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Designing and Developing the Model of Talent Management Process at Ahvaz Jundishapur University of Medical Sciences

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Abstract

Introduction: Talent management assures the organizations that competent people with the right skills and right job position are employed. Moreover, paying attention to the performance of universities and the strategic role that they play in advancing the country's goals is important Is of utmost significance The talent management process of faculty members in talent-based universities is essential to be designed and implemented in a way that the best individuals are considered and employed. The present study was conducted to design the model of talent management process fo Faculty Members for the Universities of Medical Sciences.

Methods: This is an applied and mixed method study. In the qualitative part, using semi-structured interviews with 17 experts of Ahvaz Jundishapur University of Medical Sciences, the components of talent management were identified and analyzed by content analysis method. Using this interview method, the researcher asked all the respondents the same questions, and the sequence of the questions were predetermined based on the theoretical foundation. In the quantitative part, the statistical population consisted of 615 faculty members of Ahvaz Jundishapur University of Medical Sciences. The sample size was estimated 240 people using Cochrane method (1977) randomly.

Results: Findings of the quantitative section confirmed the structure of talent management process which includes five distinct dimensions, identification and determination of talent needs, acquisition, development of potential abilities, strategic utilization, and maintenance of talents. Finally, a model for talent management process was proposed at Ahvaz University of Medical Sciences based on data from qualitative and quantitative research. According to the main findings of this study, 5 main categories and 14 subcategories show that the cases proposed by the experts are appropriate with the talent management process.

Conclusion: The based-on results, it has showed that talent management model is approved to Ahwaz University of medical sciences. The components of recruiting talented personnel, identifying talented employees, talent development, talent utilization, and talent retention was appropriate for presenting the talent management model.

Keywords: Talent management, Faculty members, Ahvaz University of Medical Sciences.

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Background

resources are not considered the only advantage in talent-based organizations, but human resources are considered the most important competitive advantage and organizational capital. Therefore, the valuable role of talents in the organization is emphasized in talent-based organizations and their optimal management is considered very important and sensitive. In the current competitive status and in an environment where continuous changes and continuous innovations are the main feature, only organizations are successful that understand the strategic role of their human resources and have

skillful, knowledge-based, competent, elite and capable human resources (1).

Modern economic theories emphasizing the knowledge-based economy consider that the most successful economy in the future is that which produces and distributes knowledge and exploits it commercially. Therefore, the role of human capital in the production of knowledge and gaining income has been increasingly considered in the modern economic theories (2). Talent-based organizations are increasingly emphasizing knowledge and knowledgable employees in the age of knowledge and we are witnessing a paradigm shift from traditional human resource management to a new human

resource management by the emergence of words such as talent management that emphasizes attention to the organizational elites. Therefore, in the field of human resource management, the need to design a comprehensive process of talent management is emphasized. Hoseini (2011) stated that creating a talent treasury, not leaving the organization by talented people, and not leaving key positions and job stability and security werethe most important results of talent management. Soltani (2010) showed that talent management involves improving individual performance, which leads to improved organizational performance. The results showed that it had a positive effect on continuous management of competitive advantage. Wellins (2017) stated that the more employees understand the effectiveness of talent management practices, the greater their commitment to leadership competency will be.

Since talent management assures the organizations that competent people with the right skills and right job position are employed (3); moreover, paying attention to the performance of universities and the strategic role that they play in advancing the country's goals is important is of great importance The most important assets of any university are its faculty members (4) that are considered as the main forces of performing higher education commitments and authorities of extending knowledge and technology and as educators and trainers of specialist community forces and in general, development directors in the overall dimensions of higher education institutions and universities (5). Thus, faculty members are among the largest resources available in universities and colleges despite the continuous changes in higher education and numerous recruitment opportunities. Therefore, the talent management process of faculty members in talent-based universities is essential to be designed and implemented so that the best individuals are considered and employed. It should also identify and recruit the best ones who are the scientific talents, and take measures that these individuals get willing to cooperate with universities.

Therefore, we first take a look at the literature of talent management and its different approaches, and then the characteristics of talent-based organizations are discussed. The word 'talent management' was presented in the late 1980s when researchers of the McKinsey Group found that the best actions that caused high-performance companies was talent management. Swailes and Blackburn (2015) mentioned that the impact of human resource management on talent management is also important because it determines how an academic organization

works to maintain its talents and improve the working conditions in the organization (6). Reviewing and investigating the literature of talent management shows various definitions. Talent management is the strategic management of the talent flow in an organization. Its purpose is to ensure an optimal supply of talents to adapt the right people with the right jobs at the right time based on the organization's strategic goals (7). In other definitions, talent management encompasses all HR processes, management of affairs and technologies. Talent management generally means exploring, discovering, selecting, retaining and maintaining, developing and improving, employing and reconstructing the workforce. Talent management involves a set of tools needed to support these processes which are distinctly defined by industrial experts and consultants, but it also includes employment, performance management, competency management, succession management, career path development, and payroll (8).

Walker states that three positions or brainstorming can be identified in talent management. The first brainstorming is the perspective of researchers who consider talent management as a new title or label for human management. The second brainstorming adopts a position contrast to the first brainstorming and states that talent management is not a new label but fundamentally a separate issue from human resource management. The third brainstorming adopts an interstitial position between the two previous positions and states that talent management is a form of human resource management that has a selective focus. According to this view, talent management may use the same HRM tools.

In this regard, it focuses on a relatively small part of the employees who are identified as "talented employees" by their current and potential performance. This brainstorming emphasizes identifying the key posts in talent-based organizations (and not all organizational posts, posts that are fundamentally related to the competitive advantage of the organization) (9). This latter view is the framework used in this study and seeks to provide a relative recognition of the concept of talent management in talent-based organizations according to this brainstorming.

Talent management is important for two general reasons: First, implementing the talent management strategy causes the successful obtaining and maintaining thetalent, and second, these employees are selected and prepared for key positions in the future (10).

Chiz, Thomas, and Crick (2008) believe that

a talent-based organization invests in creating distinctive capabilities for managing talents in order to create exceptional outcomes and values for the organization. In these organizations, competencies are the basis for the formation of human resource actions, so that competencies are properties that individuals possess and they are used in the right way to achieve the desirable performance. This property includes knowledge, skill, self-concept aspect, intellectual and subjective patterns, the way of thinking and practice, feeling and action (11).

Hertman (2010) states that human resources management in these organizations focus on the people who do work rather than the work done by the individuals (12). Talent-based organizations practice very well at determining and defining talent needs, discovering and identifying diverse sources of talent, developing individual and collective talents of the organization, and assigning and utilizing the talent in a way that obligeds them to follow an appropriate set of goals. These capabilities of the talent management process provide a distinct organizational capability and a source of sustainable competitive advantage if it is integrated and aligned with the overall strategy of the organization (13).

According to the studies conducted in the field of talent management, although the issue of talent management has been proposed in the world organizations since 1997, the importance of these issues in Iran can be attributed to recent years. Therefore, lack of a comprehensive research in this field forced the researcher to design a model in relation to the talent management process at Ahwaz University of Medical Sciences. The main purpose of this article is to design and develop the model of talent management process in Ahvaz University of Medical Sciences.

The Research Ouestion

What are the components of the talent management process at Ahvaz Jundishapur University of Medical Sciences?

Methods

Since the purpose of the study was to provide an applied model for the talent management process in Ahvaz Jundishapur University of Medical Sciences, a mixed research method was used. In this way, qualitative data were collected through content analysis method and then, based on findings from qualitative data, quantitative information were collected. The qualitative information collected at the beginning of this type of research helped to

discover and identify the phenomenon under the study and then to explain the relationship between the components of this phenomenon by collecting quantitative information and answer the question "What are the components of the talent management process in Ahvaz University of Medical Sciences?" By this method, a phenomenon can be identified, and then the themes are determined, tested, and measured by preparing an appropriate tool. The statistical population in the qualitative section consisted of faculty members of Ahvaz University of Medical Sciences who were experts and aware of the research topic. 35 individuals were identified for designing the model in the qualitative stage based on purposive sampling strategy; they were experts in this subject. Semi-structured interviews were conducted with 17 subjects according to data saturation criteria and repeating information. Using this interview method, the researcher asked all the respondents the same questions, and the sentencing of questions was predetermined based on the theoretical foundation. When conducting interviews, appropriate with the circumstances of the interview, the length of each session was at least 20 minutes and more questions were asked to provide the researcher with broader and deeper information.

In this study, asking question and investigating the members were used to validate the study. The results of the analysis and classifications were approved by the experts, and an experienced researcher approved the qualitative research. The text of the interviews were fully recorded, typed, and then entered into the MAXQDA version 2 software to facilitate data encoding.

Statistical Population in the Quantitative Stage

615 subjects participated in this stage. To determine a representative sample size from the target population, different strategies can be used according to the necessity of the research work. Use of various formulae for determination of the required sample sizes under different situations is one of the most important strategies. Random sampling method was used for sampling according Cochrane method (1977). 240 individuals were selected according to Cochrane (1997). Cochran (1977) developed a formula to calculate a representative sample for proportions as n₀₋ where, n₀ is the sample size, z is the selected critical value of desired confidence level, p is the estimated proportion of an attribute that is present in the population, q=p-1, and e is the desired level of precision. Structural equation modeling was used to test the model in the data analysis stage by Lisrel software. The validity of the instrument

Table 1: The extracted codes

Latent variable (structure)	Observed variables	Indicators of each variable		
,	Identifying and determining the gaps between the current and future talents of the organization	Explaining and determining the current status of the university (in terms of capabilities and skills and finding the shortcomings and needs), explaining the current status of the university (using the Swat matrix) drawing a clear picture of the specific combination of knowledge, skills and attitudes required by the organization in the present and future to effective implementation of university strategy		
	Determining the levels of general competence of employees	Personality (risk, challenge, mere disobedience, courage, perspicuity, high adaptability, hope for the future, motivation) Emotional intelligence and verbal skills (high public relation, fair-spoken, hearing, persuasion, being extroverted, having high tolerance threshold) behavior (striving, patient, being sensitive and persistent, tirelessly, high morale, conscientiousness, responsibility and accountability, accepting responsibility, love for service, avoiding hypocrisy, being truthful and honest, influencing decision making, influencing university performance, promoting work and being pragmatic), innovativeness (Entrepreneurship, creative and being inventive, searching, curiosity, designer and innovation, having power of thinking, evolving, non-daily life, reforming), idealism (perfectionism, high expectations, successfulness, belief in principles), the power of learning (intelligence, rapid learning, learning from experience and failure, openness to new experiences, continuous learning) and jurisprudence (obedience to rules and regulations, law-centered, full knowledge of the university, flexibility in the framework of law)		
	Determining the compatency levels of employees	Specialty (higher education, having specialized knowledge and skills related to education and research, computer literacy, work experience), scientific-research backgrounds (scientific, research and cultural background, interest in science, having educational skills) and executive skills (problem-solving, ability of guiding and leadership of time management, crisis management, organizing ability, planning ability, conflict resolution, guidance and leadership skill, problem-solving ability)		
Talent acquisition	Evaluation of Competence Levels (Screening and selection)	Investigating and analyzing resume of applicants, evaluation of their knowledge and skills through structured interviews		
	Factors Influencing talent acquisition	Opportunity for professional and scientific development, availability of resources and facilities for scientific activities and job security, brand and reputation of the university, existence of material and spiritual rewards		
Developing potential abilities of talents	Designing learning programs with high performance	Professional development (it should improve educational, research, technology, and interpersonal skills, especially the skill to communicate effectively with managers and deputies with students), individual development should include plans to develop individuals' internal capacities (developing internal capacities such as learning capacity, thinking capacity, communication capacity and execution capacity), improvement of professional ethics (creativity, risk and innovation, quality of work life and job commitment in people)		
	Evaluating learning	Evaluating learning effectiveness, results and outcomes, improving skills and competencies to improve performance		
Strategic utilization of talents	Coordinating and aligning talents with expectations of employees and goals of organization	Coordinating and aligning as much internal and external talents as possible (positions, roles, units, etc.) that they are needed the most or best suited to the positions, providing opportunities for individuals to meet their current needs and prepare themselves to face future challenges and opportunities.		
	Combining and recombining talents	Determining high-level performance expectations for Faculty Members, utilizing the talents and abilities of individuals in the best and most effective way possible, providing opportunities to flourish and emerging talents, and providing continuous and constructive feedback on their performance.		
Talent retention and maintenance	University support	The amount of support of university, environment, or favorable working conditions, supportive managers and colleagues		
	Research atmosphere at university	Innovation and advance-oriented of university, academic and scientific freedoms, giving time and opportunity to research, value research successes, research facilities and supports		
	Education atmosphere at university	Existence of educational facilities, educational support		
	Working condition	Mobility and dynamic of colleagues, job security, salary, fair benefits and rewards, work-life balance, competency of management team and administrative staff of college and university		
	Development of job path	Giving authority to Faculty Members to take their own career fate and completing their work resume, ensuring that university managers understand their job expectations and aspirations.		

was investigated by referring to library studies and consulting with the experts in the form of focus group. Cronbach's alpha coefficient and exploratory factor analysis was used for reliability according to the availability of the initial model to investigate the internal consistency of the questionnaire and the standardization of the research structures. Statistical analysis was performed with Lisrel software

Results

The qualitative analysis of the data led to the extraction of 224 initial codes. Finally, 107 codes were extracted after numerous reviewing and merging of the codes based on similarity in several stages; thus, the main themes of the study were extracted by forming 5 classifications, and the relationships between the categories were identified and the information needed regarding the main question was obtained, which will be discussed in detail in the results section.

The research findings were analyzed in two parts

Table 2: KMO and Bartlett test results

Tests	Values
KMO	0.88
Bartlett test	4.33
Significance	0.001

of qualitative and quantitative studies. At first, the components of talent management process were identified for Ahvaz University of Medical Sciences; then, the pattern test was performed for developing the questionnaire.

Analysis of the Qualitative Findings

The qualitative analysis of the data led to the extraction of 224 initial codes. After unmourns review and integration of the codes based on similarity in several stages, finally 34 codes were extracted that categorized under five main categories of identifying and determining talent needs, talent acquisition, developing potentials abilities of talents, strategic

Table 3: The values of the factor loadings of the components and reagents of talent management process

Questions	Identifying talented employees	Recruiting talented employees	Talent development	Talent development	Talent retention
1	0.50				
2	0.60				
3	0.64				
4	0.65				
5	0.62				
6	0.55				
7		0.52			
8		0.71			
9		0.66			
10		0.72			
11		0.54			
12		0.62			
13		0.61			
14		0.64			
15		0.61			
16			0.57		
17			0.69		
18			0.50		
19			0.78		
20			0.63		
21			0.61		
22			0.76		
23				0.79	
24				0.55	
25				0.62	
26				0.74	
27					0.79
28					0.77
29					0.66
30					0.65
31					0.74

utilization of talents, and talent retention (Table 1).

Analysis of the Quantitative Findings

In the quantitative stage, based on the qualitative findings, a 31-question questionnaire was developed based on the components of talent management process and after implementing, validity and reliability of the components and reagents of talent management process were determined based on variance-based structural equations approach to confirm the management process model by Lisrel software.

Validity of Questionnaire

Exploratory factor analysis was used to investigate the construct validity of the questionnaire.

According to Table 2, the results of Bartlett test show that the matrix of correlation coefficients of variables forms a single matrix in the population. Factor analysis can be used to discover questions.

Reliability of the Questionnaire

The overall reliability of the questionnaire was calculated using Cronbach's alpha coefficient after conducting a preliminary study and determining the variance of the questions; a coefficient of 0.84 was obtained and the reliability coefficients for the components of talent acquisition questionnaire were estimated 0.81, identifying talented employees 0.85, talent development 0.82, talent utilization 0.89, and talent retention 0.90.

The values shown in Table 3 indicate that factor loadings related to all components and reagents of the talent management process have a desirable position. In other words, the correlation of the talent management process with the components and reagents related to these components is estimated in the Table above. As a result, the tool for measuring these components and the concept of talent process management have a factor validity. The measurement model of the main categories of talent management, which has been significantly demonstrated using factor analysis, is shown in Figure 1 and Table 4.

Discussion

The purpose of this study was to design a model for talent management process in Ahvaz University of Medical Sciences. According to the main findings of this study, 5 main categories and 14 subcategories, including identifying and determining talent needs, identifying and determining the gaps between the current and future talents of the organization, determining general competency levels of employees, determining specialized competence levels of

employees (talent acquisition), evaluating the competency levels (screening and selection), factors affecting talent acquisition, talent development (increasing learning capacity in the organization, designing high-performance learning programs, learning assessment), strategic utilization of talents (coordinating and aligning talents with expectations of employees and goals of the organization, combining and re-combining talents), retention and maintenance of talents, support of university, research atmosphere at university, education atmosphere at university, working conditions, development of occupational path) formed the talent management process from the perspective of experts. Reflection is these cases shows that the cases proposed by the experts are appropriate with the talent management

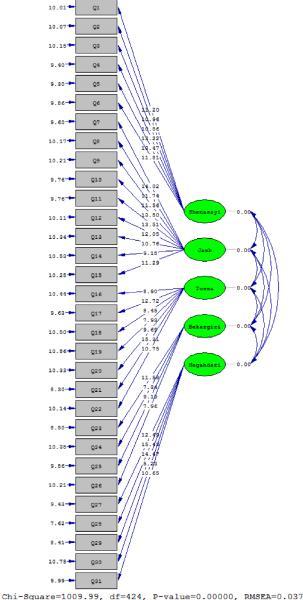


Figure 1: Talent Measurement Dimensions Model Using Factor Analysis

Table 4: Fitted index of structural model

General fit indicators									
	Thrifty			Comparative			Utter		
RMSEA	PCFI	PNFI	CMIN/DF	CFI	TLI	Р	DF	CMIN	
0.001	0.69	0.71	3.82	0.88	0.87	0.001	0.31	80.44	

process. In the quantitative stage, based on the findings of the qualitative stage, the model test was conducted based on structural equation modeling and the values of factor loadings of all components and reagents of the talent management process were confirmed. At the stage of identifying employees, all the resources available in the university to provide talent must be identified. The important thing at this stage is to know where the talented people can be. After identifying the sources of talent, there is the recruitment phase. At this stage, it is necessary to evaluate the levels of competencies (screening and selection) of the applicants. Using competency models is the best recruitment measure for screening and selecting. After recruitment of talented people, there is the stage of talent utilization. At this stage, the university use methods to coordinate and align the internal and external talents as much as possible. As to development, authorities should consider professional and individual development of members. It is necessary to improve educational, research, technology and interpersonal skills, especially skills in creating effective communication among people, employees and students. Finally, there is the stage of maintaining them. At this stage, the most important factors affecting the maintenance of people is the level of support of the university. Maintainance requires not only the provision of the necessary knowledge and technology, but also the existence of a favorable work environment or conditions, managers and supportive cooperation.

Other studies (SWEEM, 2009; PHILLIPS, 2009; HADDADI,2015) on the models of talent management process propose similar components about talent management process, but some of the features in this study are not mentioned in any of the available resources, and it has been mentioned less or expressed with other features. For example, Perry considers the talent management process including factors such as recruitment, selection, engagement, development and improvement, retention and maintanace of the employees; the obtained components are largely consistent with those of this study (14). Collins and Malahi believe that the key positions of the organization must be identified in the talent management process; then, the knowledge, competencies and skills appropriate to these positions

must be defined, and ultimately the source of talent should be created. The obtained components are consistent with the present study to some extent (3). Lewis and Heckman (2006) believe that the talent management process involves identifying the existing potentials, assessing their readiness, developing talents, selecting and utilizing talents, and ultimately emphasizing their performance, which is consistent with some of the components of the present study (15). Armstrong considers the talent management process including activities related to talent acquisition, activities related to talent retention and activities related to talent development which is consistent with some of the components of the present study. Ohli (2007) stated the talent management process began by analyzing and somehow recognizing the status quo of the organization's human resources and then sought acqusition, development and retention of talented people; the results of the present study is consistent with some of the components of the talent management process in the proposed model (16). Noe Pasand Asil and Ashegh Hosseini (2014) show that service quality and innovation consider the main talent management strategies talent acqusition, talent retaintion and maintanance and talent leadership style, and this is consistent with some of the components of the present study (17).

Although the issue of talent management has been proposed in world organizations since 1997, the importance of these issues in Iran can be attributed to recent years (18).

Among the strengths of this study is the original importance of this issue in universities and that researches conducted at both domestic and foreign levels have generally focused on specific points, and at the best state, several partial dimensions or components of the management process have been investigated. In this study, all dimensions of talent management process of the faculty members as the most important position in Ahvaz University of Medical Sciences have been tried to be considered. According to what was described in the study, Figure 1 shows the proposed model of talent management process of Faculty Members at Ahvaz University of Medical Sciences.

This model states that the talent management process must be conducted under a distinct HR architecture. Before starting the talent management process, create a talent-based attitude and culture throughout the university, which is very important. The talent-based attitude is based on two common beliefs. First, people confirm that talent is critical to realize the current and future needs of the university and themselves, and talent creates a distinctive feature for them and their university.

Second, faculty members believe they can personally help to enhance the talent available at the university. On the basis of these two common beliefs, universities can create a talent-based attitude. In this model, the talent management process begins with a strong and inspiring leadership, a clear expression of strategies and a deep belief in the strategic value of talent that has been manifestated as a talent-based attitude and culture.

When the key components of the talent management process "identifying and defining talent needs, talent acquisition, talent development, strategic utilization of talent, talent retention and maintanance" are linked and aligned together and with the overall strategy of the university and influence all processes and operations of university, universities can activate the talent reproduction process or cycle and enhance the knowledge, skills, competencies and workforce commitment to enhance the university performance.

In this case, the evaluation system plays a very important role because it enables the university to understand the strengths and weaknesses of all parts of the talent management process and their investment needs, guide values, and create stunning results by them.

This model helps authorities to develop a written version of the competencies needed to succeed for the position of faculty members as the most important position in the university instead of duplicating what is being done in human resources management and then find a new orientation to human resources in terms of identifying and determining talent needs of discovery, acquisition, development and maintenance of valuable human capital, thereby responding to emerging challenges and needs (Figure 2).

This research had some limitations as any other research, but it could be a guide to future researches. Therefore, according to the limited research and recency of the talent management issue in Iran, it is suggested that more attention should be paid to the localization of applied models of the talent management process in future research. Also, following the process of applying and evaluating the performance of the designed models is recommended

to be considered in future research. Intrinsic limitations of the questionnaire and its use are related to the tool used and quantification of the qualitative points to the research variables.

Conclusion

The results of the main question showed that according to experts, the components of recruiting talented personnel, identifying talented employees, talent development, talent utilization, and talent retention were appropriate for presenting the talent management model for Ahwaz University of Medical Sciences and they are statistically approved. This model has been endorsed in Talent Management Studies and Modeling at the Hudson Institute, Bersin Model, Business Excellence Consultants. According to the findings of the study, the survival of the university depends on its ability to discover, attract the right use, develop and retain the talents. This paradigm requires the adoption of a new perspective and approach, leadership, strategy, and capabilities.

The important point is to create a talent-oriented attitude and culture throughout the university. Talent-based attitudes are based on shared beliefs. Therefore, it is suggested that:

1- According to the component of identifying and determining talent needs, it is suggested that the officials of the University of Medical Sciences should identify and determine the talent needs to have a clear understanding of the currently available talents; the talents are needed for at least the next five years. They are also recommended to determine indicators in terms of personal characteristics, behavioral characteristics, knowledge area, professional skills dimension and key experiences of people to attract

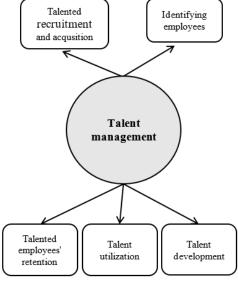


Figure 2: Proposed model of talent management process of managers and deputies in Ahvaz University of Medical Sciences

those who meet the needs of the university.

- 2- Based on the results, it is suggested that comparative study of talent management and its components in different industries, the status of talent management and its components and its role in the development of the organization, and introduction of the desired model should be attempted by researchers. Designing and explaining the talent management model through individual, organizational and environmental factors in order to improve organizational effectiveness is also recommended.
- 3- According to the talent acquisition component, university officials are recommended to consider the applicants' information skills including English language proficiency, their ability to use information technology, their adaptability skills including the ability to quickly master new skills, and personality traits. Behavioral characteristics of the applicants for legality, as well as the specialized knowledge of applicants through structured interviews with the presence of relevant experts, and the professional background of applicants to be taken into consideration accurately and based on predetermined criteria to attract the best talent.
- 4- Investigating the status of talent management and its components and its role in the development of the organization and presenting the desired model should be considered.

Limitations

- 1- Involvement of personal issues and inner desire of people in filling out the questionnaires
- 2- Intrinsic limitations of the questionnaire and its use as a tool for measuring and quantifying qualitative points related to research variables.
- 3- Time and space constraints which affect the generalizability of the results obtained

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