Determination and Prioritization of Factors Influencing Succession in Managers of Social Security Hospitals of Tehran Using Multiple Attribute Decision-Making (MADM)

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Abstract

Background: Vacuum and separation among the service forces in the organization jobs especially among the key jobs such as management and sensitive can cause disruption in the advancement of the organization. In this regard, many organizations use plans to supply capable forces for the jobs inside the organization and to prevent disruption in the advancement. Succession management is one of these plans to supply expert forces for the key jobs in the organization. This research deals with Identify and prioritize the factors affecting the succession in the Social Security Hospital in Tehran with the help of multi-criteria decision-making techniques MAD.Methods:In this study a 50 item questionnaire is distributed among the population of 141 managers, receptionists and office and medical personnel of the social security hospitals in Tehran. An attempt is made to identify the effective criteria in succession of managers in a 5 scale likert. After the statistical one sample T-test, of 35 factors were identified as the effective factors.Results:This factors were classified in 5 dimension of organizational factors and processes, job related factors, environmental and physical factors, management and personal factors. Then using the process of hierarchical analysis, an attempt was made weight and rank the effective factors of succession in the organization , abortion system and selection and employment of staff, interest in the related job , top managers support of the succession, promotion system (maintenance system), job satisfaction , agreement of top managers to the plans and policies of the organization were ranked as the seven top factors.

Key words: Succession among Managers, Social Security Hospitals in Tehran, Multi-Criteria Decision-Making Techniques MADM

Introduction

Today's organizations should take effective measures in all levels to be able to manage their current and future talents and they have to implement succession plans in order to ensure that the employees fit the jobs on the right places and at the right times and that there is adequate personnel available for the supplying of the organizational needs (Aghajani & Kariznoee, 2017). In the highly competitive world of the today's time, the organizations should have perspectives transcending well beyond the simple selection of workforce so that they can attain their required talents. One factor that plays a strategic role in getting the organizations to their predetermined goals is the efficient, specialized and motivated workforce fitting the assigned various jobs and positions (Cameron, 217). On the other hand, it seems that the workforce exit from various organizational levels for different reasons like resignation, retirement and job promotion is inevitable. The creation of the gap and service desertion in organizational occupations, especially in key jobs like managerial and sensitive professions, can cause serious disruption in the organization's movement trend (Alayo et al., 2016). Therefore, many of the organizations device programs to prevent the creation of disruption in their progress pace by supplying their various occupations with competent workforce (Naderi, 2017). Succession management is one of the programs for supplying sophisticated workforce for key organizational occupations on emergency times (Shirazian et al., 2017). Vast and rapid changes in the today's organizations have caused the shortage of versatile managers to be felt for the key organizational jobs; therefore, it can be stated in regard of the importance of succession as an essential and vital factor in organizations that it has to be connected with the organization's strategic goals and drawn in the organizational strategy and directly engage line managers (Salajegheh et al., 2014). In fact, it can be asserted that succession is an important subject with which the today's organizations are faced. As for the significance of the effective succession program, it can be

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expressed that it can specify a strategy for the existent human resources and staff, debrief the new human workforce, ease the confrontation with organizational evolutions and suggest novel methods and options in the new environment (Pan, 2014).

Nowadays, leading and managing the organizations based on the past ways would not succeed and organizations apply any mechanism to overtake one another. In such a competitive and challenging arena, the organizations are incumbently forced to direct their attentions towards the subjects that might come out as serious threat for them in near future (Lee, 2016). One of these serious threats with which every organization would undoubtedly encounter is the remaining unoccupied of the organizational positions, especially the key chairs that might have been emptied for various reasons like voluntary or involuntary exit of the individuals. The results of the studies are reflective of the shortages of managerial workforce and increase in the organizations' needs to increasingly more powerful, more talented, more skillful and more competent managers as compared to the today's managers in the forthcoming years and the fact of the matter is that the identification and employing of competent managers are two most essential challenges in the face of the organizations for leaving behind the tomorrow's difficult situation (Bakhshande et al., 2016). Succession is a dynamic and constant process with the execution of which a fresh blood is circulated in the organization's veins (Burbor et al., 2010).

Thus, considering the position of "social security hospitals" as well as the important duties it has been given, the author of the present study decided to perform a research under the title of "the determination and prioritization of factors influencing succession in managers of social security hospitals in Tehran using multiple attribute decision-making (MADM). The present study was carried out aiming at the investigation and prioritization of factors influencing succession in managers of social security hospitals of Tehran assisted by a multiple attribute decision-making the succession are identified and rated based on the importance criteria of MADM through initially presuming the independence of the factors from one another.

Study Method:

According to the fact that the present study deals with the investigation of theoretical constructs in practical and real textures and situations and also considering the idea that it targets the development of the applied knowledge in a specified study field, it has to be enumerated amongst the descriptive research. In the meanwhile, because the present study has been conducted in a given time span, to wit 2017, it is of cross-sectional type. The study environment included the social security hospitals. The study population was comprised of the "managers of social security hospitals, including the physician in chief, financial affairs manager, matron, supervisors and head nurses in Tehran" reaching in number to a total of 220 individuals. Krejcie and Morgan formula were the methods of choice for determining the size of the study sample volume. Out of the total number of the study population, i.e. 220 individuals, 140 were selected as the study sample volume based on Krejcie and Morgan table and all of them were administered with a total of 140 questionnaires for gathering the required information. The sampling method in the present study was randomized due to the homogeneity of the study population that included the "social security hospitals' managers, financial affairs manager, matron, supervisors and head nurses in Tehran".

Library research and field study were the methods of choice for collecting the data. Books, dissertations, articles, internet sources and other documents existent in the libraries were utilized in library research method and questionnaire was used in field study method for the acquiring of the preliminary data for the hypotheses analysis and test. To gather the study data, after coordinating with the studied hospitals' management, questionnaires were distributed amongst the employees. The study individuals were randomly selected and questionnaires were individually administered to them. Before completing the questionnaires, they were sufficiently debriefed.

In the current research paper, two questionnaires were used for the collecting of information. The first questionnaire of the present study included two general parts, the first of which was related to the demographic information, including age, gender, education level and service years and the second part was composed of some specialized questions; the questionnaire was codified for the identification of the indices based on the study literature and the standard model of the studied area. The second questionnaire was designed based on AHP technique concept and it deals with the prioritization of factors influencing the succession using analytic hierarchy process (AHP) through making pairwise comparisons.

Study Findings:

The findings of the present research paper were collected based on two questionnaires the first of which possessed a structure as summarized in table (1) and the second questionnaire was designed based on AHP technique and it makes pairwise comparisons to prioritize the factors influencing succession using analytic hierarchy process (AHP). The answer providing basis of the questionnaire is the numbers inserted in table (2). The decision makers select a preferred value in a range from 1 to 9 for a pair of elements.

Table 1: questionnaire structure

Variables or effective factors	Number of questions
Organizational factors and processes	11 questions
Job-related factors	11 questions
Environmental and physical factors	12 questions
Managerial factors	7 questions
Individual factors	9 questions
Total number of questions	50 questions

Table 2: preferential valuation system of the pairwise comparison scale

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The status of comparing i with j	Preferential value
Identical	1
Identical to relatively more (or important)	2
Relatively more (or more important)	3
More or stronger (or more important)	5
More to a lot more (or more important)	6
A lot more or much more (or more important)	7
A lot more to too much more	8
Too much more (or more important)	9

According to the study findings, the indices effective on succession in managers of social security hospitals in Tehran can be categorized as below in five sets:

- Organizational factors and processes: the system of absorbing, selecting and recruiting the staff; the system of evaluating staff
 based on their real performance in the organization, the participatory management system and existence of teamwork and
 group work spirits, promotion and enhancement system (retention system), service compensation system and reward and
 encouragement system, political behavior, conflict management and organizational learning.
- Factors related to job: job security and organizational justice, job career path (job promotion opportunities), inaccessibility of the substitute jobs outside the organization, job satisfaction, interest in the corresponding job, job's motivational (challenging) nature, organizational identity and values and beliefs governing he organization, valuableness of the job as viewed by the individual and holding of various instructional courses on job-related matters.
- Environmental and physical factors: common culture of the organization and its values (with an emphasis on the succession culture and thought), being respected at workplace, interesting and fascinating nature of the physical work environment, financial corruption in the organization and social factors such as social justice
- Managerial factors: supporting of the senior managers of succession, high-ranking managers' agreement to the organizations' programs and careers, risk acceptance by the managers, managers' skillfulness, managers' commitment and leadership style
- Individual factors: personality characteristics of the staff, the employees' experience and work history, skillfulness and specialty of the staff, attitudes, beliefs and motivations of the staff, economic base, education level of the staff and social class of the staff.

Rank	Indices	Final weight
	indices	of the indices
1	Valuation system of the staff based on their real performance in organization	0.059
2	Absorption, selection and employment system of the staff	0.055
3	Interest in the related job	0.045
4	Senior managers' support of succession	0.045
5	Promotion and enhancement system (retention system)	0.041
6	Job satisfaction	0.039
7	High-ranking managers' agreement on the organizations' programs and policies	0.039
8	Staff's personality characteristics	0.038
9	Interesting and fascinating physical work environment	0.038
10	Staff's skillfulness and specialty	0.035
11	Experience and work history of the employee	0.034
12	Risk acceptance by the managers	0.033
13	Leadership style	0.032
14	Job career path (job promotion opportunities)	0.031
15	Managers' skillfulness	0.030

Table 3: The weight and rank of each of the factors influencing succession in managers of Tehran's social security hospitals

16	Staff's education level	0.028
17	Financial corruption in organization	0.028
18	Managers' commitment	0.027
19	Inaccessibility to the substitute occupations outside the organization	0.027
20	Job security and organizational justice	0.025
21	Being respected at workplace	0.025
22	Organizational learning	0.024
23	Valuableness of the job from the perspective of the individual	0.024
24	Participatory management system and the existence of teamwork and group work spirits	0.023
25	Service compensation system and organizational reward and encouragement system	0.023
26	Attitudes, beliefs and motivations of the staff	0.021
27	Common organizational culture and its values (with an emphasis on the succession culture and thought)	0.021
28	Political behavior	0.019
29	Holding various work-related instructional courses	0.015
30	Job's motivational (challenging) nature	0.015
31	Conflict management	0.014
32	Organizational identity and values and beliefs governing the organization	0.013
33	Staff's social class	0.013
34	Economic base	0.012
35	Social factors like social justice	0.011

According to the study findings, the following diagram illustrates the weights of the factors influencing succession in managers of social security hospitals in Tehran from the highest to the lowest, respectively.

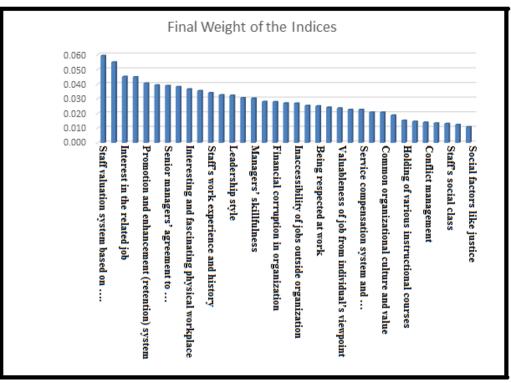


Diagram 1: the weights of factors influencing the succession in managers of social security hospitals in Tehran

According to the study findings, the 35 indices mentioned above can be classified in five primary aspects. Table (2) displays the weights of these aspects respectively from the most important to the least important. As it can be seen in the table and diagrams, the organizational factors and processes is the most important aspect.



Diagram 2: the weight of each of the factors influencing succession in managers of social security hospitals in Tehran

Discussion and Conclusion:

The corroboration of organizational talents has a direct effect on the final output of the organization and considerably assists its growth. In the highly competitive world of today, those organizations can survive and strive and remain active that have the required plans for their future and make realistic predictions of the highly challenging future events. The future incidents cannot be any longer handed over to chance and fortune; and, trial and error and routineness do not assist the achievement of development.

In between the daily increasing environmental challenges and the ever increasing value of the intellectual capitals, it has become necessary to take measures for keeping on the management and enhancing staff more than ever before. This reality has caused the topics on management succession to become one of the most important discussions in scientific and managerial centers during the past two decades. At any time, the appointment and supply of the competent workforce for management positions are amongst the main work priorities of the human workforce sector and this important need can be satisfied by various systems the most important of which is management succession planning. Although succession in its most primitive definition conveys the idea of determining the future leaders, in fact, planning equals a volitional process for ascertaining the continuation of leadership in key positions, preservation and development of spiritual and knowledge capitals for the future and encouragement of individuals to the development all of which originate from macro-level human resources strategy.

According to the materials mentioned in the present study, the determination and prioritization of factors influencing succession in Tehran's social security hospitals were conducted herein using multiple attribute decision-making (MADM). The factors influencing succession were taken into account in five aspects of organizational factors and processes, job-related factors, managerial factors, individual factors and environmental and physical factors. The organizational factors and processes were assessed based on such indices as staff absorption, selection and employment system, staff evaluation based on their real performance in organization, participatory management system and existence of teamwork and group work spirits, promotion and enhancement (retention) system, service compensation system and organizational reward and encouragement system, political behavior, conflict management and organizational learning. Job-related factors were evaluated using such indices as job security and organizational justice, job career path (job enhancement opportunities), inaccessibility to substitute jobs outside the organization, job satisfaction, interest in the corresponding job, motivational nature of the job, organizational identity and values and beliefs governing the organization, valuableness of the job as viewed by the employees and holding of various instructional courses on job-related matters. The environmental and physical factors were measured using such indices as common organizational culture and values (with an emphasis on succession culture and thought), being respected at workplace, interesting and fascinating physical work environment, financial corruption in the organization and such social factors as social justice. The managerial factors were investigated based on such indices as senior management's support of succession, high-ranking managers' agreement on the organizational plans and policies, risk acceptance by managers, managers' skillfulness, managers' commitment and leadership style. Finally, the individual factors were examined using such factors as staff's personality characteristics, staff's work experience and history, skillfulness and specialty of the employees, attitudes, beliefs and motivations of the employees, economic base, staff's education level and employees' social classes. The results of the study findings' analyses showed that organizational factors and processes, job-related factors, managerial factors, individual factors and physical and environmental factors correspondingly have the highest to the lowest effects.

Generally, the majority of the results obtained in the current research paper largely overlaps with those found in prior research such as by Kanger and Folmer (2003) who classified the factors influencing succession success into such aspects as concentration on development, focus on key positions, system transparency and ambiguity avoidance, continuous progress management and staying away from traditional succession mentalities and keeping system flexible.

Moreover, the results of the present study are consistent with those obtained in a study by Friedman (1986) who categorized the characteristics of succession system according to seven distinct aspects, named formality, control systems, resource allocation, information system, political indices, technical indices and staff role.

In addition, the results found herein perfectly match with those attained by Libman (2013) who investigated factors influencing succession.

It can be asserted following the investigation of the organizational factors and processes that the existence of this aspect and its indices in the study results is compliant with its existence in the results of the study performed on systematic approach and planning factors by Mehrtak et al in 2016. Furthermore, the existence of this aspect and its indices is also in accordance with its existence in the findings of the study in 2012 by Jaliliyan and Sufi.

The job-related factors and its indices in the present study conform to the job promotion path as pointed out in a study by Mehrtak et al in 2016. This aspect and its indices are also in consistence with the participatory motivation factor as pinpointed in the study by Jaliliyan and Sufi in 2012.

As for the environmental and physical factors, it can be claimed that the existence of this aspect and its indices in the results of the study corresponds to the existence of organizational culture in the study by Mehrtak et al in 2016. The existence of this aspect and its indices is also consistent with the existence of organizational preparedness and organizational capital as demonstrated in the study by Jaliliyan and Sufi in 2012.

The existence of the managerial factors and its indices in the present study's results is in compliance with the existence of the role of senior management as obtained by Mehrtak et al in 2016. In addition, this factor has also been repeated in the study by Poursadegh et al in 2013 under the title of constant support and guidance by the organization's senior management. The existence of this aspect and its indices matches with the existence of macro-level strategic flexibility factor and performance bond in the study by Jaliliyan and Sufi in 2012.

The substantial difference between the present study and the prior research lies in its more focus on the individual aspects and factors influencing succession. The existence of individual factors and its indices in the present study and their nonexistence in the study by Mehrtak et al (2016) as well as in the research by Poursadegh et al is the major difference between the aforesaid studies. Also, the individual and job-related factors are missing from the study by Ostadlor et al (2011).

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