Designing Competency Model Based on Succession Planning Approach for Educational Managers of 7 Districts of Mashhad Ministry of Education

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Abstract

This research was an applied research using mixed method design. In the qualitative approach, Delphi method is used by referring to 20 academic and educational experts selected by purposeful method. In this study, 381 participants were selected by stratified sampling method with appropriate allocation. Face validity is used for validation. Cronbach alpha reliability coefficient was higher than 0.8, indicating high reliability of the research instrument. The results identified 4 dimensions including; individual, communicative, organizational, professional, and 32 components for competency model of Mashhad 7 districts educational managers. Also, the communicative dimension and conceptual skill were determined as the most important ones. It was also revealed that the confirmed succession planning model of educational managers of 7 districts of Mashhad Ministry of Education involved three dimensions of volunteer evaluation, volunteer training and assessment of effectiveness with 6 components. Volunteer training dimension and individual performance evaluation and process components are of utmost importance. In competency model of Mashhad 7 districts educational managers based on a succession planning approach, competency plays an important role of 58% in succession planning.

Keywords: Competency, educational manager, Mashhad Ministry of Education, succession planning

Introduction

Organizations are created to attain goals, and achieving these organizational goals is directly related to how human resources work, Managers need to have special competencies and skills that enable them to do their jobs in a best way possible (Hayati, Dadgar & Jannati, 2015). Knowledge, skill, and attitude must be integrated in the individual so that he can effectively act in a particular context (Mérida Serrano et al., 2011). In today's competitive marketplace, organizations need to attract and keep the best people, and in order to maximize their employees' capabilities, they should choose an efficient and effective way to evaluate and improve the employees' performance at a

low cost and suitable time (Razazi, 2011). Barnett and Davies define succession planning as a structured process for identifying and preparing a potential successor or new leader in order to take on a new role (Gholipoor & Hashemi, 2015). Succession planning is a means of achieving our ultimate goals, which has the high risk of senior leadership (Nair, Shyamsunder & Sarmma, 2011). Succession planning is a strategic planning tool for addressing issues due to leaving people and also a bridge for the knowledge gap arising from those who have left the organization (Ghelichli, Mashoofi & Ghahramani, 2017). In today's changing environment, human resource is an expensive wealth and plays an essential role (Amoozadeh et al., 2015). More rigorous research suggests that in order to succeed, not only must individuals be placed in the right positions, but the top performers for each

position must be identified (Abbas Palangi, 2011). Since the organizations will face increasing competitive challenges in the future, and considering that managing these challenges will require more competent and effective managers than current managers, therefore, talent management or succession planning management has received much attention and has been considered important in prospective organization (Hajian, 2013). Therefore, managers' competencies can play a great role in succession planning in order to achieve their goals, because there are different reasons for appointing a skillful, competent and committed person in any organizations, such as transition from one organization to another, retirement, promotion, etc. Providing a model of competency can be helpful. Different studies have investigated managers' competency, its variables, designing competency models as well as designing succession planning models**.**

Ekrami and Hooshyar (2017) conducted a study entitled "Identifying Secondary School Managers' Competency: Mashhad District 4". In this study, 4 dimensions have been identified including, individual, environmental, managerial and technical. The results confirmed all dimensions and components of secondary school managers' competency model. In another study, "Towards a Valid Competency Framework for Sustainable Entrepreneurship" Ploum, Blok and Lans (2017) identified key competencies in three studies; Hesselbarth and Schaltegger (2014)'s study: 1) Strategic competency; 2) Systematic thinking ability; 3) Competency prediction; 4) Legal competency; and 5) Interpersonal competency; Wesselink et al., (2015)' study; 1) Thinking competency system; 2) Accepting diversity and interdisciplinary competency; 3) Interpersonal competency; 4. Operational competency; 5) Strategic management ability; as well as Lans et al., (2014)' study; 1) System thinking ability; 2) Accepting diversity and interdisciplinary competency; 3) Prior thinking ability; 4) Legal competency; 5) Operational competency; 6) Interpersonal competence; and 7) Strategic management ability. Three competencies are common; strategic competency (management), system thinking competency, and interpersonal competency**.** Moreover, in a study "Developing and Evaluating a Suggested Questionnaire Based on Competency" conducted by Ryan, Spencer and Bernhard (2012), participants were qualified for 15 jobs and the managers were identified as high performance. This study described the process of developing a questionnaire based on competency for using succession planning and management development in North America and Europe. The study showed, from an experimental viewpoint, organization's efforts and qualifications role in profitability of business as well as accomplished efforts for experimenting cultural validity. Findings indicated that a group of competencies were identified as anticipating factors for developing capital profits of organizations' managers. Business profit can be noticed by four competencies; team leadership, others development, success orientation, impact and influence.

Zakeri, Faghihi and Daneshfard (2015) did a library research called "Determining the Succession Planning Pattern of Managers Using the Story of Adam's Caliph, Based on Ayatollah Javadi Amoli's Interpretive Thought". From interpretive point of view, the most important factors in succession planning are competency meritology, competencies definitions, competency cultivation, personal and social preparation, and goal-based evaluation. Using these effective factors and methods, managers' succession planning can be richened and strengthened**.**

However, no research has been done on the designing a competency model for school managers based on succession planning approach, especially in Ministry of Education. Therefore, this study seeks for providing a suitable model of competency for educational managers based on succession planning approach in 7 districts of Ministry of Education in Mashhad **.**This research can have effective short and long-term impacts on different organizations such as Ministry of Education regarding the succession planning and selecting the competent people for different sections particularly managers. This study looks for answering the fundamental question of "what is the appropriate model for managers' competency based on a succession planning approach?" Thus the research questions are as the following:

1. What is the appropriate competency model of educational managers of 7 districts of Mashhad Ministry of Education based on a succession planning approach?
2. What are the dimensions of competency model of educational managers of 7 districts of Mashhad Ministry of Education?
3. What are the dimensions 'priorities of competency model of educational managers of 7 districts of Mashhad Ministry of Education?
4. What are the components of competency model of educational managers of 7 districts of Mashhad Ministry of Education?
5. What are the components' priorities of competency model of educational managers of 7 districts of Mashhad Ministry of Education?

6. What are the dimensions of succession planning model of educational managers of 7 districts of Mashhad Ministry of Education?
7. What are the dimensions' priorities of succession planning model of educational managers of 7 districts of Mashhad Ministry of Education?
8. What are the components of succession planning model of educational managers of 7 districts of Mashhad Ministry of Education?
9. What are the components' priorities of succession planning model of educational managers of 7 districts of Mashhad Ministry of Education?
10. What is the role of competency in the succession planning of educational managers of 7 districts of Mashhad Ministry of Education and to what extent?

Method

This study is a developmental-applied research and a mixed-method one. In a mixed-method study, first, the qualitative data and then, the quantitative data are collected and analyzed. Finally, the results of both qualitative and quantitative analysis are interpreted. Therefore, the research design is exploratory analysis. In fact, to present a competency model for educational managers of 7 districts of Mashhad Ministry of Education based on succession planning approach, first conceptual model was formed and then, using the case studies and field and survey studies data, the designed model based on Delphi method was analyzed and tested.

Participants

The statistical population in the qualitative section (Delphi method) includes all professors of educational science and management, senior managers of higher education institutes as well as managers and school secretaries of 7 districts of Mashhad in the academic year 2017-2018. Based on the research title, using non-probability sampling methods, the required experts were identified and Delphi method's members, 20 people, were selected.

After determining the panel members, 3 steps of Delphi method were done. Questionnaires for each step were distributed in person and electronically. These people, known as the Delphi panel or experts must be selected in a purposeful sampling procedure, formed the statistical population framework of the qualitative section. The statistical population in the quantitative section includes all secondary school teachers and school secretaries of 7 districts of Mashhad. Based on data gathered from Mashhad Ministry of education, 7759 are working in Ministry of Education, 6561 as a teacher and 1198 as a school secretary. In this study, 381 samples were selected by stratified sampling method but to insure validity 391 questionnaires were collected and analyzed.

For sample size determination of the study, the following formula has been use;

$$ n = \frac{Npq}{(N-1)D + pq} $$

After specifying the sample size, the number of participants in each category should be specified, indicating how the sample is distributed among the categories which is called "specifying method". Therefore, considering the study population structure and consultations with statistical and research experts, it was decided to use the proportional allocation method to determine the number of each category. Consequently, regarding the required sample size, selecting the categories, and allocation method, the required number in each category is calculated and reported in Table 1.

Table 1.

Sample Size Determination in Each Category

Districts	Class	The volume of each class	Assignment coefficient	Sample size
1	**Teachers**	1122	0/15	55
	school secretaries	186	0/15	9
2	**Teachers**	901	0/12	44
	school secretaries	144	0/02	8
3	**Teachers**	558	0/07	27
	school secretaries	111	0/01	6
4	**Teachers**	1054	0/14	52
	school secretaries	210	0/03	10
5	**Teachers**	873	0/11	43
	school secretaries	165	0/02	8
6	**Teachers**	1003	0/13	49
	school secretaries	194	0/02	10

Districts	Class	The volume of each class	Assignment coefficient	Sample size
7	Teachers	1050	0/14	51
	school secretaries	188	0/02	9
Total		7759	1/00	381

Instruments

In this study, the data were collected by Delphi method in three phases through a questionnaire and its face validity was confirmed by experts. The final questionnaire had 131 indicators .After selecting a sample of (teachers and school secretaries) and collecting 391 questionnaires, factor analysis was used, and confirmed the instrument validity statistically. Cronbach's alpha coefficient was higher than 0.8, indicating high reliability of research instrument.

Procedure

In this study, the data were collected by Delphi method in three phases through a questionnaire. After designing the initial conceptual model based on theoretical bases, research background and qualitative analysis, the model dimensions and components were sent to 20 Delphi panel experts to be analyzed and evaluated, as well as the validity of each question in 3 different Delphi stages was assessed. Also, after

editing research questionnaire based on suggestions and comments, the final questionnaire was prepared and adjusted. The validity of the research instrument (presenting the competency model of educational managers of 7 districts of Mashhad Ministry Education based on succession planning approach) was assessed according to the experts' comments. After sampling (teachers and school secretaries) and collecting the final 391 questionnaires, factor analysis was used. (Investigating explained variation, variables correlation, factor analysis, estimating factor loadings, etc.)a factor analysis model was fitted based on main variables and varimax, which also confirmed the selective components for each dimension. It confirmed the instrument validation. In this research, the most famous and widely used method of reliability measurement, Cronbach's alpha coefficient, was used. Therefore, Cronbach's alpha coefficient was calculated using pre-test data of 25 people. Table 2 shows the Cronbach's alpha coefficient for each of the variables studied in terms of their dimensions.

Table 2.

Cronbach's Alpha Coefficient for Measuring the Reliability of Research Variables

variable	Dimensions	Number of components	Cronbach's alpha coefficients
managers competency	**Individual**	7	0/87
	Communicative	8	0/91
	Professional	7	0/94
	organizational	10	0/88
The overall managers competency index		32	0/90
Succession planning	**policy making determination**	1	0/73
	Volunteer Evaluation	3	0/84
	Volunteer training	3	0/88
	Assessment of Effectiveness	2	0/77
The overall Succession planning index		9	0/81

As it can be seen from tables' data, Cronbach's alpha coefficient for competency and succession planning along with their dimensions is higher than 0.8

that indicates high reliability of measurement instruments.

Findings

Demographic Analysis of Qualitative Section

Table 3.
Demographic Characteristics of Experts Members

Gender	Male	Female	total
	(90%) 18	(10%) 2	(100%)20
Age	30 to 40 years	40 to 50 years	over 50 years
	(15%) 3	(75%) 15	(10%)2
Service Experience	10 to 15 years	15 to 20 years	20 to 30 years
	(10%) 2	(10%) 2	(80%)16
Academic level	MA	PhD	in total
	-	(100%)20	(100%)20

According to the results of Table 3, it can be seen that most of experts are men, that is 90%, and only 10% are women. Experts' academic level was one of the demographic variables of the study, which indicated all 20 people as experts have a PhD degree. Most of experts that are 70% are 40-50 years old and their service experience is between 20 and 30 years.

Demographic Analysis of Quantitative Section

Table 4.
Frequency Distribution of Respondents' Gender

Gender	Frequency	Percentage Frequency
Female	135	35
Male	232	59
No Answer	24	6
Total	391	100

According to the results of Table 4, the most participants were men, 59% and only 35% were women.

Table 5.
Frequency Distribution of Respondents' Academic Level

Academic levels	Frequency	Percentage Frequency
Associate Degree	18	5
Bachelor	214	55
MA	117	30
PhD	4	1
No Answer	38	10
Total	391	100

As it can be seen in Table 5, most of the participants, that are 55%, have a BA degree, 30% have MA, and 1% has a Ph.D. degree.

Table 6.
Descriptive Statistics of Respondents' Age

Variable	number	Average	Minimum	maximum	standard deviation
Age	298	43	27	60	7

Findings of Table 6 show that the average age of participants is 43. The youngest one is 27, and the oldest is 60. Standard deviation of age is about 7 years.

Table 7.

Frequency Distribution of Respondents' Organizational Position

organizational position	Frequency	Frequency percentage
Teacher	316	80/80
school secretary	74	18/9
No answer	1	0 /3
Total	391	100

According to Table 7, 81% are teachers and 19% are school secretary.

Table 8.

Descriptive Statistics of Respondents' Service Experience

Variable	number	Average	minimum	maximum	standard deviation
Service Experience	315	20/6	2	38	8/18

Table 8shows that participants' service experience is 20.6 years, and their scattering is about 8 years.

Table 9.

Frequency Distribution of Respondents' Service District

District of Service	Frequency	Percentage Frequency
1	64	16
2	52	13
3	35	9
4	67	17
5	51	13
6	61	16
7	61	16
Total	391	100

Table 9 indicates that most participants, 17% works in district 4, and the least belongs to district 3, 9%. Other districts are the same.

Qualitative Findings

In the first phase of Delphi method, a questionnaire including dimensions, components, and indicators suggested by the researcher that assesses competency model of educational managers of 7 districts of Mashhad based on a succession planning approach was distributed to the experts to comment on the importance of dimensions, components and indicators. The results showed that most of the identified indicators were approved by experts and only 47 indicators received less than 60% agreement. Therefore, in the second phase of Delphi method, these indicators were eliminated. Experts were asked to identify and add, if possible, other important indicators constituting the managerial competency model of the Mashhad 7 districts that the researcher did not mention them in the questionnaire. Based on experts' recommendations, Faithfulness and Trust indicators were added to communicative dimension of competency, and applied in the second phase. In the

second Delphi method, a Likert-scale questionnaire including the remaining components and indicators of the first phase were again re-assigned to the experts to determine the significance of each identified indicators. The findings showed that among the designed indicators, 10 indicators obtained the same measure or less than 4.0 by experts. Therefore, these indicators were eliminated and the remaining indicators were compiled in the third phase questionnaire and returned to the experts which were reported below. The results obtained from the third phase of Delphi method showed that all of the indicators assessing both competency and succession planning variables got a score higher than 4. Therefore, at this phase of the Delphi method, all of the indicators for evaluating the competency model based on succession planning approach were evaluated.

Quantitative Findings

In this research, the research questions are investigated using the findings and results of the structural equation model fitting.
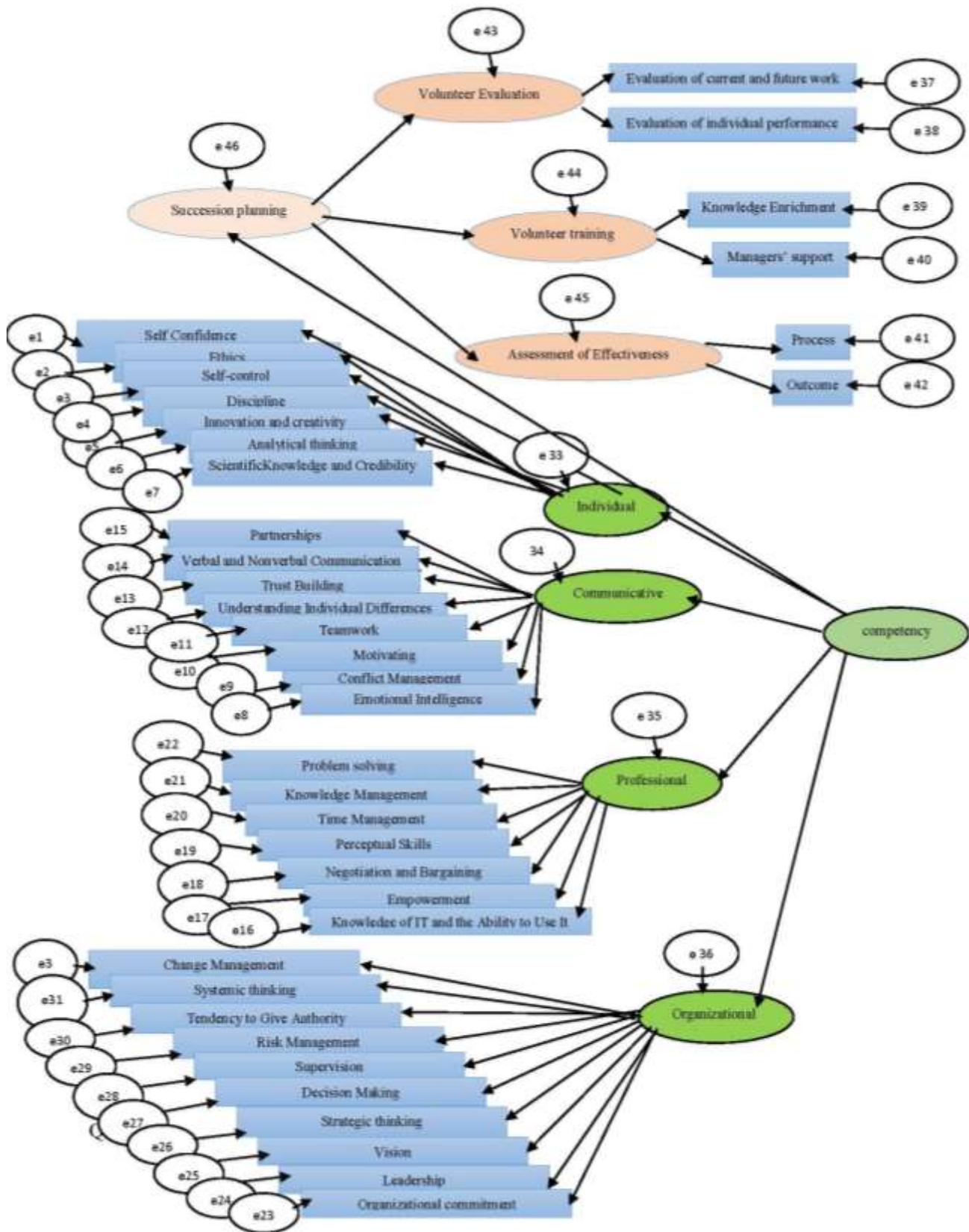
Figure 1.
Structural Model of Research

Question 1: As you can see in Figure 1, the structural equation model of the research including the implementation of competency model of educational managers based on succession planning approach was presented. Fitting the model to the research data was investigated, the suitability of model was confirmed, and all the coefficients were significant.

Question 2 : the structural model in Fig.1 should be reused and it can be seen that the structural model of competency consists of four dimensions; individual, communicative, professional, and organizational. In fact, based on the results, the fit indices confirmed the fitness of the measurement model to the collected data and all coefficients are significant at 95% level. Therefore, to answer the above question, the following dimensions of competency were described in the table below.

Table 10.
Structural Research Model Results for Question Two

Variables		Standardized Coefficient	Standard Deviation	P-value
competency	**individual**	0/90	-	-
	communicative	0.95	0/073	0/000
	professional	0/94	0/076	0/000
	organizational	0/92	0/064	0/000

As the findings in Table 10 showed, competency consists of four aforementioned dimensions, and all of which are meaningful. Because the calculated P-value for these dimensions is less than the significance level of the test (P-value = 0.05 <0.05).

Question 3: The information in following table is based on the results of the structural research model (Figure 1).

Table 11.
Structural Research Model Results for Question Three

Variables		Multiple Correlation Square
Competency	**Individual**	0/807
	Communicative	0/896
	Professional	0/887
	Organizational	0/865

The above table shows some of the results of structural model related to question 3 including; the multiple correlation square values for each of competency dimensions. Multiple correlation squares are estimates of the percentage of variance of each of the competence dimensions explained. According to this table, the highest multiple correlation coefficients belongs to the communicative dimension that is 90%, then professional dimension, 89% and the lowest belongs to the individual dimension, 81%. Therefore,

to answer question 3, it can be said that in educational managers' competency model of 7 districts of Mashhad based on succession planning approach, the communicative dimension is the most important one.

Question 4: based on the results, the fit indices confirmed the fitness of the measurement model to the collected data and all coefficients are significant at the 95% level, since the calculated P-value for these components is less than the significance level of the test. (05/0 <000 / 0P-value =). Therefore, it can be concluded that with 95% confidence coefficient that the dimensions of 7 districts of Mashhad managers' competency based on succession planning approach consist of 32 components of scientific knowledge and credibility, analytical thinking, innovation and creativity, discipline, self-control, ethics, self-confidence, partnerships, verbal and nonverbal communication, trust building, understanding individual differences, teamwork, motivating, conflict management, emotional intelligence, problem solving, knowledge management, time management, conceptual skill, negotiation and bargaining, empowerment, knowledge of IT and ability to use it, change management, system thinking, tendency to give authority , risk management, supervision, decision making, strategic thinking, vision, leadership and organizational commitment.

Question 5: Table 12 shows some of the structural model results related to the fifth question.

Table 12.
Structural Research Model Results for Question Five

Dimensions	Components	Correlation Square Multiple
Individual	Scientific Knowledge and Credibility	0/544
	Analytical thinking	0/686
	Innovation and creativity	0/632
	Discipline	0/564
	Self-control	0/533
	Ethics	0/626
	Self Confidence	0/700
Communicative	Partnerships	0/614
	Verbal and Nonverbal Communication	0/579
	Trust Building	0/729
	Understanding Individual Differences	0/648
	Teamwork	0/644
	Motivating	0/613
	Conflict Management	*0/660*
	Emotional Intelligence	0/545
Professional	Problem solving	0/761
	Knowledge Management	0/682
	Time Management	0/759
	Perceptual Skills	0/806
	Negotiation and Bargaining	0/529
	Empowerment	0/732
	Knowledge of IT and the Ability to Use It	0/477
Organizational	Change Management	0/615
	Systemic thinking	0/711
	Tendency to Give Authority	0/791
	Risk Management	0/714
	Supervision	0/705
	Decision Making	0/719
	Strategic thinking	0/703
	Vision	0/632
	Leadership	0/658
	organizational commitment	0/561

As it can be seen in Table 12, the highest multiple correlation coefficient belongs to the conceptual component of professional dimension, 81%, then tendency to give authority and time management with a multiple correlation coefficient more than 75%. The last rank belongs to the knowledge component of IT technology and ability to use it with a multiple correlation coefficient of less than 50%. Therefore, in response to the fifth question, it can be said that in the educational managers' competency model based on succession planning approach, the conceptual skill component is of utmost importance.

Question 6: some of the results of structural model of the research related to it are shown in the following Table.

Table 13.
Structural Research Model Results for Question Six

Variables		Standardized Coefficient	Standard Deviation	*P-value*
Succession planning	Volunteer Evaluation	0/85	-	-
	Volunteer Training	0/99	0.087	0.000
	Evaluation of effectiveness	0/94	0.087	0.000

As Table 13 shows, succession planning approach consists of the three aforementioned dimensions, and all of which are meaningful. Because the calculated P-value for these dimensions is less than the significance level of the test (P-value = 0.05 <0.05). Therefore, with 95% confidence coefficient, it can be concluded that the succession planning dimensions of educational managers of Mashhad include three dimensions of volunteer evaluation, volunteer training and evaluation of effectiveness.

Question 7: The information in this table is based on the results of the structural research model (Figure 1).

Table 14.
Results of the Structural Research Model for Question Seven

Variables		Multiple correlation squares
Succession planning	**Volunteer Evaluation**	0.714
	Volunteer Training	0.999
	Evaluation of effectiveness	0.885

Table 14 shows some of the results of structural model for question seven, including multiple correlation square values for each succession planning dimension. Multiple correlations square are estimate of the percentage of variance in each succession planning dimension explained by it. According to this table, the highest multiple correlation coefficients belongs to the volunteer training dimension of 99%, after that, the evaluation of effectiveness with multiple correlation coefficient of 89%, and the last place belongs to the voluntary evaluation dimension of 71%. Therefore, in answer to the seventh question, it can be said that in model of succession planning evaluation of Mashhad educational managers, the dimension of volunteer education is the most important one.

Question 8: the structural model shown in Figure1 should again be used. According to this figure, it can be seen that the structural model of succession planning consists of six components; evaluation of current and future work requirements, individual performance evaluation, knowledge enrichment, managers' support, process and outcome. In fact, based on the results, the fit indices well confirmed the fitness of measurement model to the collected data and all coefficients are significant at the 95% level, since the calculated P-value for these components is less than the significance level of the test. (05/0 <000 / 0P-value =).

Question 9: Table 15 shows some of the results of structural model related to the question.

Table 15.
Structural Research Model Results for Question Nine

Variables		Multiple correlation square
Volunteer Evaluation	**Evaluation of current and future work requirements**	0.682
	Evaluation of individual performance	0.942
Volunteer training	**Knowledge Enrichment**	0.768
	Managers' support	0.807
Evaluation of effectiveness	**Process**	0.927
	Outcome	0.842

As can be seen in Table15, the highest multiple correlation coefficient belongs to the individual performance component of volunteer evaluation dimension, 94%. Then the process component with multiple correlation coefficients of 93% and the last rank belongs to the component of knowledge enrichment with multiple correlation coefficients of 77%. Therefore, in answer to this question, it can be said that in the model of succession planning evaluation of Mashhad educational managers, the components of individual performance evaluation and process are of utmost importance.

Question 10: Table 16 shows some of the results of structural model related to this question.

Table 16.

Results of the Structural Research Model for Question ten

Relationship	Standardized Coefficient	Standard Deviation	Multiple correlation square	P-value
Succession planning ← Competency	0.764	0.0775	0.58	0.000

According to the above table, the coefficient between succession planning and competency was 0.76. Also for this coefficient, P-value is<0.05 <0.05, which indicates that this coefficient is significant at 95% confidence level. In other words, the relationship between succession planning and competency is significant. On the other hand, the multiple correlation square value is 0.58. Multiple correlations square is estimate of the percentage of succession planning variance explained by competency. Therefore, in this model, about 58% of the succession planning variance is explained by competency. Thus, in answer to question ten, it can be said that in competency model of Mashhad educational managers based on succession planning approach, competency explains 58% of succession planning and plays a role in it.

Discussion and Conclusion

The rapid development of science and technology along with broad cultural, social, and economic developments cause a requirement for training workforce of organizations to keep pace with current developments in order to play their role as an active and effective element of organization for achieving the goals (Nayebpoor, Zoghi & Salehi, 2012).

In the modern viewpoint of succession planning, organizations have become more aware of this process importance in the long run, not only choosing at the managerial level but at all levels of the organization, preparing, developing, and retaining organizational leaders, and preparing, developing, and retaining future leaders (Mahdi Beigi, Yaghoobi & Seyyed al-Hosseini, 2017, p.149). In addition to their broad practical capabilities in human resource management processes, including: recruitment, selection, learning and development and career planning: competency models have many other benefits such as employees' explicit understanding of how behaviors and attitudes are encouraged in the organization, transparency and fairness of performance management and development processes and talent identification (Gholipoor, Seyed Javadin & Roozbehan, 2018, p.6). Therefore, presenting a competency model of educational managers of 7 districts of Mashhad Ministry of Education based on succession planning approach is

effective on human resource development and it is the main aim of this study.

To answer the first question, the appropriate competency model of 7 districts Mashhad educational managers based on succession planning approach has been identified. The obtained results of managers' competency model are in line with the results of Derakhshan and Zandi research (1997); Birjandi et al. (1977). The results obtained in the succession planning model are in line with the results of Kolivand and Hezar Jeribi (2018). To answer question two, based on the results with 95% confidence coefficient, it can be concluded that there are four dimensions for competency model of educational managers including; individual, communicative, professional and organizational. In response to question three, as it can be seen in the results, the highest multiple correlation coefficient belongs to communicative dimension of 90%, then the professional dimension with multiple correlation coefficient of 89% and the last place belongs to the individual dimension, 81%. Therefore, it can be said that in the competency model based on succession planning approach of educational managers of 7 districts of Mashhad Ministry of Education, the communicative dimension is the most important dimension. The results of this study are in line with the findings of Derakhshan and Zandi (2018); Khorasani, Zahedi and Kamizi (2014) as well as Abili, Nikkhah, Farrokhani and Salehnia (2014). In this study, communicative dimension has been identified as a priority.

To answer question four, with 95% confidence coefficient it can be concluded that competency model components based on succession planning consisted of 32 components of scientific knowledge and credibility, analytical thinking, innovation and creativity, discipline, self-control, ethics, self-confidence, partnerships, verbal and nonverbal communication, trust building, understanding individual differences, teamwork, motivating, conflict management, emotional intelligence, problem solving, knowledge management, time management, conceptual skill, negotiation and bargaining, empowerment, IT Knowledge and ability to use it, , change management, systematic thinking, tendency to give authority, risk management, supervision, decision making, strategic thinking, vision, leadership and organizational

commitment. The results of the present study are in line with the findings of Barvani and Taleb (2017); Macke and Crespi (2016); Lee (2010) cited in Abbaspoor et al. (2016); Cheethamand Chivers(1996) cited in Hashemi, Mashinchi and Mohammad Khani (2016); Allahyari, Abolghasemi and Ghahramani (2018); Gholipoor, Sayyed Javadin and Roozbehan (2018); Cheragh Birjandi et al. (2018); Sangari (2017); Mohebi and Mohammadian Shamim (2017); Abili, NikkhahFarrokhani and Salehnia, (2014); Badli and Amirkhani (2013); Mir Mohammad Sadeghi, Sobhiyeh and MalekJafarian (2013); Mahmoodi, ZareiMatin and Bahirayi (2012) Chit Saz, Zolfaghar Zadeh and Ghiasi Nodooshan (2012) and Ekrami and Rajab Zadeh(2011).

To answer question five, according to the results, it can be said that the highest multiple correlation coefficient belongs to the conceptual component of professional dimension, 81%. Then, the components of tendency to give authority and time management with multiple correlation coefficient more than 75%, and the last rank belongs to the knowledge of IT technology and the ability to use it, with a multiple correlation coefficient of less than 50%. Therefore, it can be said that in the competency model based on succession planning approach, the conceptual skill is of the utmost importance. The results of the present study are in line with the findings of Derakhshan and Zandi (2018). Also in the research of Hashemi, Mashinchi and Mohammadkhani (2016), conceptual skill was identified as priority. In answer to question six, with a 95% confidence coefficient, it can be concluded that the succession planning of educational managers of 7 districts of Mashhad Ministry of Education include three dimensions of volunteer evaluation, volunteer training and evaluation of effectiveness.

To answer question seven with 95% confidence coefficient, it can be concluded that there are 6 components for succession planning including; assessment of current and future work requirements, individual performance evaluation, knowledge enrichment, managers' support, process and outcome. The results of the present study are in line with the findings of Loew(2015); Rothwell (2006) cited in Zeynodin Bidmeshki, Adli and Vaziri (2014); Bayham et al., (2002); Karan cited in Latifi, Abdolhosseinzadeh and Azarfar (2016); Kolivand and Hezar Jeribi (2018); Amin, Naderi Khorshidi and Vahed (2017); Ghelichli, Mashoofi and Ghahramani (2016); Research and Research Council of Pars Educational Complex (2016); Ghorbannejad and Isa Khani (2016); Ziyaie et al. (2014); Mansoori Jalilian and Soofi (2013), Hooshyar and Rahimnia (2013);

Esbati (2013); Gholipoor, Poor Ezzat and Sabok Ro (2011); Kim (2006) cited in Hadizadeh, Moghadam and Soltani (2011); Zare (2011); Nasehi Far, Dehghan poor, Farashah and Sanjari (2011); and Karbasi and Alavi (2011). Based on the results, we can say that the highest multiple correlation coefficient belongs to the volunteer training dimension, 99%. After that, the evaluation of effectiveness, 89% and the last place belongs to the volunteer evaluation, 71%. Therefore, to answer the eighth question, it can be said that in the succession planning model, the volunteer training dimension is the most important one. The results of the present study are in line with the results of Amin, Naderi, Khorshidi and Vahed (2017).

In response to question nine, the results show that the highest multiple correlation coefficient belongs to the individual performance evaluation component of volunteer evaluation dimension, 94%. Then the process component with multiple correlation coefficient was 93%. The last rank belongs to the component of knowledge richness, 77%. Therefore, it can be said that in evaluating the succession planning model, the individual performance evaluation and process are the most important components. The results of the present study are in line with the results of Amin, Naderi Khorshidi and Vahed (2017) Delkhosh Kasmayi, Oladiyan and Arabshahi (2017). According to the results, in the competency model based on succession planning approach, competency explains 58% of succession planning and plays a role in it. The results of this study are in line with the findings of Mohammadi, Esmaili and Sajjadi Hazaveh (2017).

The results show that the effective factors of competency are 4 dimensions. Individual dimension: Individual indices investigate individual performance before and after management appointment; and compare it with anticipated performance qualification and the desired one. General indices evaluate appointment numbers and management jobs (Ahmadi Baladehi & Salehi, 2015, p. 80) Communicative dimension: These competencies make the exchange of information easy (Ekrami & Hooshyar, 2016, p.16). Professional dimension: The definition of skills and the kinds of competency are identified as technical and practical competencies, or professional and job competencies (Irannejad, Saee Arsi & Moosavi, 2014, p.12). Organizational dimension: These competencies are effective on organization (Ekrami & Hooshyar, 2016, p.16).

For investigating the dimensions of succession planning, some organizations design competency models for professions in order to explain the needed competencies of professions. In a competency model,

job competencies generally are obtained by different methods such as testing, job analysis, analysis of key organization processes and collecting inside and outside experts' comments (Karbasi & Alavi, 2011, p.32). Volunteer training: Developing succession planning as a vital component of succession planning management is going to be increased and developed. Today, more than half of organizations, 51% consider development priority and more than two-thirds, 68% put it in their next 12 years' priority (Loew, 2015, p.12).

Effectiveness evaluation consists of outcome and process indicators. Outcome focuses more on final product of succession planning. Evaluation outcome indicators include;

1. Evaluation of individual performance of selected candidates for key positions.
2. Evaluation of candidates' commitment to using succession planning management system.
3. Evaluation of personnel's' tendency to be remained in organization for assessing the effectiveness of management succession planning system.

According to the findings, expectations from managers are increasing rapidly. One of these expectations is succession share in managerial positions that organizations cannot meet their needs only by existent backup force. Absorbing, developing and keeping talented human force for key positions are necessary. Succession planning is essential for effective management of human resource. Organizations have a comprehensive approach for planning, selection, development and contributing of their workforce. By this process the organizations can anticipate their executive resource needs, assessment needs and their executive members' needs and select high qualified successors from a variety of executive positions in an organization (Reynold, 2017). Therefore, different organizations such as Ministry of Education should organize some programs for training talent and ability of current and future managers; this will lead to increasing skills and achieve organizational goals. Using competency models can help organizations with identifying and selecting these people. Moreover, succession planning models cause planning, implementing and assessing the succession planning process that using these models is suggested.

Limitations

1. Non-implementation and no validation of the research findings in a wider society for generalizability

2. Implementing this research cross-sectional in 2017-2019

Practical Suggestions

1. Planning some educational programs for training and enhancing managers by authorities of Ministry of education
2. Considering that the most important dimension of competency model is communicative one, some educational programs related to communicative skill of managers and creating a favorable atmosphere are suggested.
3. Considering that the most important component of competency model is conceptual skill of professional dimension, it is suggested that in order to achieve conceptual skill, hold some educational programs in special fields, familiarity with systemic attitude and methods, and using the findings of studies about organizations.
4. In order to take into account competency model of managers in their choosing and appointing, it is suggested that the competency model is given to Ministry of Education and also Universities and appointing the competent manager will be based on this model.
5. Presenting intelligent competency model of managers is suggested for future research.
6. It is suggested that the competency model is used for developing competencies of teachers.
7. Based on succession planning and training the likely successor, it is suggested that Ministry of Education take action to hold educational programs specialized in succession planning in order to identify competent people.
8. In order to prepare successors of managers, there is a need to provide financial logistics and budgeting for succession planning programs.
9. Doing some research on designing the educational programs and evaluation of succession planning is suggested.

References

Abbas Palangi, J. (2011). *Investigating the relationship between talent management and substitute cultivation in workers' welfare bank*, Master of Science Degree in Public Administration, Ministry of Science, Research and Technology, Payame Noor University, Department of Management, Economics and Accounting, Tehran Center.

Abbaspoor, A., Ahmadi, M., Rahimian, H., & Delavar, A. (2016). Explaining and presenting the competency model of inspectors in the inspectorate general of the country based on theory approach. *Human Resources Education and Development,* 10, 95-124.

Abili, Kh., Nikkhah Farrokhani, Z., & Salehnia, M. (2014). Insurance seller's competency model for realization of management based on competency. *Insurance Research Journal*, 3, 95-124.

Allahyari, R., Abolghasemi, M., & Ghahramani, M. (2018). Discovering and identifying the dimensions, components, and indicators of competency model of Iranian science and technology park managers using structural equation modeling. *Management and Planning in Educational Systems*, *11*(1), 59-82.

Amin, F., Naderi Khorshidi,A., & Vahed, A. (2017). Investigating the succession planning model of Iranian management of Water Resources Company. *Human Resource Management Research*, 3, 49-70.

Amoozadeh, M., Ghahramani, M., Khorasani, A., & Frostkhah, M. (2015). Investigating the personnel training and development system in Iranian organizations. *Human Resources Training and Development,* 6, 25-73.

Badli, Z., & Amirkhani, A. H. (2013). Determining the key competencies of evaluation center's evaluators. *Organizational Behavior Studies*, 4, 61-81.

Cheragh Birjandi, K., Peymanizad, H., Keshtidar, M., & Fahim Doin, H. (2018). Structural modeling of competency model of physical education managers of universities based on Islamic culture. *New Approaches to Sport Management, 6* (21), 81-93.

Chit Saz, E., Zolfaghar zadeh, M., & Ghiyasi Nodooshan, S. (2012). Developing a core competencies model for social cultural managers of Iran Islamic universities. *Management in Islamic University, 1* (2), 27-48.

Delkhosh Kasmayi, A., Oladiyan, M., & Arabshahi, T. (2017)*.* Investigating the success factors of succession planning of school managers of Tehran district. *Applied studies in Management and Development Science. 4*(1), 113-123.

Derakhshan, M., & Zandi, Kh. (2018). Designing competencies model for training heads of department*. Management and Planning in Educational Systems*, *11*(2), 105-126.

Ekrami, H., & Hooshyar, V. (2016). Identifying and explaining the competencies of high school principals (Case study: high school district 4 of Mashhad), *Family and Research, 13*(32), 7-31.

Ekrami, M., & Rajabzadeh, S. (2011). Developing components of managers' measurement scale. *Management and Development Process*, *24*(77), 49-69.

Esbati, T. (2013). *The pathology of succession planning status in Ministry of Education*, MSC thesis, Faculty of Education and Psychology.

Ghelichli, B., Mashoofi, Sh., & Ghahramani, S. (2017). Identifying and ranking the effective factors of succession planning success in the banking industry using multi-criteria decision making techniques (Case study: workers welfare bank)*. Human Resource Education and Development,* 12, 79-103.

Gholipoor, R., & Hashemi, M. (2015). Explaining the impact of mentoring on succession planning: focusing on the individual development plan. *Human Resource Management Research*, 2, 25-52.

Gholipoor, R., Seyed Javadin, S. R., & Roozbehan, M. V. (2018). Designing a competency model for university administrators based on university document . *Resource management in Police, 6*(2),1-24.

Ghorbannejad, P., & Isa Khani, A. (2016). Designing competency model for university managers based on Islamic patterns: A comparative study, *Management in Islamic University*, *5*(1), 37-48.

Hadizadeh Moghaddam, A., & Soltani, F. (2011). Explaining the components of implementing succession planning management in organization, *Management and Human Resources in Oil Industry*, *3*(10), 39-82.

Hajian, F. (2013). *Strategic analysis of the succession planning system in the central insurance industry of the Islamic Republic of Iran*. Master of Science Degree in Public Administration in Human Resource Management.

Hashemi, A., Mashinchi, A. A., & Mohammadkhani, K. (2016). Presentation of a model for assessing faculty competencies in Islamic Azad University system (Case study: Islamic Azad University nits of Fars Province), *New Approach in Educational Management*, *7* (28), 185-209.

Hayati, H., Dadgar, E., & Jannati, A. (2015). Investigating different types of competency models of hospital managers, *Health Information Management, 12* (5), 671-680.

Hooshyar, V., & Rahimnia, F. (2013). Presentation the competency model of branch managers of banks . *Quarterly Journal of Development and Transformation,* 13, 55-68.

Karbasi, N., & Alavi, B. (2011). Designing considerations and effective implementation of a succession planning system in a low-formal company and knowledge-based employees. *Iranian Management Science, 6* (22), 27-63.

Khorasani, A., Zahedi, H., & Kamizi, A. (2014). Designing and developing a competency model of business management, *Human Resources Education and Development, 1* (3), 1-21.

Kolivand, A., & Hezar Jaribi, J. (2018). Managers' succession planning with emphasis on talent and competency, *Resource Management in Law Enforcement, 6*(3), 31-55.

Latifi, M., Abdolhosseinzadeh, M., & Azarfar, A. (2016). Designing a succession planning model in government organizations using structural-interpretive modeling. *Management of Government Organizations, 4*(4), 33-50.

Mahdi Beigi, N., Yaqubi, I., & Seyed al-Husseini, M. (2017). Career management and surrogacy: explaining the moderating role of coaching culture. *Public Management Research*, 38, 145-170.

Mahmoodi, M., Zarei Matin, H., & Bahirayi, S. (2012). Identifying and explaining the competencies of university managers. *Management in Islamic University, 1*(1), 114-143.

Mansoori Jalilian, A., & Soofi, A. (2013). Succession planning of Najah managers and commanders, its dimensions and validation based on exploratory and confirmatory Factor Analysis .*Supervision and Inspection Quarterly*, *7*(23), 31-58.

Mérida Serrano, R., Angulo Romero, J., Jurado Bello, M., & Diz Pérez, J. (2011). Student training in transversal competences at the University of Cordoba. *European Educational Research Journa, 10*(1), 34-52.

Mir Mohammad Sadeghi, A., Sobhiyeh, M., & Malek Jafarian, M. (2013). The competency model of Pars Oil and Gas Company project managers. *Human Resource Management in Oil Industry, 5*(17), 161-190.

Mohammadi, M., Esmaili, M., & Sajadi Hazaveh, H. (2017).Structural analysis of mediation competencies of Najah managers on knowledge management and succession planning. *Resource Management in Law Enforcement, 5* (4), 25-48.

Mohebi, A., & Mohammadian Shamim, M. (2017). Designing the competency model of educational managers and experts of police in east of Tehran Province, *Resource Management in Law Enforcement*, 5(4),145-164.

Nair, P., Shyamsunder, A., & Sarmma, Ch. (2011).Growing leaders at Infosys: An evidence-based approach to leader development. Founder & Chairman Emeritus, *Infosys. VIKALPA*, *36* (3).

Nasehifar, V., Dehghanpoor Farashah, A., & Sanjari, A. (2011). Producing and validation of measurement index of succession planning management extension based on best practices classification.*Management Research in Iran*, Lecturer in Humanities, *15*(3), 191-209.

Nayebpoor, M., Zoghi, L., & Salehi, S. (2012), Investigating the effect of police graduate training on student success, *Social Policy Research*, *4*(3), 127-144.

Niknam, S. (2015). Paying attention to succession planning in the petroleum industry, *Management and Human Resources*, 744.

Ploum, L., Blok, V., Lans, T., & Omta, O. (2017). Toward a validated competence framework for sustainable entrepreneurship. *Organization & Environment,*1-20.

Razazi, Gh. (2011). *Decision making support system for personal evaluation and development of employees based on 360 degree competency and evaluation*. MSC in information technology management advanced information systems, Faculty of Management and Accounting, Allameh Tabatabai University.

Research and Research Council of Pars Educational Complex (2016). *Personnel placement and replacement training course*. Publisher: Pars Educational Complex.

Reynold, M. (2017). Guidance on establishing an annual leadership talent management and succession planning process.

Sangari, N. (2017). Developing a core competency model for Islamic University faculty members (Case study of Al-Zahra University), *Management in Islamic University 13*, *6* (1), 45-60.

Zare, N. (2011). *Optimizing the succession planning model with a competency based selection approach in Iran Alloy steel company*. MSC Thesis in Executive Management of Marketing and Export Center of Karaj Center.

Zeynodin Bidmeshki, Z., Adly, F., & Vaziri, M. (2014). Comparison of the current status of succession planning and talent management with its desirable status in higher education. *Research and Planning in Higher Education, 20* (2), 51-72.

Ziyaie, M., Seyed Javadin, R., Hosseinian, Sh., & Fatahi, M. (2014). The success factors of succession planning program in private section (Case study: Alpha Holding), *Public Management*, *6*(4), 747-767.