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# Structural equation modeling of the relationship between job descriptions and employee competencies in drug distribution companies

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### Abstract

The aim of this study was to model the structural equations of the relationship between job descriptions and employee competencies. The existing research is descriptive research in terms of practical and developmental purpose and correlational descriptive research in terms of method. The statistical population of the study includes all the work of employees of pharmaceutical companies in Tehran from 1399 to 1870 people, of which 800 people were selected as a sample by simple random sampling method. Four researcher-made questionnaires were used to collect data, which included an 80-item questionnaire describing job descriptions with a validity of 0.84 and reliability of 0.967, a 98-item questionnaire on employee competencies with a validity of 0.86 and reliability of 0.953. Structural equation modeling was used to analyze the data using SPSS and AMOS22 software. The results showed that the proposed model has an acceptable fit to explain the relationship between job descriptions and employee competencies. So that there is a positive and significant relationship between job descriptions of physical abilities (including physical health, and physical ability); intellectual abilities (including intelligence, memory, creativity, innovation, and flexibility); social skills (including social interactions, verbal skills, nonverbal skills, emotion management, social responsibility, emotional intelligence) and mental ability (including mental health, adjustment and vitality) and competencies of pharmaceutical companies employees.

Keywords: job description, competency, employees, pharmaceutical companies 2020 MSC: 03D32, 49J55, 68W20

# 1 Introduction

One of the most important aspects of a person's life is his job, which has a direct impact on other aspects of his life, and people's satisfaction with their job will not only lead to increased success in that job but will also have a positive impact on their general routine, as growth and the promotion of any society depends on the people of that society. The positive results of people's satisfaction with their jobs will eventually lead to the development and promotion of their society [24]. One of the factors that cause the success of human resources working in the organization is having a suitable job description [20]. Job descriptions are useful not only for HR managers and managers of other units but also

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*Email addresses:* a.sayah570gmail.com (Taraneh Sayyah), a.salajeghe@iauk.ac.ir (Sanjar Salajegheh), Mjalalkamali@yahoo.co.uk (Mohammad Jalal Kamali), zarianjom@yahoo.com (Zahra Anjomshoaa) for job seekers. If a person is looking for a job and can analyze his / her desired job position accurately and accurately, he/she can not only learn purposefully and develop his/her abilities regularly but also in the job interview session, the message that "I'm a good choice for you to transfer to the other side in the best way [5]. Meritocracy is especially important in organizations that have grown or are growing. Organizations strive to identify, recruit, and protect the most deserving individuals. The organizational situation and the region that governs it requires that everyone and everything be used properly and in proportion to the situation, as much as possible [10]. Such a hypothesis about human capital is posed as placing the most deserving person in the most appropriate job position (meritocracy). Merit in the sense of employing the most suitable people in the most appropriate position in the organization [18].

One of the essential tasks in governments and organizations is to select the right people for the responsibilities. Merit means placing people in positions and responsibilities based on their skills and abilities, in a way that increases productivity in the organization. Institutionalizing meritocracy in organizations reduces corruption and promotes social justice. In management today, there are criteria for meritocracy that rely primarily on skill and expertise. These skills can be technical, human, and managerial skills [16]. From the Qur'an's point of view, specialization and skill alone are not sufficient conditions to be placed in organizational and governmental positions and responsibilities, but another factor that should guide these specializations and skills was commitment. Commitment and expertise together are the two basic criteria for meritocracy. Merit in Islam is rooted in justice and a monotheistic worldview [14]. Efficient human resource management needs to evaluate and demonstrate the competencies available to the organization's human resources, in order to improve the competencies required for specific job positions and occupations in the organization [9].

The competency requirements required for job positions are professional (job) competencies of human resources, innovative competencies of human resources, and social competencies of human resources. Qualifications, knowledge, skills, abilities or personality traits directly affect his job performance. The concept of individual competence has a long history in the field of management and is more applicable to leaders and managers. Competence is the ability to create added value for the organization, so as to create a sustainable competitive advantage for the organization. It must be ensured that human resource management is taken into account to achieve such a situation in the organization. Many competencies are rooted in the knowledge and skills of employees and especially in their functional specialities [8]. Therefore, the value of human capital in the development and use of capabilities as well as core capabilities cannot be underestimated. In fact, in determining the relationship between job descriptions and employee competencies based on Islamic competency models, there should be a sufficient number of candidates and job applicants to meet the competitive arena, and organizations rely on human resources to improve their activities and have an active presence in various markets. One of the most important responsibilities of human resource management is to establish a relationship between job descriptions and employee competitive advantage in the organization [18].

Usually, when it comes to adapting a person to a job, attention is paid to adapting the skills and knowledge of the employee to the job. But the adaptation of the individual personality and the needs of the employees to the job are ignored, which appears in the later stages and during the work. In general, a distinct capability or competence makes a company and organization superior. To decide whether a resource can be specifically identified as a distinctive competency or capability, the following four criteria are introduced: value creation for the customer, its scarcity compared to others, its imitability, and its irreplaceability [17]. Given what has been said in this study, our goal is to determine what is the relationship between job descriptions and employee competencies in drug distribution companies.

## 2 The theoretical framework

Explaining the relationship between job descriptions and employee competencies is a major activity in the planning and human resource management of any organization and includes legal activities that are used to find a sufficient number of qualified people. In fact, balancing these two issues is a major activity in the planning and human resource management of any organization and includes legal activities that are used to find a sufficient number of qualified people so that individuals and organizations can make each other in the form of short and long term profits [6].

An individual's relationship with his job was based on job design theories [19]. Most of these theories emphasize the role and efforts of managers to create a suitable work environment for employees [23]. Some of these theories believe that good performance is achieved when managers design employees' jobs in such a way that they have the maximum desired characteristics [13]; Others believe that because managers are more familiar with the materials and production processes in an organization, they can design a job that maximizes the fit between the different characteristics of

employees (interests, desires, abilities, etc.) and their jobs [15]. In general, it is assumed that employees perform their duties and tasks based on the formal job description performed by managers, and employees with similar occupations perform their work in the same way and play an active role in the way their job is performed [12].

Parker and Ohly [22] have argued that employees may actively change the design of their jobs by choosing tasks and discussing their content. The process by which employees shape their tasks is called job re-creation [7, 23]. They create, define, and generally employ three distinct behaviors: increase job resources, structural and social resources), increase challenging job demands, and decrease deterrent job demands [7, 25, 26]. Physical changes refer to changes in the shape, scope, number of job tasks or relationships in the workplace, and cognitive changes to changes in how people perceive their job. In fact, job design is a process that employees do to redesign their jobs and by doing so, they achieve a high level of job satisfaction [7].



Figure 1: Conceptual Model

#### 3 Methodology

The present research is a descriptive research in terms of applied purpose and a descriptive research in terms of method. The statistical population of the research includes all employees of pharmaceutical companies in Tehran province in 2020 to 1870 people. The sample size was 800 people who were selected by simple random sampling method Using the Cochrane relation:

$$n = \frac{\frac{z^2 pq}{d^2}}{1 + \frac{1}{N} \left(\frac{z^2 pq}{d^2} - 1\right)} \tag{3.1}$$

Research data were analyzed at the level of descriptive statistics using SPSS 23 software and structural equation modeling method using AMOS 22 software. In this study, a researcher-made questionnaire was used to assess job descriptions. This questionnaire has 80 items with a Likert scale of 5 options from strongly disagree to strongly agree that their score was from 1 to 5. The description of job characteristics in 4 dimensions of physical abilities (including physical health, physical ability); intellectual abilities (including intelligence, memory, creativity, innovation, flexibility); measures social skills (including social interactions, verbal skills, nonverbal skills, emotion management, social responsibility, emotional intelligence), and mental ability (including mental health, adjustment, and vitality). In this study, a researcher-made questionnaire was used to assess the competencies of employees. This questionnaire has 98 items with a Likert scale of 5 options from strongly disagree to strongly agree that their score was from 1 to 5. The questionnaire covers staff competencies in 5 dimensions including technical knowledge and reasoning, individual skills and attitudes, professional and ethical skills and attitudes, interpersonal skills and attitudes, system development skills, product and process.

AMOS22 software and according to the statistics obtained in Table 1, the results of the model under structural coefficients, a reasonable and acceptable fit was obtained. Considering the indices of  $X^2/Df = 4.74$ , GFI = 0.96, IFI = 0.98, TLI = 0.96, NFI = 0.98, CFI = 0.98 and RMSEA = 0.068, it shows that the measurement patterns the latent variable of job descriptions of employees in different dimensions has good structure and validity. So that the factor loads of all variables are more than 0.30, which indicates the acceptable factor loads of the components of job descriptions of employees.

Latent facto	ors	Factor	First-order latent	Measurement indicators	Factor	Significance		
Second-order la- tent variables		loads	variables	(Observed variables)	loads	0		
		0.27	Physical abilities	Physical health	0.82	0.001		
			i nysioar asinteios	Physical ability	0.79	0.001		
				Intelligence	0.62	0.001		
				Memory	0.69	0.001		
		0.78	Intellectual abilities	Creativity	0.85	0.001		
				Innovation	0.83	0.001		
				Instal learn 0.02 0.001   Physical ability 0.79 0.001   Intelligence 0.62 0.001   Memory 0.69 0.001   Creativity 0.85 0.001   Innovation 0.83 0.001   Flexibility 0.77 0.001   Social interactions 0.79 0.001   Verbal skills 0.88 0.001   Emotion management 0.85 0.001   Social Responsibility 0.87 0.001				
Job decemintion				Social interactions	0.79	0.001		
Job description				Verbal skills	0.88	0.001		
		0.81	Nonverbal skills	Nonverbal skills	0.87	0.001		
		0.81	Social Skill	Emotion management	0.85	0.001		
				Social Responsibility	0.87	0.001		
				Emotional Intelligence	0.75	0.001		
			Montol and	Mental health	0.82	0.001		
		0.63	mental and	Compatibility	0.84	0.001		
			psychological ability	Succulence	0.87	0.001		

Structural validity of the staff competency questionnaire Structural coefficients was used using AMOS22 software and according to the obtained statistics in Table 2, the results of the model under structural coefficients, a reasonable and acceptable fit was obtained. Considering the indices of  $X^2/Df = 0.888$ , GFI = 0.99, IFI = 0.99, TLI = 0.99, NFI = 0.99, CFI = 0.99 and RMSEA = 0.001 show that the measurement pattern The latent variable of employees' competencies in different dimensions has good fit and validity of structures. So that the factor loads of all variables

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Table 2 Structural	pattern of routes and	standard coefficients of	employee competencies
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are more than 0.30, which indicates the acceptable factor loads of the competency components of employees.

Tuble 2. Structural pattern of routes and standard coefficients of employee competencies										
Latent	factors	(Hidden	Factor loads	Significance						
variables	s)									
			Technical knowledge and reasoning	0.74	0.001					
			Individual skills and attitudes	0.98	0.001					
Employee competencies		cies	Professional and ethical skills and attitudes	0.66	0.001					
			Interpersonal skills and attitudes	0.44	0.001					
			System, product and process development skills	0.36	0.001					

The reliability of the questionnaires was measured by Cronbach's alpha method using SPSS 23 which according to Table 3 the coefficient of reliability of all questionnaires is at the desired level.

$$\alpha = \frac{k}{k-1} \left( 1 - \frac{\sum_{i=1}^{k} S_i^2}{\sigma^2} \right) \quad \text{or} \quad \alpha = \frac{k\overline{C}}{\overline{V} + (k-1)\overline{C}} \tag{3.2}$$

where: k: number of questions;  $S_i^2$ : variance of the i-th question;  $\sigma^2$ : Variance of the total number of questions;  $\overline{C}$ : average covariance between questions;  $\overline{V}$ : Variance is the average of the questions.

stionnairo Numbe	or of itoms	Crophach's	alpha a
Table 3: Cronbach	r's alpha coei	meients by vari	ables

Questionnaire	Number of items	Cronbach's alpha coefficients
Job description	80	0.967
Employee competencies	98	0.953

# 4 Findings

Among the respondents, 44.7% (358) were female and 55.3% (442) were male. Age: 40 (5%) respondents 30 years and younger, 227 (28.4%) between 31 to 40 years, 214 (26.8%) between 41 to 50 years and 319 (39.9%) were 51 years old and older. About 31 (3.9%) had a master's degree, 171 (21.4%) had a bachelor's degree, 468 (58.5%) had a master's degree and 130 (16.3%) had a doctorate.

Table 4: Descriptive Indicators Job Description								
Variable	Average	Standard deviation	Minimum	Maximum	$\mathbf{Skew}$	Elongation		
Job description	3.339	0.703	1.45	4.61	-0.694	0.177		
Physical abilities	3.046	0.825	1.11	5	0.092	-0.577		
Physical health	2.886	0.867	1.21	5	0.279	-0.453		
Physical abilities	3.207	0.951	1	5	-0.188	-0.839		
Intellectual abilities	3.312	0.791	1.36	4.81	-0.171	-0.326		
Intelligence	3.231	0.951	1	5	-0.271	-0.771		
Memory	3.272	0.985	1	5	-0.242	-0.834		
Creativity	3.254	0.951	1.21	5	-0.151	-0.815		
Innovation	3.369	1.011	1.21	5	-0.331	-0.845		
Flexibility	3.436	1.018	1	5	0.347	-0.911		
Social skill	3.488	0.908	1.43	4.77	-0.534	-0.543		
Social interactions	3.511	1.065	1	5	-0.487	-0.822		
Verbal skills	3.534	0.993	1	5	-0.512	-0.524		
Nonverbal skills	3.506	1.092	1	5	-0.427	-0.984		
Emotion management	3.472	1.085	1	5	-0.409	-0.856		
Social responsibility	3.522	1.041	1	5	-0.496	-0.731		
Emotional Intelligence	3.381	1.045	1	5	-0.378	-0.871		
Mental and psychological	3.283	0.891	1.27	4.73	-0.346	-0.629		
ability								
Mental health	3.372	1.007	1	5	-0.393	-0.664		
Compatibility	3.228	1.051	1	5	-0.211	-0.989		
Succulence	3.251	0.922	1	5	-0.282	-0.515		

About 49 people (6.1%) less than 5 years, 173 people (21.6%) between 6 to 10 years, 213 people (26.6%) between 11 to 15 years, 158 people (19.8%) between 16 and 20 years and 207 people (25.9%) had 21 years or more of service.

Table 5: Descriptive indicators of employee competencies								
Variable	Average	Standard	Minimum Maximum		Skew	Elongation		
		deviation						
Employee competencies	3.088	0.575	1.95	4.57	0.761	0.304		
Technical knowledge and reasoning	3.029	0.861	1.24	4.88	0.164	-0.703		
Individual skills and attitudes	3.061	0.796	1.44	4.88	-0.021	-0.329		
Professional and ethical skills and atti-	2.994	0.786	1.36	4.73	0.395	-0.257		
tudes								
Interpersonal skills and attitudes	3.155	0.759	1.41	4.88	0.257	-0.231		
System, product and process development	3.181	0.719	1.54	4.92	0.476	-0.514		
skills								

#### 4.1 Evaluate the proposed model using structural equation modeling

Structural equation modeling (SEM) method was used to evaluate the proposed model. Before examining the structural coefficients, the suitability of the model was examined. In structural equation modeling (SEM) based on the least squares method by PLS2 software, the index (GOF) will be used to check the fit of the entire conceptual model of the research. This index can be calculated by the following equation:

$$GOF = \sqrt{communalities \times R^2} \tag{4.1}$$

 $\overline{communalities}$  = average communal values of all hidden first-order variables of the research including 3 constructs; Environmental behaviors are good location and loyalty. The value of this parameter is calculated as follows:

$$\overline{communalities} = \frac{0.69 + 0.633 + 0.558}{3} \cong 0.627 \tag{4.2}$$

 $R^2$  = the average coefficient of determination of dependent variables (first and second order) in this research includes 2 constructs of good location and loyalty. The value of this parameter is calculated as follows:

$$R^2 = \frac{0.106 + 0.548}{2} \cong 0.327 \tag{4.3}$$

The review of the general research model is done using the GOF criteria:

$$GOF = \sqrt{0.627 \times 0.327} \cong 0.452$$
 (4.4)

According to the relation (GOF), the value of the index (GOF) is equal to 0.452, according to the three values of 0.01, 0.25 and 0.36 which are introduced as weak, medium and strong values for the index (GOF) and obtaining a value of 0.452 for the index (GOF) in this research, the very suitable fit of the conceptual model of the research is confirmed.



Figure 2: Developed model of the relationship between job descriptions and employee competencies

The fit of the initial pattern based on the fit indices used in this study is reported in the first row (compiled model) of Table 6. It indicates that the values of some of the fit indicators of the original model indicated that the proposed model needs to be modified and improved. For this purpose, in the next step, according to the correction indices (MI) in the output of Amos22 covariance paths, the dimensions of the research variables (Figure 3) were added to the model. After applying these changes, another analysis was performed on the data. The second pattern in Table 6 is given.

As the contents of Table 6 show, the first model does not have a good fit. In the next steps, by adding the proposed correction index (MI) paths, the pattern is improved and the fit indices of the final model are accepted. Also, the relationship intensity criterion determines the intensity of the relationship between the constructs of the model. The measure of the effect size is taken from the  $R^2$  index to analyze the relationship between the structures:

$$f^{2} = \frac{R^{2}y(x \text{ included}) - R^{2}y(x \text{ excluded})}{1 - R^{2}y(x \text{ included})}$$
(4.5)

The assumptions of the formula are as follows:

 $f^2(x \longrightarrow y)$ : the amount of influence of x on y



Figure 3: Modified model of the relationship between job descriptions and employee competencies

 $R^2 y(x \text{ included})$ :  $R^2$  value of structure y when structure x is included in the model.

 $R^2 y(x \text{ excluded})$ :  $R^2$  value of structure y when structure x is excluded from the model.

For the  $X^2/Df$  fit index, values less than 5 are appropriate, and the closer it is to zero, the better the pattern will fit. For GFI and AGFI, IFI, CFI, TLI index, a value close to 0.90 and above is considered as an acceptable good fit, which indicates that the model is good. In relation to the RMSEA index, values close to 0.05 or less indicate a good fit of the pattern and a value of 0.08 or less indicates a logical approximation error; A value higher than 0.10 indicates the need to reject the pattern [11]. Therefore, considering the values of the final pattern fitting indices (formulated model) and the limit of acceptable values mentioned above, it can be said that the model presented in this research is acceptable. The regression coefficients of the model show that the mentioned variables well explain the relationship between job descriptions and employee competencies.

Table 0: Fitness indicators for the developed models and the final model									
Pattern fit indicators	$X^2$	$\mathbf{D}\mathbf{f}$	$X^2/Df$	NPAR	GFI	IFI	TLI	CFI	RMSEA
Developed model	188808.39	1371	13.71	114	0.487	0.52	0.498	0.519	0.126
Corrective model (final)	6468.29	1329	4.86	122	0.902	0.904	0.906	0.904	0.079
Independence model	37661.22	1431	26.31	54	0.142	0.001	0.001	0.001	0.178

Using general fit indices, the question can be answered that regardless of the specific values reported for the parameters, in general, the developed model is supported by the collected experimental data or not? If the answer is yes, the model is acceptable. To interpret the values in the table above, it should be said:

The presence of non-significant chi-square (CMIN) equal to 693.40 and the level of significance (P = 0.001) shows a good result, but in this, the role of the degree of freedom (Df) is also important. In addition, considering that the degree of freedom (Df) of the fitted model (equal to 155) is close to zero and close to the degree of freedom of the model of independence (equal to 210), the model should be considered favorable.

The number of free parameters for the developed model (NPAR), which is 76, shows that the researcher in the development of the model did not easily spend the degrees of freedom, and this situation is acceptable.

Regarding relative indices, it should be said that in this table, the relative chi-square value (CMIN / DF) is 4.47, which indicates an acceptable situation for the model. Also, the value of 0.079 of the second root mean square residual index (RMSEA) for the developed factor model indicates the acceptability of the model.

In the above table, the Tucker-Lewis fit index (TLI) is equal to 0.904 and the adaptive fit index (CFI) is equal to 0.938, and since their values are higher than 0.90, based on these indices, the model is developed and considered acceptable.

In the above table, the value of goodness-of-fit index (GFI) is equal to 0.90 and the value of incremental fit index

(IFI) is equal to 0.939, both of which show acceptable values. The values of general fit indices in the table above show that the measurement model of this research is quite acceptable.

The results of the model show that the regression coefficient of the relationship between job descriptions and employee competencies is equal to 0.48 with a significance of less than 0.05. Therefore, it can be said that there is a significant relationship between job descriptions and employee competencies.

## 5 Discussion and conclusion

Based on the results of research there is positive and significant relationship between job descriptions of physical abilities (including physical health, physical ability); intellectual abilities (including intelligence, memory, creativity, innovation, flexibility); social skills (including social interactions, verbal skills, nonverbal skills, emotion management, social responsibility, emotional intelligence) and mental ability (including mental health, adjustment and vitality) and competencies of pharmaceutical companies employees. In this way, when employees have the appropriate physical, mental and emotional abilities and social skills, then their competencies will increase. In line with these findings, Abbasi [1] concluded that one of the competencies required for success in performing tasks by employees is intellectual abilities and social skills. Findings of the manager (2019) show that physical health, physical ability, intelligence, memory, creativity, innovation, social interaction, verbal skills, non-verbal skills and mental health are considered the competencies needed for managers. Aghajanloo [4] includes physical health, physical ability, intelligence, memory, creativity, innovation, flexibility, value and school characteristics, specialized knowledge and skills, social interactions, verbal skills, nonverbal skills, interpersonal relationships, emotion management, responsibility social acceptance, emotional intelligence, mental health, adaptability and vitality are considered to be the most important job descriptions that show the necessary competencies for employees. Abedi [2] competencies such as user interaction, creativity and initiative, software and information technology skills, self-confidence, managerial and conflict management skills, information literacy, professional knowledge and administrative skills are the job characteristics required to have employee competence in the field of librarianship have been mentioned. Ahmadi [5] business is specialized skills, ethics and commitment, decision-making and strategic thinking, change leadership (transformation), communication skills, performance management and self-motivation. Also describe the dimensions of the competency model designed for senior operational managers, business acumen, specialized skills, ethics and commitment, problem solving and analytical thinking, leadership, effective interaction and team building, executive power and resilience. Naami and Shenavar [21] have mentioned job motivation, job control, innovative behaviors and transformational leadership as predictors of job design that can be effective in creating and strengthening employee competence. [3] has introduced factors such as personality, awareness and knowledge, attitude and value, skills, etc. as the professional competencies and competencies of school principals. Institute (2020) lists the knowledge competencies, including basic-applied knowledge and professional knowledge, practical-professional competencies, operational management and work processes, self-management, communication, innovation and change, the competencies required by managers. Job descriptions have a significant impact on employee competencies. Therefore, it can be said that when the organization pays special attention to the physical health of employees, the organization encourages employees to do sports, the number of employees who are on sick leave is small, employees should take care of their physical health, the physical strength of employees should be appropriate and acceptable, the employees of the organization should usually be selected from smart people, the employees of the organization should be smart people, the organization should evaluate the employees after hiring short and long term memory. Try to attract creative people, to present a lot of creative ideas by employees to solve an organizational problem, the ideas that employees give to solve problems are innovative and new, the employees of the organization have good flexibility in solving organizational problems, flexibility the employees of the organization should be acceptable and suitable, having high public relations staff is important for the organization, the employees of the organization cooperate well with each other, the organization should try to keep the employees with high verbal skills, it is important that employees with high non-verbal skills are promoted more easily in the organization, the organization pays special attention to the ability to manage emotions in attracting employees, the organization encourages employees to stay away from emotional behaviors, in the organization body of social responsibility is an important principle, the organization should strive to maintain high emotional intelligence, having mental health is one of the most important criteria for attracting manpower in the organization, the organization should strive to maintain and promote the mental health of employees in the organization, the priority should be to hire people who are highly adaptable, in the organization, the field should be provided for the promotion of employees with optimism and cheerfulness, the organization should strive to have a fresh environment and the organization should strive to maintain optimistic and cheerful manpower. In that case, employees' knowledge of the basic concepts and principles of the job they are engaged in will be high, employees will have the ability to reason and solve job problems and adapt to technological changes, will have new and scientific methods of information retrieval, creative and they will be

innovative, care about their intellectual development, will have rational and defensible thinking, will have the ability to plan for their career path and stay as an employee, and will be able to participate in sustainable development and pay attention to creative thoughts and mindsets. They will try to avoid re-working in the organization, avoid wasting time and doing useless work, will have management and leadership skills, and will be able to work in multidisciplinary teams.

## **Practical suggestions**

- Pharmaceutical companies should pay special attention to the physical health of employees and encourage employees to exercise.
- Employees should be selected from smart people and pharmaceutical companies should evaluate the short-term and long-term memory of employees after hiring.
- It is important for pharmaceutical companies to have high public relations staff and the employees of the organization have a good cooperation with each other.
- Pharmaceutical companies should try to retain employees with high verbal skills and provide opportunities for promotion of employees with high non-verbal skills.
- Pharmaceutical companies should pay special attention to the ability to manage their emotions in attracting employees and encourage employees to avoid emotional behaviors.
- To consider specific measures to promote the company and not to take action without a plan.
- The organizational goals of the company should be drawn based on scientific planning and planning, employees should act prudently to improve their careers and be familiar with the strengths and weaknesses of the company.
- Employees have a scientific and regular planning for their future careers and are familiar with the opportunities and threats of the company.
- Employees demand their reasonable demands from managers with determination, welcome constructive criticism, apologize to others for mistakes and misbehavior, and talk openly with the critic.
- Employees resist the urge to have an intimate relationship when they do not want to, have the ability to carry out the company's strategic planning, and maintain the company's interests in negotiating with the client.
- Employees have the ability to take risky actions, have the necessary expertise in their field of work and transfer their experiences to newcomers.

## References

- [1] T. Abbasi, A study of the skills required by managers in managing the career path of employees, Master Thesis in Public Management, Tarbiat Modares University, 2019.
- Y. Abedi, Designing a job competency model for single librarians in Iranian public libraries, Master Thesis, Tarbiat Modares University, 2018.
- [3] E. Agha Ali Khani, Investigating the factors affecting the professional competencies and competencies of principals of middle and secondary education in Mallard county, M.Sc. Thesis, Islamic Azad University, Central Tehran Branch, 2011.
- [4] B. Aghajanloo, Designing and presenting a competency model for managers in government organizations in Zanjan province with emphasis on Islamic values, Master Thesis, Islamic Azad University, Zanjan Branch, 2018.
- [5] Y. Ahmadi, Designing a managerial competency model to identify managerial talents (case study: Iran Railway company), Master Thesis, Al-Zahra University, 2018.
- [6] M. Arefnejad, Identifying and prioritizing the components of competencies of school principals with emphasis on Islamic management, School Manag. Quart. 5 (2017), no. 1, 151–172.
- J.M. Berg, J.E. Dutton and A. Wrzesniewski, What is job crafting and why does it matter?, Michigan Ross School of Business, Retrieved June 15, 2015, from, http://positiveorgs.bus.umich.edu/wp-content/uploads/What-isJob-Crafting-and-Why-Does-it-Matter1.pdf

- [8] J.M. Berg, A.M. Grant and V. Johnson, When callings are calling: Crafting work and leisure in pursuit of unanswered occupational callings, Organ. Sci. 21 (2010), 973–994.
- [9] M. Bohlouli, N. Mittas, G. Kakarontzas, T. Theodosiou, L. Angelis and M. Fathi, *Competence assessment as an expert system for human resource management: A mathematical approach*, Expert Syst. Appl. **70** (2017), 83–102.
- [10] H. Darwish, A. Moghli, M. Mosavi and B. Panahi, Explaining the competencies of human resources in the national Iranian petrochemical company, J. Transform. Manag. 6 (2014).
- [11] V. Ghasemi, Structural equation modeling in social research using Amoss graphic, Sociologists Pub., Tehran, 2015.
- [12] A.M. Grant, Relational job design and the motivation to make a prosocial difference, Acad. Manag. Rev. 32 (2017), no. 2, 393–417.
- [13] A.M. Grant and S.K. Parker, Redesigning work design theories: The rise of relational and proactive perspectives, Acad. Manag. Ann. 3 (2019), no. 1, 317–375.
- [14] M.A. Haghighi, Organizational behavior management, Tehran: Termeh, 2020.
- [15] P. Lyons, Individual competitiveness and spontaneous changes in jobs, Adv. Compet. Res. 14 (2016), no. 1, 90-98.
- [16] M. Makoundi, A study of the process of recruitment and employment of human resources and its role in the development of the organization, Int. Conf. Manag. the 21st Century, Tehran, Vira Capital of Ideas, 2014.
- [17] S.M. Moghimi, Organization and management of research approach, Termeh Pub., Tehran, 2019.
- [18] S. Mohammadi and J. Bahari, Identification and prioritization of human resources recruitment and employment indicators based on improving passenger satisfaction level, Third Conf. Envir. Plann. Manag., University of Tehran, 2013.
- [19] F.P. Morgeson and M.A. Campion, Minimizing tradeoffs when redesigning work: Evidence from a longitudinal quasi-experiment, Person. Psych. 55 (2020), no. 3, 589–612.
- [20] A.Z. Naami and F. Shenavar, The effect of job regeneration on task performance and organizational citizenship behavior mediated by job motivation, New Psych. Res. Tabriz 9 (2014), no. 36.
- [21] A.Z. Naami and F. Shenavar, The role of work engagement, job control, innovative behavior, and transformational leadership in prediction of job crafting, Public Manag. Res. 8 (2015), no. 27, 145–166.
- [22] S.K. Parker and S. Ohly, *Designing motivating jobs*, In: R. Kanfer, G. Chen and R.D. Pritchard (Eds), Work motivation: Past, present, and future, New York: Routledge, 2018.
- [23] S.K. Parker, T.D. Wall and J.L. Cordery, Future work design research and practice: Towards an elaborated model of work design, J. Occup. Organ. Psych. 74 (2011), 413–440.
- [24] S.R. Seyed Javadin, Theories of management and organization, Tehran: Negah Danesh, 2017.
- [25] M. Tims, A.B. Bakker and D. Derks, The development and validation of the job crafting scale, J. Voc. Behav. 80 (2012), 173–186.
- [26] J. Van Mersbergen, The test and evaluation of a job crafting intervention in healthcare, Master Thesis in Innovation Management, TUE. School of Industrial Engineering, 2012.