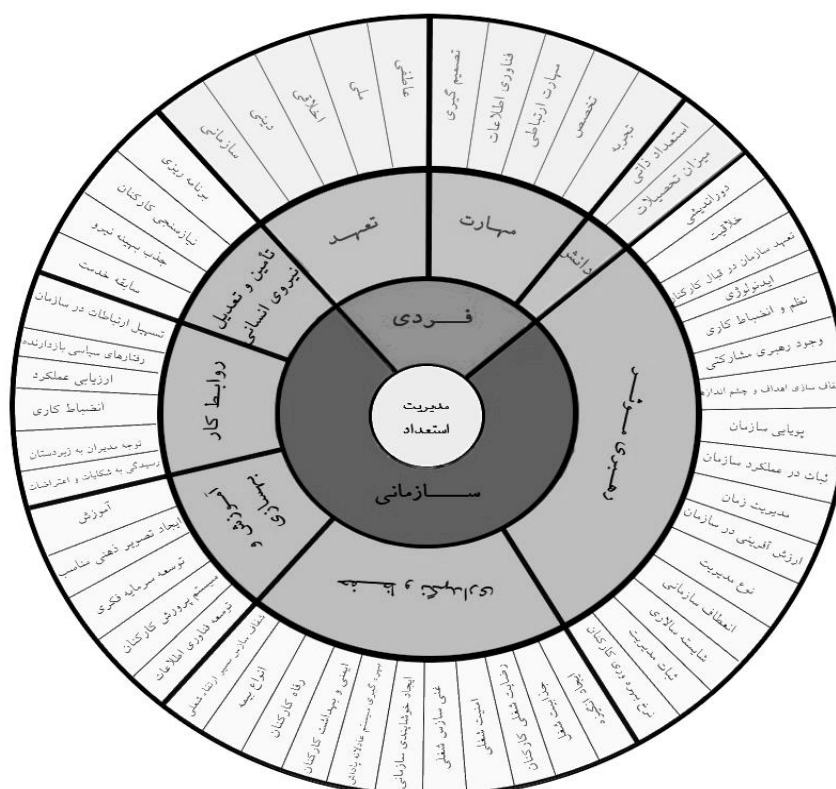


Figure 10 - Final research model

According to the results of the present study, managers of organizations in the country should pay attention to the fact that creating motivation among employees can have the greatest impact on the development of organizational talent management among other factors. Therefore, managers should be diligent in creating motivation among employees. Managers can use methods to create commitment and responsibility instead of pure obedience, create job security in the workplace, respect subordinates and avoid unnecessary strictness, provide opportunities for success for employees and their families, create financial, educational incentives and facilities, gain the trust of

the organization's employees, create job satisfaction and interest in work, provide a calm and friendly environment in the organization, delegate authority, address problems and respond to employee complaints, involve employees in decision-making, and evaluate performance fairly to create motivation among the organization's employees. The results of the present study are consistent with the studies of Islamic (1401), Taskhori Jahromi (1401), Armstrong (2006), Khaliq and Ranjbarian (1400), Sohrabi et al. (2017), Nader Ali et al. (2012), Hemtian and Niroumand (2016), Phillips and Raper (2009), Collings and Malahi (2009), Swaym (2009), Zakariai (1401), Barzegar et al.(2010) .

Suggestions

By examining the results of the present study, we find that managers of organizations should pay attention to both the organizational and individual dimensions of talent management in order to develop talent management in their organizations, with the explanation that the coefficient of influence of the organizational dimension is much greater than the individual dimension. Also, among the components affecting employee talent management, effective leadership and employee retention and maintenance have a greater impact than other components. Considering the above, the following points should be noted to develop talent management in employees of departments and agencies:

- Managers should be diligent in maintaining and maintaining existing talents.
- Education, training and improvement play an important role in talent management. Therefore, addressing this issue is very important.
- In attracting talents, the individual dimension, including knowledge, skills and commitment, should be paid attention to and taken into account.
- The type and method of management plays an important role in attracting, employing and retaining forces. Therefore, the relevant managers should have sufficient knowledge in this field and have the necessary abilities.
- In order to develop their employees and reduce the shortage among existing talents and achieve organizational strategic goals, organizations must develop appropriate training, learning, and development activities for each employee.

REFERENCES

- [1] Ahmadi, Ali Akbar, Farhani, Abolfazl, Bahmani Chobusti, Akbar, Shahbazi, Mehdi (2012). The role of social capital on improving talent management in physical education organizations, *Journal of Sports Management Studies*, 4(13): 237-260.
- [2] Ahmadi Baladehi Seyed Mehdi, Salehi Mohammad (2015). Succession planning and its relationship with the leadership style of commanders and managers, *Journal of Supervision and Inspection*, (35): 71-102.
- [3] Ahmadi, Ali Akbar, Fazeli Kobria, Hamed, Faghih, Mohammad Baqer (2012). Designing a general conceptual model of indicators and components of competency-based human resource planning, *Strategy Journal*, (66): 148-178.
- [4] Eslami, Azar, Poursadegh, Naser, and Haqiqi, Masoud (2014). Designing a talent management model in the public sector. *Quarterly Journal of Development and Transformation Management*, (48), 35-49.
- [5] Ashrafi, Sadegh, Sheikh Aboli, Fatemeh, Shams Al-Haroudi, Seyed Hassan (2018). Tools and Challenges of Human Resource Management in the Field of Health Services, *Journal of Management and Accounting Studies*, No. 1.
- [6] Amiri Zeinab, Esmaceli, Mahmoud Reza (2016). The Effect of Participatory Leadership on Talent Management, *Journal of Management Studies (Improvement and Transformation)*, 25, 80:47-64.
- [7] Taskhori Jahromi, Mohammad, Salehi, Elah Karam, Kohbar, Mohammad Amin (2013). Investigating the Role of Talent Management and Succession Planning in Developing the Performance of Iranian Audit Institutions. *Iranian Political Sociology Monthly*, 5(6), 225-241.
- [8] Khaliq, Ghader, Ranjbarian, Rasoul (2013). The Effect of Talent Management and Knowledge Management on Employee Job Satisfaction. *Journal of Human Capital Empowerment*, 4(4), 275-287.
- [9] Zakariai, Seyed Salman, Khneifer, Hossein, Ebrahimi, Salahuddin, Gholami, Bahman (2013). Designing a Model for Optimizing Talent Management: With a System Dynamics Approach, *Quarterly Journal of Development and Transformation Management*, (49), 97-113.

- [10] Rahimi, Hamid (2016). Studying the Relationship Between Talent Management and Social Capital in International Cooperation Affairs of National Iranian Oil Company, *Journal of Innovation and Value Creation*, 5(10): 79-91.
- [11] Rostamzadeh Yaghoub, Moradi Berenjabad, Asadollah (2018). The Effect of Job Rotation on Employee Productivity, Case Study of Sepah Bank Branches in Mako Free Trade and Industrial Zone, *National Conference on New and Creative Thoughts in Management, Accounting, Legal and Social Studies*.
- [12] Razavi Seyed Yousef (2013). *Modern Management Sunset*, Public Administration Training Center, Scientific, Educational and Information Monthly, First Year, No. 6.
- [13] Ranjebrian, Rasoul, Shokri, Hossein (2013). The effect of talent management and succession planning on preventing administrative corruption (case study: West Azerbaijan Province Courts). *Human Resources Excellence*, 3(1), 43-25.
- [14] Sohrabi, Roohollah, Jafari Seresht, Davood, Mayandar Bassmanj, Fahimeh (2017). Presenting a talent management framework with a human resources agility approach. *Human Resources Management Research*, 9(2), 1-20.
- [15] Seyidi, Amir (2012). Talent management in human resources development processes. *Social, scientific and cultural monthly work and society*, 149, 12-18.
- [16] Shaemi, Ali, Allameh, Seyed Mohsen, Askari, Mahboobeh (2013). Talent management strategy and its relationship with employees' emotional intelligence, *Journal of Improvement and Development Management Studies*, 23(70):47-57.
- [17] Asheghi, Hossein, Ghahremani, Mohammad, Ghorchian, Nadergholi (2017). Feasibility study of establishing a performance-based payment system to improve work culture, *Scientific, Research and Information Management Publication*, April and May 2017, No. 19.
- [18] Irfani Nasab, Yousef and Shamsi Khani, Mohammad (2018). *Strategic Human Resources Management: Necessity of Rural Water and Wastewater Companies in Markazi Province*, Second Iranian Congress of Water and Wastewater Sciences and Engineering, Isfahan.
- [19] Pirmoradian, Fatemeh, Mostahfezian, Mina (2015). The Role of Talent Management in Organizational Commitment of Organizational Employees, *National Conference on New Approaches in Management, Economics and Accounting Sciences*, Mazandaran.
- [20] Azadeh, Qamari, Abdollahi, Bijan, Zeinabadi, Hassan Reza, Tabeshfar, Gholam Hassan (2016). Evaluation of Organizational Excellence Based on Analytic Hierarchy with Emphasis on Developing Economic Capabilities of Bank Shahr, *Journal of Urban Economics and Management*, Year 5, No. 19.
- [21] Karami Gilavand Mohsen, Haghighi Masoud, Rizqi Rostami, Alireza (2017). Designing a Strategic Model for Talent Management in the Petrochemical Industry. *Strategic Studies in the Oil and Energy Industry*, 13 (51): 115-132.
- [22] Guy, Matthew, Sims, Doris (2009). *Developing Future Talent: A Practical Guide to Talent Management and Succession Planning*, Translated by: Nasrin Jazani, Tehran: Saramad Publications, First Edition.
- [23] Lari, Majid and Moradi, Habib (2016). Feasibility Study of Establishing a Performance-Based Pay System to Improve Work Culture, *National Conference on Organizational Culture*, Tehran.
- [24] Latifi, Meysam, Abdolhosseinzadeh, Mohammad and Azarfar, Amir (2016). Designing a Succession Model in Government Organizations through the Application of Structural-Interpretive Modeling. *Quarterly Journal of Government Organization Management*, 4 (16), 33-50.
- [25] Moradi, Vahid, Ayini, Mohammad Amin (2016). Smart Talent Management: A New Approach and a Superior Factor in Future Wars. *Military Sciences and Technologies*, 12(37), 111-128.
- [26] Mozaffari, Mohammad Mehdi, Mahmoudi Shenash, Mahshid, (2017). Talent Management in Small and Medium Enterprises, *International Conference on Modern Research in Management, Economics, and Tourism Industry Capability in Development*, Mashhad.
- [27] Nikpour, Amin (2017). The Effect of Talent Management on Entrepreneurial Behavior in the Public Sector: Explaining the Mediating Role of Job Satisfaction and Organizational Commitment of Employees. *Management Studies (Improvement and Transformation)*, 26(86), 97-123.
- [28] Hadi Mohammad, Rastaghi, Fatemeh (2015). *Talent Management*, Annual Conference on Business Management and Economics, 2015.

- [29] Yousef Pour (2014). Designing a Comprehensive Talent Management Model with a Career Planning Promotion Approach (Case Study: Strategic Navy of the Islamic Republic of Iran). *Marine Science Education*.
- [30] Abdel Azem Mostafa, H., Hassan EL-Sayed. Mahfouz, H., & Mohammed Araby Ebraheem, S. (2021). Effect Of Educational Program About Talent Management For Nursing Managers On Their Job Affiliation And Organizational Excellence. *Egyptian Journal Of Health Care*, 12(2), 718–740.
- [31] Adero, F. A., & Odiyo, W. O. (2020). Employee Characteristics, Contemporary Human Resource Management Practices And Organization Effectiveness. *International Journal Of Business Management, Entrepreneurship And Innovation*, 2(2), 1–18.
- [32] Almohtaseb, A., Shaheen, H., Alomari, K., & Almahameed, M. (2020). Impact Of Talent Management On Organizational Performance: The Moderating Role Of An Effective Performance Management System. *International Journal Of Business And Management*, 15, 11-24.
- [33] Armstrong, Michael. (2006), *A Handbook Oh Human Resours Management Practice*. London And Sterling VA.
- [34] Collings, D. G., & Mellahi, K. (2009). Strategic Talent Management: A Review And Research Agenda. *Human Resource Management Review*, 19(4), 304-.313
- [35] Daniel Honkanen, Hong Zhu (2018), Disruptive Talent Management, A Case Study Of A Talent Management System In Times Of Disruptive Technology Advancements Future [Online] <https://www.semanticscholar.org/> (Accessed 20 April 2021).
- [36] Deborah R. Phillips, Kathy O. Roper, (2009) "A Framework For Talent Management In Real Estate", *Journal Of Corporate Real Estate*, Vol. 11 Issue: 1, Pp.7-16
- [37] Deiser, R. (2010). *Talent Management In The Creative Age. Grow Your Talent: A Corporate Duty*. Tarrytown, NY: Marshall Cavendish.
- [38] Eva Gallardo-Gallardo, Nicky Dries, Tomás F.(2013), What Is The Meaning Of ‘Talent’ In The World Of Work?
- [39] Fact Sheet, (2016), Talent Management: Past, Present And Future [Online] <https://cct.mycpd.co.za/SABPP/Factsheets/2016/Sabpp-Fact-Sheet-April-2016.Pdf> (Accessed 20 April 2021).
- [40] Ghaffari, H., Purkiyani, M., Shkari, G. A., & Shaykhi, A. (2017). Design Of Model The Talent Management With An Approach Integrating Human Resources Activities. *Public Management Researches*, 10(36), 117-142.
- [41] Heinen, J. S., & O'Neill, C. (2004). Managing Talent To Maximize Performance. *Employment Relations Today*, 31(2), 67.
- [42] Hosseinzadeh Nojehdeh, S., & Sattari Ardabili, F. (2015). An Overview On Talent Management In Nursing. *Management Issues In Healthcare System*, 1, 4-17.
- [43] Jeffrey Gandz (2006), *Talent Development : The Architecture Of A Talent Pipeline That Work*
- [44] Kaewnaknaew, C., Siripipatthanakul, S., Phayaphrom, B., & Limna, P. (2022). Modelling Of Talent Management On Construction Companies’ Performance: A Model Of Business Analytics In Bangkok. *International Journal Of Behavioral Analytics*, 2.(1)
- [45] Karla, A. (2018). Influence Of Talent Management Practices On Commitment Of Non-Critical Employees In IT Companies In Chennai. *International Journal Of Business Administration And Management Research* 4(1), 1-5
- [46] Krause, D. R., Handfield, R. B., & Tyler, B. B. (2007). The Relationships Between Supplier Development, Commitment, Social Capital Accumulation And Performance Improvement. *Journal Of Operations Management*, 25(2), 528-545.
- [47] Krishnan, T. N., & Scullion, H. (2017). Talent Management And Dynamic View Of Talent In Small And Medium Enterprises. *Human Resource Management Review*, 27(3), 431-441.
- [48] Marjani, A. B., & Safaee, N. (2016). Surveying The Influence Of Talent Management On Meritocracy. *Journal Of Administrative Management, Education, And Training*, 12(3), 292-299.
- [49] Mediating Role Of Competency Development. *Economic Research-Ekonomiska Istrazivanja*, 2020, Vol. 33, No. 1, 1330–1353.
- [50] Mehmet Altinöz, Demet Çakiroğlu, Serdar. (2013). Effects Of Talent Management On Organizational Trust: A Field Study. *Procedia - Social And Behavioral Sciences*, 99, 843 – 851.
- [51] Mignone, J., Elias, B., Hall, M. (2011). Validation Of A Culturally Appropriate Social Capital Framework To Explore Health Conditions In Canadian First Nations Communities. *The International Indigenous Policy Journal*, 2(3), 1-18

-
- [52] Mignone, J., Elias, B., Hall, M. (2011). Validation Of A Culturally Appropriate Social Capital Framework To Explore Health Conditions In Canadian First Nations Communities. *The International Indigenous Policy Journal*, 2(3), 1-18
- [53] Mulaik, S. A. (1987). A Brief History Of The Philosophical Foundations Of Exploratory Factor Analysis. *Multivariate Behavioral Research*, 22, 267-305.
- [54] Pa'wan, F., & Said, I. (2020). Strengthening Talent Management In Enhancing Organizational Commitment In Developing Countries. *Revista argentina De Clínica Psicológica*. Vol. XXIX, No4, 67-79.
- [55] Phillips, R & Roper, O. (2009). "A Framework For Talent Management In Real Estate". *Journal Of Corporate Real Estate*. Vol. 11, No. 1, Pp. 7-16.
- [56] Preece, J. (1998). Ethnic Cleansing As An Instrument Of Nation-State Creation: Changing State Practices And Evolving Legal Norms. *Human Rights Quarterly* 20(4) 817- 842. Retrieved September 1, 2000, From Project Muse Database, On The World Wide Web: <http://Muse.Jhu.Edu/seychwr>, A. (2004), *Talent Management Systems, Best Practices In Solutions For Recruitment, Retention And Workforce Planning*, Wiley, New York, NY.
- [57] Richard S., Audrey B. Smith, Scott Erker, *Nine Best Practices For Effective Talent Management*
- [58] Schiemann, W. A. (2014). From Talent Management To Talent Optimization. *Journal Of World Business*, 49(2), 281-288.
- [59] Serrat, O. (2017). A Primer On Talent Management. In *Knowledge Solutions* (Pp. 385-393). Springer, Singapore.
- [60] Shabane, T. S. (2017). *The Integration Of Talent Management And Knowledge Management In The South African Public Service* (Doctoral Dissertation, University Of South Africa).
- [61] Sottile, S. N. (2021). *Talent Management And Organizational Performance Correlation Of Faculty At Community Colleges In Southern California*. Grand Canyon University.
- [62] Wang-Cowham, C. (2012). *Talent Management And Knowledge Management : Toward A Critique And Theoretical Integration*.
- [63] Wellins, R. S., Smith, A. B., & Erker, S. (2009). *Nine Best Practices For Effective Talent Management*. Development Dimensions International, 1, 14.
- [64] Younas, M., & Waseem Bari, M. (2020). The Relationship Between Talentmanagement Practices And Retention Of Generation 'Y' Employees: