

## Design of a Model for Performance Management based on Components of Talent Management

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**Purpose:** Given the importance of performance management in improving organizational performance, the present study was conducted to design a model for performance management based on components of talent management.

**Methodology:** This study was applied in terms of objective and mixed (qualitative and quantitative) in terms of research method. The population of qualitative study included literature on performance management based on the components of talent management during 2001-2021 and the population of quantitative study included managers and employees of the airports and air navigation of East Azerbaijan Province in 2021 (n=240). The sample size of qualitative study was n=30, and n=144 in quantitative study, who were selected as according to the table of Karjesi and Morgan by simple random sampling method. The tool of qualitative study was note-taking of the researches; and a 90-item researcher-made questionnaire in quantitative study, whose validity and reliability were appropriate. The qualitative study data were analyzed by coding method and MAXQDA; and quantitative study data were analyzed by exploratory factor analysis (EFA) and structural equation modeling using SPSS and LISREL.

**Findings:** The results of qualitative study showed that for performance management based on components of talent management, 158 indicators and 71 components were identified in 6 categories, including talent sourcing, talent retention, talent development, creativity and innovation, performance development and professional competencies. Also, the results of quantitative study showed that the factor load of all 6 categories and 90 items was higher than 0.50 and the reliability of all categories was calculated higher than 0.90 by Cronbach's alpha. In addition, the performance management model based on components of talent management had a good fit and this model had a direct significant effect on all six categories (P<0.001).

**Conclusion:** The performance management model based on the talent management components designed in the present study had a good validity. Therefore, to improve performance management, it is possible to provide the basis for improving the components of talent management.

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## 1. Introduction

Today, the complexity, instability and unpredictability of changes and developments have greatly affected the concepts of traditional management in organizations, and managers are looking for organizational tools and measures that are efficient to move and direct organizational performance and sufficiently flexible to improve performance to the changing environmental conditions (Shakari, Shabani Bahar & Solimani, 2020). The current era is introduced as the era of performance management, and the strict implementation of performance management and evaluation systems is at the top of the policies of all managers of organizations. So that an accurate, comprehensive and reliable performance management system as one of the indicators of the development of organizations and societies requires the provision of infrastructure to create, maintain and expand planning and implementation (Motahhari, Soltani & Davazdah Emami, 2021). The performance of the organization and its continuous improvement is one of the most important concerns of any organization and of course the management of that organization. Performance management can improve the performance of the organization, and clarify, evaluate and better implement solutions (De Rooij, Janowicz-Panjaitan & Mannak, 2019). Performance is the main issue in all organizational analysis, considering organizational performance leads to the development of organizational theory, and the evaluation and measurement of performance makes the system intelligent and motivates people for the desired behavior, which is part of formulating and implementing organizational policies (Jang & Ahn, 2021). Performance evaluation and measurement is one of the main management processes to analyze one's own performance and fit of performance and group goals, the result of which can be the basis for correct decision making in future actions (Vahedi, Hajalian, Jahangirfard & Mojibi, 2020). The continuous improvement of the performance of organizations creates a huge synergistic force that can support the plan of growth, development and creating opportunities for organizational excellence. Continuous improvement of the organization's performance will not be possible without knowledge about the progress and achievement of goals and without identifying the challenges facing the organization, and obtaining feedback and information about the implementation of formulated policies and identifying cases that need serious improvement (LaPlante & Paradi, 2015).

Today, performance management is always one of the concerns of capable managers interested in improving human resources, which in traditional models of management is considered as controlling the tasks and functions of management, but as the main system of human resources management in modern models and theories of management, which is beyond rewards and emphasizes on strengthening behavior, establishing relationships between managers and employees and improving human resources in organizations to achieve desired changes (Manville & Greatbanks, 2020). Performance management includes strategic, organized and integrated processes that provide the basis for the sustainable success of the organization by improving the performance of the people working in the organization and developing individual and group capabilities (Nair, 2019). This construct is considered as a tool or solution for implementing strategies, policies and achieving organizational goals, the main of which is to increase the abilities, competencies, growth and development of the organization (Zhang, Wang, Cui & Han, 2020). Performance management is part of human resources management, whose task is to establish managerial relationships, and in the performance evaluation process, it takes into account the initiatives and creativity of individuals, and while improving the current competencies of individuals and the organization, it connects the competency of the individual with his actual performance and always seeks to improve and develop new competencies of people (Van Thielen, Bauwens, Audenaert, Van Waeyenberg & Decramer, 2018). To describe performance management, there are four approaches, including performance administration in the sense of performance evaluation and not in the sense of performance management, performance management in the sense of directing affairs to provide public services using citizens' participation in the form of improvement programs, performance management in the sense of paying attention and focusing on the effect of improvement programs resulting from the information obtained from the performance and its effect on the life of the man and finally the performance of governance which refers to the performance of a governmental political system that includes the performance of all the elements of a system (Bouckaert & Halligan, 2008). The performance management system significantly

contributes to the flexibility of the plans, goals and missions of organizations in today's dynamic environment, and the lack of a performance management system in an organization means the lack of communication with the environment inside and outside the organization, which will have many negative consequences for the organization and finally causes the destruction of the organization (Tseng, Wu, Lim & Wong, 2019).

Human resources performance management is responsible for turning talent into performance, which is achieved by removing barriers and encouraging human resources and / or optimizing talent management (Shakari et al., 2020). One of the important topics in the field of talent is talent management, which emerged as a process in the 1990s and is still evolving. This construct as a management tool or solution empowers managers and creates a kind of flexibility according to the changing conditions of the organization (Azhari & Mohammadi Moghadam, 2021). Attracting, recruiting, developing and retaining talented people is a fundamental human resource challenge that can support the competitiveness and sustainability of organizations. For this reason, many organizations and managers seek to develop a talent management strategy (Sparrow, 2019). In fact, the importance of talent management is due to the fact that talented employees with strategic capabilities can increase the productivity, efficiency and competitive advantage of any organization in all fields (Anlesinya & Amponsah-Tawiah, 2020). Talent management includes all human resource processes and refers to the selection, recruitment, socialization, retention, development, establishment and appointment of employees (Krishnan & Scullion, 2017) and prevents the loss of skills and knowledge capacities of the talents and skills of organizations' employees and guides them consistent with the goals and mission of the organization (Gardas, Mangla, Raut, Narkhede & Luthra, 2019). The objective of talent management is to ensure the availability of talents and place the right people in the right jobs at the right time based on the strategic goals of the business (Makarem, Metcalfe & Afiouni, 2019). In fact, talent management includes performing a series of integrated activities to ensure the attraction, maintenance, motivation and development of talented people needed in the present and future of the organization to develop and maintain a talent pool consisting of skilled and committed workforce in the organization (Gerhardt & Karsan, 2022). Talent management is important for organizations for two reasons. First, its correct implementation leads to the successful discovery and retention of talented employees for key jobs, which is called succession. Second, the discovery, attraction, and retention of talents of employees is considered as the main factor of competition between organizations and productivity improvement (Saling & Do, 2020).

Although models for performance management and talent management have been designed, no model was found for performance management based on talent management or its components. For this reason, the results of studies on performance management and talent management models are reported below.

Nazimi, Teimournejad and Daneshfard (2021) in a study on human resources performance management model by digital era approach, sixteen components in five dimensions of strategic planning of human resources performance consistent with the digital era (with six data-based components of setting goals and making decisions, targeting employees performance by digital approach, developing strategies consistent with the digital era, designing digital-based executive programs, re-engineering processes and procedures by digital and ecosystem-based approach to manage performance of employees), cultural development of human resources consistent with the digital era (with two components of senior managers' support for digital approaches and encouraging employees consistent with the requirements of the digital age), training and empowering human resources consistent with the digital era (with two components of training needs assessment of employees to meet the requirements of the digital era and providing knowledge and skill training to employees to meet the requirements of the digital era), developing communication human resources consistent with the digital era (with three components of facilitating relationships between employees in different departments, application-based relationships between managers and employees and facilitating the establishment of organizational knowledge cycles) and evaluating the performance of human resources consistent with the digital era (with three components of determining employees performance evaluation indicators in accordance with requirements of the digital era, selecting performance evaluation

methods in accordance with requirements of the digital era and data orientation for employees performance evaluation) were introduced. Mohammadi, Bahlouli, Beikzad and Rahimi (2021) reported in a research that the comprehensive performance management model had three individual (with components of motivation, healthy and effective relationships, work discipline, work commitment, responsibility, ego strength, individual skills and individual personality), group (facilitating group partnership, achieving group goals, correct and fair group rewards and ethical collaborative management) and organizational (with components of human resources management, internal processes, customers and stakeholders, financial ethics performance, information systems management, quality of service delivery and management support) dimensions and the designed model had a good fit. In another study, Asgharzadeh, Mehrara and Tabari (2020) concluded that in the performance management model of the insurance industry, causal conditions included human factors, insurance industry factors and cultural factors, intervention conditions included educational factors, organizational factors and managerial and leadership factors, contextual conditions included economic factors, political factors and environmental factors, the phenomenology included the performance management system, the strategies included the design of the performance management system and the establishment of the performance management system, and the consequences included individual consequences, group consequences and organizational consequences. Hartog, Den Boselie and Paauwe (2014) introduced performance management including the dimensions of creativity and innovation with the components of goals, motivation and perseverance and performance development with the components of planning, perseverance, discipline and capability. Also, Tayefeh Seifi, Hashemi and Gholtash (2021) in a study introduced the talent management model of school principals including 194 sub-categories in 7 main categories, including identifying and discovering talent resources, attracting talent resources, selecting talent resources, developing talent resources, retaining and maintaining talent resources, evaluation of talent resources and the results of talent resources, the factor loading of all of which was higher than 0.70 and the standard coefficients and fit indices of the model were confirmed. Zahabion, Saedian and Keshtiaria (2021) in a study introduced the talent management model of teachers in 10 organizing themes and 5 comprehensive themes including recruitment and identification (with two organizing themes of identifying the elite and creating motivation to attract elites), selection (with two organizing themes of fit of a person with a job and merit selection), application (with two organizing themes of comprehensive application of people's capabilities and providing implementation conditions), development (with two organizing themes of individual knowledge enhancement and promotion of job and professional skills) and retention (with two organizing themes of teachers' excellence and well-being and familiarizing people with teaching jobs). In another study, Soleymani, Abbaspour, Rahimian and Taheri (2020) reported that the talent management model in the higher education system included causal conditions including individual factors, dynamic adaptation factors and managerial factors, confounding conditions including extra-organizational factors, background conditions including organizational factors and work-related factors, the phenomenology included the establishment of talent management, strategies included effective recruitment strategies, effective development strategies, and effective retention strategies, and consequences included individual consequences, attitudinal consequences, behavioral v, and organizational consequences. Rajabipoor Meybodi and Mohammadi (2020) in a study concluded that the integrated model of talent management by thematic analysis included seven categories including identifying and discovering talent resources, attracting talent resources, selecting talent resources, developing talent resources, maintaining talent resources, evaluating talent resources and the results of talent resources. In another study, King and Vaiman (2021) introduced talent management including three dimensions of talent sourcing with the components of review and needs assessment, attraction and recruitment, talent retention with the components of interaction, communication, maintaining positive relationships and rewards, and talent development with the components of training, development and empowerment.

Studies have shown that performance management plays an effective role in improving organizational effectiveness and organizational functions. Accordingly, over the last few decades, the attention of many

researchers, managers and experts has been drawn towards performance management and many studies have been conducted in this field. Although many studies have been conducted about performance management from different angles, no study has paid attention to the model of performance management based on the components of talent management, and no model was found in this field. Since talent management, like performance management, plays an effective role in improving organizational effectiveness and organizational performance, and researchers, managers and experts showed great interest. Therefore, it seems that the design of a model for performance management based on the components of talent management can help managers, experts and planners to improve the performance and effectiveness of the organization. It should be noted that the study results can probably help managers and organizational officials to gain a competitive advantage and improve their organizational position compared to other organizations, and in addition, improve the scope of educational science knowledge, especially in the field of promoting performance management and talent management. As a result, the present study was conducted to design a performance management model based on talent management components.

## 2. Methodology

This study was applied in terms of objective and mixed (qualitative and quantitative) in terms of research method. The population of the qualitative study included literature on performance management based on the components of talent management during 2001-2021 and the population of quantitative study included managers and employees of the airports and air navigation of East Azerbaijan Province in 2021 (n=240). The sample size of qualitative study was n=30; and n=144 in quantitative study, who were selected as a sample according to the table of Karjesi and Morgan by simple random sampling method. To select 30 studies in qualitative study, first the related research literature was reviewed in terms of title and then in terms of abstract, and if it was relevant, it was selected as the sample. Also, to select 144 people out of 240 people in quantitative study, a code was first assigned to each of them, and then 144 people were selected as the sample by random number table.

The stages of conducting the present study were as follows. First, the theoretical principles or related research literature were reviewed, and after reading their titles and abstracts, 30 studies were selected as the samples. Next, their texts were fully read and the concepts related to the performance management model and talent were noted. Finally, the concepts were categorized and classified. Then, sampling was done in quantitative study and after the necessary coordination, 144 people were selected. The importance and necessity of the research was explained to them and they were asked to answer the researcher-made questionnaire in qualitative study. Finally, the completed questionnaires were collected after checking for completeness and the samples were acknowledged.

The research tool of qualitative study included note-taking from studies. For this purpose, all the paragraphs and lines of the selected studies were examined by one of colleagues familiar with the coding method, and the concepts related to the performance management model based on the talent management components were recorded. The validity of the results of qualitative study was confirmed by the triangulation method and the reliability was confirmed by the coefficient of agreement between the researcher and colleagues (0.73), which was higher than 0.70, indicating its appropriateness. Also, the research tool of quantitative study was a researcher-made questionnaire on performance management based on the components of talent management, which was made based on the results of qualitative study. This researcher-made questionnaire had 90 items on a five-point Likert scale from completely disagree to completely agree. The score of this tool was calculated with the total score of its items and a higher score indicated a more desired situation. The face validity of the researcher-made questionnaire was confirmed by the opinion of 10 management experts, and its reliability was higher than 0.90 using Cronbach's alpha.

In this study, data of qualitative study were analyzed by coding method using MAXQDA and data of quantitative study were analyzed by EFA and structural equation modeling using SPSS and LISREL.

### 3. Findings

The sample of qualitative study included 30 studies and the sample of quantitative study included 144 people. Therefore, the analyzes of the qualitative study were based on 30 samples and the analyzes of quantitative study were based on 144 samples. The coding results showed that for performance management based on talent management components, there are 158 indicators and 71 components in 6 categories, including talent sourcing (8 components), talent retention (14 components), talent development (15 components), creativity and innovation (12 components), performance development (14 components) and professional competencies (8 components) (Table 1).

Table 1. Results of coding performance management model based on components of talent management

category	component	index
Talent sourcing	Criteria determination	Determining suitable indicators for attracting desirable people, clarifying goals and perspectives and organizational cooperation charter
	Review and needs assessment	Analysis of organizational requirements and employee capability assessment
	Planning	Short-term, medium-term and long-term planning of human resources and permanent and regular supply of required human resources
	Attraction and recruitment	Attraction and recruitment based on employment exam, employment interviews and evaluation center
	Selection and application	Selection and use of resources within the organization and outside the organization
	Talent sourcing	Discovering people's talents and suitable job placement, organizational interactions and identifying talented people
	Discovery and identification	Identifying potential human talents and valuing employee competencies
	Separation	Requirement of GPA, age and graduation from prestigious universities, separation by comprehensive test, screening and expert panel interview
Talent retention	Retention and maintenance	Organizational support, atmosphere and environment of the organization and working conditions
	Interaction	Social communication and activities and behaviors of people in the public field
	Work process determination	Integrating related processes and adopting a systemic and holistic approach
	Communication	Communication with colleagues and superiors
	performance evaluation	Periodic performance evaluation and 360-degree feedback
	Commitment	Obliged to commitments to organizational goals, deep engagement with organizational activities and events, and job relevance
	Alignment and adaptation	Intra-organizational displacement, workforce planning, individual organizational companionship and work-life balance policies
	Not leaving the organization	Empowering and understanding expectations, supporting and appreciating talent and creating desired working conditions
Do not leave key positions vacant	Providing key positions and supporting internal promotion	

Talent development	Fit of job and employee	Suitability of job and talent, job knowledge in work and environment and the relationship between the employee's field of study and job
	Displacement	Internal displacement and job rotation
	Maintain positive relationships	Creating and maintaining positive relationships with colleagues
	Cultivating loyalty	A person's positive attitude towards the organization and support and emotional connection with the goals and values of the organization
	Reward	Payment based on knowledge, skill and experience of employees and payment based on achievement of goals
	Training	Needs assessment, planning and implementation of training courses and regular holding of in-service training courses
	Development	Knowledge, skills and professional attitudes of employees and access to learning opportunities
	Empowerment and improvement	Individual competence and effectiveness on work results
	Strengthen the positive points	Delegating authority and freedom of action and providing the necessary training
	Culture	Work and entrepreneurship culture and talent-oriented attitude and culture
	knowledge creation	Activities of creating knowledge and creating useful knowledge at different times
	work team	Good interpersonal communication and focus on goals
	Coaching	Personality traits and technical skills
	Innovation	Research, making fundamental changes and developing new resources
	Creativity and Innovation	Future competencies
Growth		Strengthening people's self-growth, creativity and talent
freedom of action		Freedom and agency of action, job independence in the legal framework and job description
Career development path		Mutual need of units for talented forces, promotion of talented people within the organization with educational considerations
Succession		Internal promotion and belief in career path management
Talent pool		Securing key positions, issuing talents and strengthening the organizational position
Indexing		Providing clear and measurable indicators and the extent of using indicators in work
Initiative and creativity		Providing creativity and initiative in work and sensitivity to problems
Goals	Goals	Goal orientation and efforts to achieve goals and individual goals along with organizational goals
	Precision	Planning and managing time and providing quality services
	Motivation	Creating responsibility and commitment and effective communication with the manager

Performance development	Perseverance	Efforts to achieve goals and tirelessness in work	
	Innovation	Providing innovation in work and creating a new way or product	
	Politeness and behavior	Having good relationships with colleagues and respecting people	
	Mental health	Compliance with basic safety and health and success and happiness in life	
	Partnership	Participation in solving organizational problems and creating added value for the organization	
	Ability to work in a team	Constructive interactions, organization and focus on team goals and motivation	
	Leadership	Motivate and communicate effectively with others	
	Planning	Scheduling and operational planning	
	Productivity	Productivity in doing work and participation in reducing organization costs	
	Effectiveness	Goal orientation to achieve goals and participate in identifying environmental factors affecting the organization's goals	
	Saving	Correct use of resources and energy and optimal use of facilities	
	Encouragement	Encouragement by the manager and senior managers	
	Reporting	Writing work results and reporting to the manager immediately	
	Performance improvement and development	Participation in solving organizational problems and participation in continuous improvement of work processes	
	Communication	Having good relations with supervisors and colleagues and interactions	
	Trust	Institutionalizing organizational values and ethics, and trust while doing work	
	Perseverance	Efforts to achieve goals and tirelessness in work	
	Accountability	Responding to needs and complaints as soon as possible and presenting a positive image of the organization	
	Professional competencies	Discipline	Attending the organization on time and adhering to work rules, regulations and standards
		Responsibility	Follow-up, accountability and job support
Satisfaction of social stakeholders		Dealing with clients appropriately, guiding, training, consulting and thinking together with clients and meeting the expectations of stakeholders	
Capability and ability		Ability to communicate with colleagues and subordinates	
Skill and technology development		Development of functional skills and up-to-date organizational technology	
Documentation		Written report to the official and documentation of actions and plans	
	Training	Acquiring new skills, knowledge and ability and participation in training	
	Coaching	Sharing knowledge and training to colleagues and the ability to transfer content to others	



Culture	Trying to adapt to new conditions and promoting organizational culture, values and ethics
Attitude c	Organizational identity and belonging, and organizational commitment and loyalty
Learning	Learning, improving performance and learning motivation

Test of the assumptions of EFA showed that KMO = 0.83 and Bartlett's sphericity = 935.70 were significant at a level lower than 0.001. The results indicated sufficient correlation and the adequacy of the samples to perform factor analysis. The results of EFA for the items of the performance management model based on components of talent management showed that 68 items were removed due to the factor loading less than 0.40 and the factor loading of 90 items in the six categories of talent sourcing, talent retention, talent development, creativity and innovation, performance development and professional competencies were significant above 0.50 and lower than 0.05 (Table 2).

Table 2. Results of EFA of performance management model items based on components of talent management

category	item	Factor loading	Significance
Talent sourcing (10 items)	Determining the indicators of attracting suitable and talented people	0.95	0.05<
	Attention paid to employees' skills	0.91	0.05<
	Emphasis on the use of human resources within the organization for talent sourcing	0.90	0.05<
	Measurement of employee talents	0.84	0.05<
	Desirability of identifying the potential talents of human resources	0.83	0.05<
	Clarifying the goals and perspectives of talent sourcing	0.82	0.05<
	Analysis of talent sourcing requirements	0.80	0.05<
	Short-term, medium-term and long-term planning of human resources	0.71	0.05<
	Selection and evaluation of human resources through evaluation centers	0.71	0.05<
	Permanent and regular supply of human resources	0.59	0.05<
talent retention (13 items)	Periodic performance evaluation	0.81	0.05<
	Rewards based on the presentation of practical and effective plans	0.80	0.05<
	Willingness of employees to work hard for the organization	0.75	0.05<
	Rewards based on productivity	0.75	0.05<
	Use promotion to retain talented employees	0.73	0.05<
	Support and emotional connection with the goals and values of the organization	0.73	0.05<
Organizational support for talent retention	0.71	0.05<	

	Relationship between the knowledge, skills and experience of the worker and the job	0.69	0.05<
	Employees' belief in the goals and values of the organization	0.69	0.05<
	Effect of a person's positive attitude towards the organization on retention	0.66	0.05<
	Effect of the atmosphere and environment of the organization on talent retention	0.64	0.05<
	۳۶۰ - degree performance evaluation	0.62	0.05<
	Relationship between the employee's field of study and job	0.54	0.05<
	Evaluation of the appointment of key positions	0.82	0.05<
	Development of individual competencies	0.79	0.05<
	Issuing talents and strengthening the organizational position	0.79	0.05<
	Leadership development	0.77	0.05<
	Determining key positions	0.77	0.05<
	Affecting work results	0.73	0.05<
	Strengthening teamwork and content production	0.73	0.05<
	Determining the employee's career paths	0.73	0.05<
	Group synergy and coordination	0.72	0.05<
	Creativity and talent development	0.72	0.05<
	Participation in knowledge-based activities in the organization	0.71	0.05<
Talent development (23 items)	Internal promotion	0.69	0.05<
	Job independence in the legal framework and job description	0.69	0.05<
	Creating suitable opportunities for learning	0.67	0.05<
	Professional development of employees	0.67	0.05<
	Freedom and authority	0.65	0.05<
	Increasing professional knowledge, skills and attitude of employees	0.65	0.05<
	Focus on goals and results	0.63	0.05<
	Organizational knowledge transfer	0.63	0.05<
	Career development	0.63	0.05<
	Strengthening people's self-improvement	0.60	0.05<
	Participation in in-service training courses	0.58	0.05<
	Scholarship	0.52	0.05<
Creativity and innovation (16 items)	Effective communication with the manager	0.88	0.05<
	Constructive interactions	0.83	0.05<
	Participation in solving organizational problems	0.82	0.05<

	Participation in creating added value for the organization	0.82	0.05<
	Efforts to achieve goals	0.80	0.05<
	Efforts to achieve goals	0.80	0.05<
	Tirelessness	0.77	0.05<
	Motivation	0.77	0.05<
	Sensitivity to problems	0.75	0.05<
	Organize based on team goals	0.73	0.05<
	Research	0.72	0.05<
	Creating a new way or product	0.71	0.05<
	Responsibility and commitment	0.70	0.05<
	Achievement of individual goals along with organizational goals	0.64	0.05<
	Influence	0.61	0.05<
	Risk-taking	0.56	0.05<
	Encouragement by the manager	0.89	0.05<
	Optimal use of resources	0.84	0.05<
	Encouragement by senior managers	0.83	0.05<
	Participation in solving organizational problems	0.80	0.05<
	Having good relationships with supervisors and colleagues	0.79	0.05<
	Participation in the continuous improvement of work processes	0.78	0.05<
	Dealing with needs and complaints as soon as possible	0.74	0.05<
	Responsibility for actions	0.72	0.05<
Performance development (18 items)	Integrity in doing things	0.71	0.05<
	Participation in work improvement	0.70	0.05<
	Achievement of goals	0.69	0.05<
	Seriousness in assigned cases	0.69	0.05<
	Operational planning	0.68	0.05<
	Having good personality traits and communication skills	0.68	0.05<
	Doing things accurately and correctly	0.68	0.05<
	Meeting the expectations of stakeholders	0.65	0.05<
	Scheduling	0.64	0.05<
	Appropriate treatment with clients	0.62	0.05<
Professional competencies (10 items)	Organizational commitment and loyalty	0.93	0.05<
	Promoting organizational values and ethics	0.83	0.05<
	Efforts to adapt to the organizational identity	0.80	0.05<

Organizational identity and belonging	0.75	0.05<
Interested in acquiring knowledge in the organization	0.73	0.05<
Distribution and interpretation of knowledge in the organization	0.70	0.05<
Development of functional skills	0.68	0.05<
Ability to transfer knowledge to others	0.66	0.05<
Development of up-to-date organizational technologies	0.66	0.05<
Sharing knowledge and training to colleagues	0.59	0.05<

The results of EFA showed that the factor loading of all 6 categories of talent sourcing, talent retention, talent development, creativity and innovation, development of performance and professional competencies are higher than 0.90 and at a level smaller than 0.05 significant and the reliability of all of them by Cronbach's alpha was higher than 0.90 (Table 3).

Table 3. Results of EFA for performance management model categories based on talent management components

category	Number of items	factor loading	significance	Reliability (Cronbach's alpha)
Talent sourcing	10	0.86	0.05<	0.94
Talent retention	13	0.95	0.05<	0.93
Talent development	23	0.96	0.05<	0.96
creativity and innovation	16	0.97	0.05<	0.95
Performance development	18	0.94	0.05<	0.96
professional competencies	10	0.90	0.05<	0.94

The results of the fit indices of the performance management model based on components of talent management indicated a good fit. Because NFI=0.95, NNFI=0.98, IFI=0.98, CFI=0.98, and RMSEA=0.06. RMSEA lower than 0.05 and other indices higher than 0.90 indicated a good fit. The results of structural equation modeling showed that in the performance management model based on components of talent management, the model had a direct significant effect on all six categories ( $P<0.001$ ) (Figures 1 and 2).

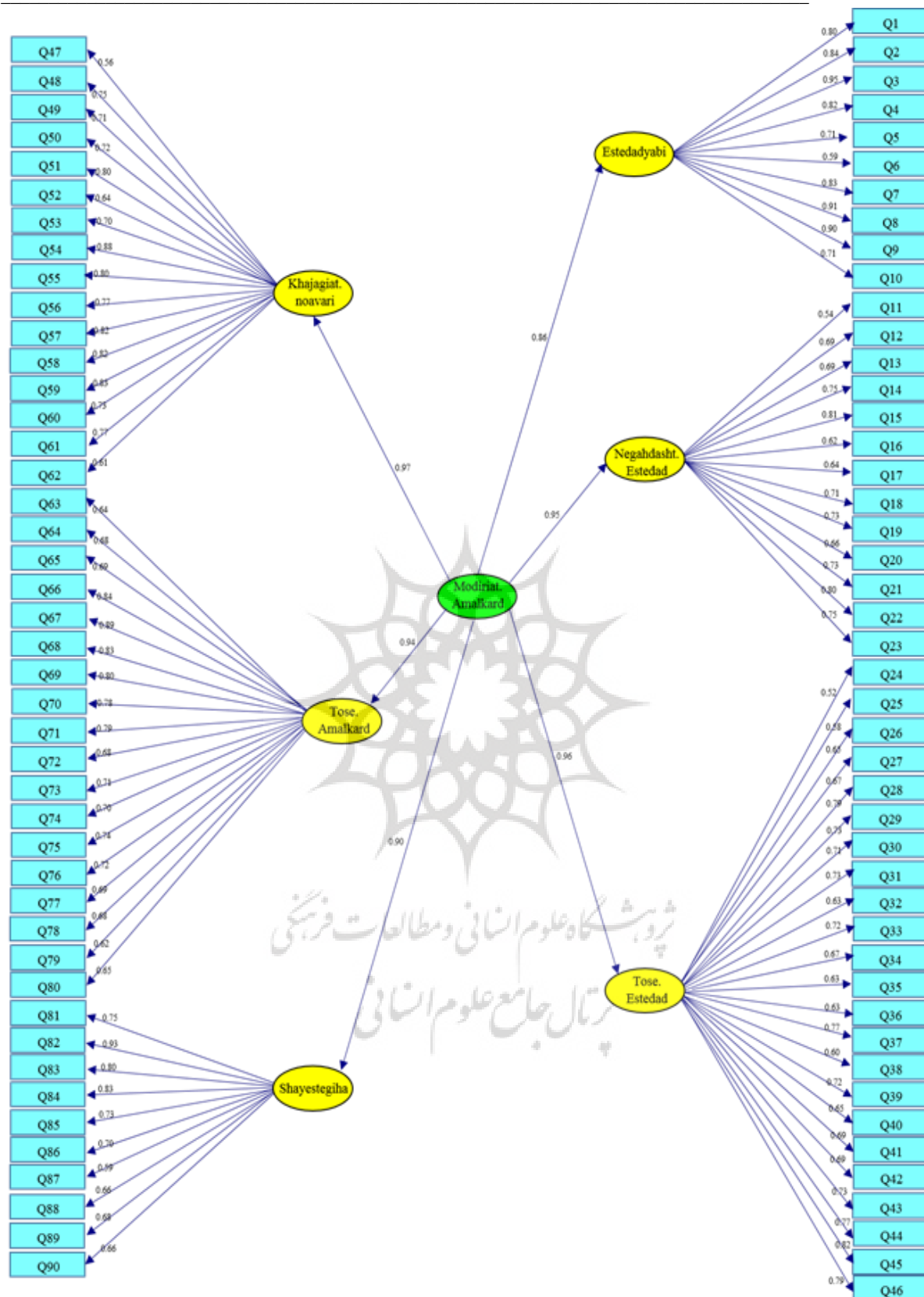


Figure 2. Results of the structural equation modeling of the performance management model based on the talent management components for path coefficients

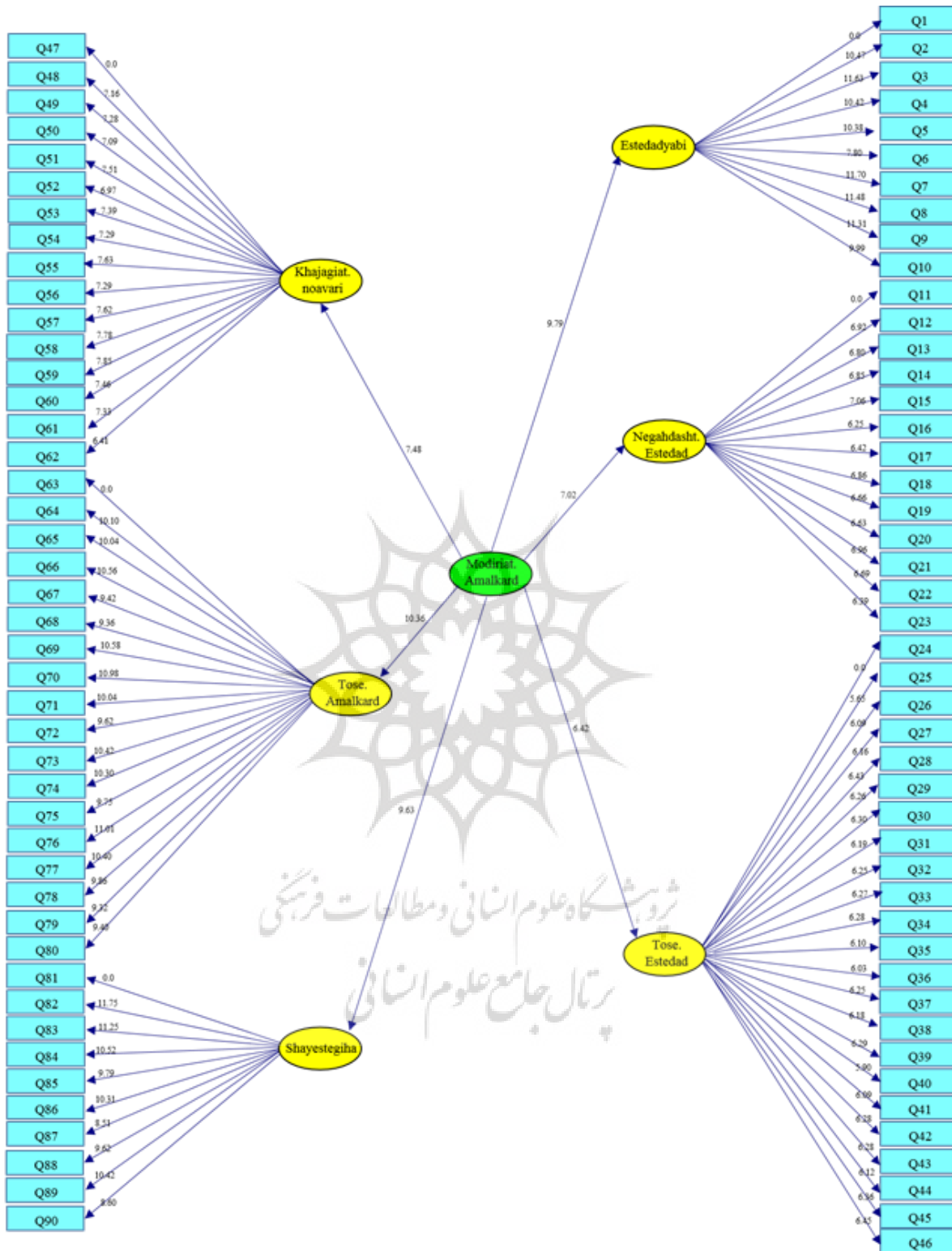


Figure 2. Results of the structural equation modeling of the performance management model based on the talent management components for t-statistic

#### 4. Conclusion

Every study is conducted to provide results to increase awareness and by helping to make decisions about specific issues, and its value depends on the help it gives to the researcher or decision maker in this regard. Since the provision of the management field as a university field, all theorists have focused on providing solutions for the maximum use of various resources, especially human resources. Although many studies have been conducted on each of the variables of performance management and talent management, no study was found on their combination and it seems that performance management based on talent management can play an important role in creating a competitive advantage for organizations and improving organizational effectiveness. As a result, the present study was conducted to design a model for performance management based on components of talent management.

The results of qualitative study showed that for performance management based on components of talent management, 158 indicators and 71 components were identified in 6 categories, including talent sourcing, talent retention, talent development, creativity and innovation, performance development and professional competencies. Also, the results of quantitative study showed that the factor loading of all 6 categories and 90 items was higher than 0.50 and the reliability of all categories was calculated higher than 0.90 by Cronbach's alpha. In addition, the model of performance management based on components of talent management had a good fit and this model had a direct significant effect on all six categories ( $P < 0.001$ ). Although no study was found on performance management based on the components of talent management, the study results on performance management are consistent with the study results of Nazimi et al. (2021), Mohammadi et al. (2021), Asgharzadeh et al. (2020) and Hartog et al. (2021). 2014); and the study results on talent management are consistent with the study results of Tayefeh Seifi et al. (2021), Zahabion et al. (2021), Soleymani et al. (2020), Rajabipoor Meybodi and Mohammadi (2020) and King and Vaiman (2021).

For the category of talent sourcing with 8 components of criteria determination, review and needs assessment, planning, attraction and recruitment, selection and application, talent sourcing, discovery and identification and separation in the model of performance management based on components of talent management, it can be said that to improve talent search in the above model, solutions such as determining the indicators of attracting suitable and talented people, attention paid to the competencies of employees, emphasizing the use of human resources within the organization for talent sourcing, measuring the talents of employees, the desirability of identifying the potential talents of human resources, clarifying the goals and perspectives of talent sourcing, needs assessment of talent sourcing. short-term, medium-term and long-term planning of human resources, selection and evaluation of human resources through evaluation centers and permanent and regular supply of human resources should be used.

For the category of talent retention with 14 components of retention and maintenance, interaction, work process determination, communication, performance evaluation, commitment, alignment and adjustment, not leaving the organization, not leave key positions vacant, fit of job and employee, displacement, maintaining positive relationships, nurturing loyalty and rewards in the performance management model based on the components of talent management, it can be said that for talent retention in the above model, indicators such as periodical performance evaluation, rewards based on the presentation of practical and effective plans, the willingness of employees to work hard for the organization, reward based on productivity, use of job promotion to retain talented employees, support and attachment with the goals and values of the organization, organizational support for talent retention, the relationship between knowledge, skills and experience of employees and the job, employees' belief in the goals and values of the organization, effect of a person's positive attitude towards the organization on his retention, effect of the atmosphere of the organization on talent retention, 360-degree performance evaluation and the relationship between the employee's field of study and the job.

In addition, for the category of talent development with 15 components of training, development, empowerment and improvement, strengthening positive points, culture, knowledge creation, work team, coaching, innovation, future competencies, growth, freedom of action, career development path, succession

and talent treasury in the performance management model based on the components of talent management, it can be said that to improve the development of talent in the above model, strategies such as evaluating key positions, developing individual competencies, issuing talents and strengthening the organizational position, developing leadership, determining key positions, affecting work results, strengthening teamwork and content production, determining career paths for employees, synergy and group coordination, creativity and talent productivity, participation in knowledge-based activities in the organization, internal promotion, job independence within the legal framework and job description, creating suitable opportunities for learning, professional development of employees, freedom and authority, increasing the knowledge, skills and professional attitude of employees, focusing on goals and results, transferring organizational knowledge, career development, strengthening the self-development of people, participating in in-service training courses and scholarship should be used.

For the category of creativity and innovation with 12 components of indexing, initiative and creativity, goals, precision, motivation, perseverance, innovation, politeness and behavior, mental health, participation, team work capability and leadership in the performance management model based on talent management components, it can be said that to promote creativity and innovation in the above model, indicators such as effective communication with the manager, constructive interactions, participation in solving organizational problems, participation in creating added value for the organization, efforts to achieve goals, efforts to achieve goals, tirelessness in work, creating motivation, being sensitive to issues, organizing based on team goals, research, creating a new way and / or product, responsibility and commitment, achieving individual goals along with organizational goals, the influence and risk taking should be used.

Also, for the category of performance development with 14 components of planning, productivity, effectiveness, savings, encouragement, reporting, performance improvement and development, communication, trust, perseverance, accountability, discipline, responsibility and satisfaction of social stakeholders in the performance management model based on the components of talent management, it can be said that to improve performance development in the above model, strategies such as encouragement by the manager, optimal use of resources, encouragement by senior managers, participation in solving organizational problems, having good relationships with supervisors and colleagues, participation in continuous improvement of procedures, addressing needs and complaints as soon as possible, responsibility for actions, integrity in performing tasks, participation in work improvement, achievement of goals, seriousness in assigned tasks, operational planning, having personal characteristics and appropriate communication skills, doing things accurately and correctly, meeting the expectations of stakeholders, time planning and appropriate dealings with clients should be used.

In addition, for the category of professional competencies with 8 components of capability and ability, skill and technology development, documentation, training, coaching, culture, attitude and learning in the performance management model based on the components of talent management, it can be said that to promote professional competencies in the model, indicators such as organizational commitment and loyalty, promoting organizational values and ethics, efforts to adapt to organizational identity, organizational identity and belonging, interest in acquiring knowledge in the organization, distribution and interpretation of knowledge in the organization, development of functional skills, ability to transfer knowledge to others, development of up-to-date organizational technologies and sharing of knowledge and training to colleagues should be used.

The study results showed that for proper performance and promotion of employees, managers should, based on the indicators, components and categories identified in this study, distinguish talented employees, evaluate the performance and capacities of employees and use knowledge to allocate resources, and promote employees. Meanwhile, the role of the management culture governing the organization is important and valuable for the success of the model in the field of human resources. So that the appropriate behavioral model of the manager creates high work motivation in employees and can increase their job satisfaction, which finally leads to the improvement of organizational commitment of employees and increase the productivity of the



organization. Also, the study results, while innovating in the performance management model, can help managers and experts to benefit from human capital and rare and even unique talents in the direction of value creation, make decisions and plan.

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## References

- Anlesinya A, Amponsah-Tawiah K. (2020). Towards a responsible talent management model. *European Journal of Training and Development*. 44(2-3), 279-303.
- Asgharzadeh M, Mehrara A, Tabari M. (2020). Designing a performance management model for Iran's insurance industry based on the grounded theory approach. *Journal of Public Administration Perspective*. 11(1): 169-202. [Persian]
- Azhari R, Mohammadi Moghadam Y. (2021). The role of talent management in quality of police services – Case study of Karaj city. *Police Management Studies Quarterly*. 16(3): 61-84. [Persian]
- Bouckaert G, Halligan J. (2008). *Managing performance: International comparisons*. London: Routledge.
- De Rooij MMG, Janowicz-Panjaitan M, Mannak RS. (2019). A configurational explanation for performance management systems' design in project-based organizations. *International Journal of Project Management*. 37(5): 616-630.
- Gardas BB, Mangla SK, Raut RD, Narkhede B, Luthra S. (2019). Green talent management to unlock sustainability in the oil and gas sector. *Journal of Cleaner Production*. 229: 850-862.
- Gerhardt T, Karsan S. (2022). Talent management in private universities: The case of a private University in the United Kingdom. *International Journal of Educational Management*. 36(4): 552-575.
- Hartog DN, Den Boselie P, Paauwe J. (2014). A pattern and research Agenda. *An International Review*, 53(4): 556-569.
- Jang SW, Ahn WC. (2021). Financial analysis effect on management performance in the Korean logistics industry. *The Asian Journal of Shipping and Logistics*. 37(3): 245-252.
- King KA, Vaiman V. (2019). Enabling effective talent management through a macro-contingent approach: A framework for research and practice. *Business Research Quarterly*. 22: 194-206.
- Krishnan TN, Scullion H. (2017). Talent management and dynamic view of talent in small and medium enterprises. *Human Resource Management Review*. 27(3): 431-441.
- LaPlante AE, Paradi JC. (2015). Evaluation of bank branch growth potential using data envelopment analysis. *Omega*. 52: 33-41.
- Makarem Y, Metcalfe BD, Afioni F. (2019). A feminist poststructuralist critique of talent management: Toward a more gender sensitive body of knowledge. *Business Research Quarterly*. 22(3): 181-193.
- Manville G, Greatbanks R. (2020). Performance management in hybrid organisations: A study in social housing. *European Management Journal*. 38(3): 533-545.
- Mohammadi T, Bahlouli N, Beikzad J, Rahimi Gh. (2021). Develop a comprehensive performance management model based on ethics approach in government organizations. *The Journal of Ethics in Science and Technology*. 16(2): 148-155. [Persian]
- Motahhari M, Soltani I, Davazdah Emami H. (2021). Designing a performance management model for government organizations based on social approaches using a mixed method of quantitative and qualitative data (Case study: Government organizations of Najafabad - Isfahan). *Iranian Journal of Public Policy in Management*. 12(42): 113-132. [Persian]
- Nair GK. (2019). Dynamics of pricing and non-pricing strategies, revenue management performance and competitive advantage in hotel industry. *International Journal of Hospitality Management*. 82: 287-297.
- Nazimi Y, Teimournejad K, Daneshfard K. (2021). Explaining the human resource performance management model with the digital age approach. *Quarterly Journal of Urban and Regional Development Planning*. 6(18): 165-191. [Persian]
- Rajabipoor Meybodi A, Mohammadi M. (2020). Designing an integrated model of talent management through thematic analysis. *Journal of Human Resource Studies*. 10(3): 79-104. [Persian]
- Saling KC, Do MD. (2020). Leveraging people analytics for an adaptive complex talent management system. *Procedia Computer Science*. 168: 105-111.

- Shakari M, Shabani Bahar G, Solimani M. (2020). The effect of organizational architecture on performance management with the mediating role of organizational agility of physical education departments of Medical Sciences Universities in the country. *Iranian Journal of Ergonomics*. 8(2): 72-82. [Persian]
- Soleymani M, Abbaspour A, Rahimian H, Taheri M. (2020). Presentation of managing talent model in Iran's higher education system: A model based on grounded theory. *Jundishapur Education Development Journal*. 11(4): 811-827. [Persian]
- Sparrow P. (2019). A historical analysis of critiques in the talent management debate. *Business Research Quarterly*. 22(3): 160-170. [Persian]
- Tayefeh Seifi Z, Hashemi SA, Gholtash A. (2021). Designing a talent management model for school principals: A mixed approach. *Managing Education in Organizations*. 9(2): 35-63. [Persian]
- Tseng ML, Wu KJ, Lim MK, Wong WP. (2019). Data-driven sustainable supply chain management performance: A hierarchical structure assessment under uncertainties. *Journal of Cleaner Production*. 227: 760-771.
- Vahedi H, Hajalian F, Jahangirfard M, Mojibi T. (2020). Designing a health system performance management model for Iran. *Quarterly Journal of Nursing Management*. 9(3): 87-100. [Persian]
- Van Thielen T, Bauwens R, Audenaert M, Van Waeyenberg T, Decramer A. (2018). How to foster the well-being of police officers: The role of the employee performance management system. *Evaluation and Program Planning*. 70: 90-98.
- Zahabion L, Saedian N, Keshtiarina N. (2021). Validating the talent management model of elementary school teachers in the formal and public education system of Iran based on the fundamental reform document of education in the Islamic Republic of Iran. *Applied Issues in Islamic Education*. 6(1): 73-98. [Persian]
- Zhang C, Wang X, Cui AP, Han S. (2020). Linking big data analytical intelligence to customer relationship management performance. *Industrial Marketing Management*. 91: 483-494.

