

Investigation of performance management behaviors in educational managers of Iran University of Medical sciences

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Abstract

Performance management supports the power of knowledge in the academic system and makes this knowledge a comparative advantage. The amount of performance management behavior expressed by managers affects their assessment and ability to improve. Therefore, the present study aims to investigate the performance management behaviors expressed by the educational managers of Iran University of Medical Sciences. This is a descriptive-analytic study. The population under study includes the educational managers of Iran University of Medical Sciences. A census was applied as the sampling method. Performance Management Behavior Questionnaire (PMBQ) was applied as the data collection instrument. After evaluating the validity and reliability of this instrument, data would be analyzed through descriptive and inferential statistical tests. Of all distributed questionnaires, 144 were filled and recollected. The obtained means were average or higher for all aspects. The average score of male and female managers was respectively equal to 89.58 and 86.77. The total average score was 83.58 with the standard deviation of 6.4224. In no aspect, the difference between average scores of male and female managers was statistically significant. As to the performance expectations, there was a significant difference in behavior of managers with different management experiences ($p=0.014$). According to the results, the educational managers of Iran University of Medical Sciences have all evaluated their performance management behaviors to be generally desirable.

Keywords: Performance management behaviors, PMBQ, educational managers

Introduction

The concept of performance management is one of the new issues in human resource management. This rises when the efficiency of traditional performance evaluation methods is clearly inadequate to achieve strategic objectives of the organization. One of the functions of performance management is to evaluate the performance of employees. There are also other tasks including goal setting, performance design, review, performance investigation and analysis, and finally, modification and promotion of behaviors (Torkzadeh J, Jafari S. 2012).

Higher education is among the key parameters of human development in any country. During the previous decades, the academic institution has quickly developed in Iran. The role of higher education in development of societies and organizations in particular is indisputable, because knowledge production and promotion leads the country toward multidimensional development. "Management of academic services in universities is among the exquisite tasks that require high levels of employees' effort and endeavor so that they can provide suitable services for the students (Siadat, a. et al. 2006).

It is very important to establish a performance management system in universities as the world's best educational systems are distinguished through their performance management (<http://www.european-science.com>)

www.acer.edu.au/enews/0310. 2009Aug). The educational managers of universities play a key role in evolution of education and teaching, and promotion of qualitative activities. Along with the fast and complicated changes in health service system, the professional roles and responsibilities of doctors in universities of medical sciences is quickly changing in our country as well; in a way that right now, management and leadership skills have been assimilated to their therapeutic and medical performance. Therefore, particularly in universities of medical sciences, in which doctors participate in making managerial and executive decisions, suitable training programs should be designed and implemented in order to train and reeducate them, since there is still a long distance between the existing levels of competence and what is necessary for the organization(Mansoorian M, et al. 2013).

Results achieved through the studies on Iranian universities of medical sciences indicate that the most important priority after leadership competence is related to human resource competence(Sarchami R, et al. 2011). Performance management is among the most important tasks in human resource management that includes particular roles and behaviors. Certainly, these behaviors affect managers' evaluation and their ability to improve (Kinicki AJ, et al. 2013).

The present study aims to investigate performance management behaviors of educational managers in Iran University of medical sciences. Therefore, the questionnaire designed by Angelo Kinicki et al. 2013 was applied.

Methods

This is a descriptive-analytic study. The population under study consists of the educational managers of Iran University of Medical Sciences including the educational assistant, managers of education headquarters, heads of educational groups, assistants of each educational group, and managers of development centers and offices in this university. Since this population is limited, a census was performed in order to collect data and the minimum sample size was estimated to be five times bigger than the number of items in the questionnaire (135 individuals). The use of PMBQ (Kinicki et al. 2013, the University of Arizona) that includes 27 items in six arenas is authorized by the writer. The questionnaire was translated from English to Persian under the surveillance of the university professors. Then someone competent translated it back to English in order to be compared to the main questionnaire, and the existing gap was modified through this matching.

The considered questionnaire consists of two main parts. The first part include demographic information such as age, gender and management experience, and the second part consists of 27 items in six arenas. Goal setting process include 5 items, 4 items are related to the communication arena, the feedback arena has 5 items, 5 items are included in coaching arena, the result provision consists of 3 items and the other 5 items form the surveillance of performance expectations. The items are scored based on five point Likert scale (4 for always/constantly, 3 for often, 2 for some times, 1 for every once in a while and no score for rarely/never).

In order to investigate both face and content validity, the questionnaire was given to twelve experts including those professional in management and educational sciences and the educational managers of Tehran University of Medical Science. The content validity was studied from two aspects: content validity rate and index(WHOQOL-Bref Introduction, 2010). In order to obtain the content validity rate (CVR), necessity of each item was investigated based on Lawshe model(Lawshe CH, 1975). The sixth item was omitted in this step.

To obtain the content validity index (CVI), a four point Likert scale was applied in order to measure three features including communication, transparency and simplicity. For each of the items the communication, transparency and simplicity CVI was separately calculated through the following formula. The average CVI index of the three features of each item was calculated as well.

In line with the qualitative investigation of face validity, some questions about the redaction, the coordination between items and arenas and research objectives, sufficiency of the items, and the necessity of omitting or adding some items were included in the first part of content validity form. The test-retest (repeatability) reliability of the questionnaire was obtained through split-half method and Spearman-Brown formula (Saboori-kashani A, 2004; Najafi H. 2007). As to the internal consistency reliability, Cronbach's alpha was applied for each of the items and also the whole questionnaire (Karami a. 2013).

In order to investigate the structural reliability, the possibility and goodness of fit were firstly tested separately for each of the aspects of parametric analysis of "PMBQ", applying KMO and BTS statistical tests. Then, the internal relationship between the variables was studied through heuristic parametric analysis. Thus some classes of variables, which were mostly related, were discovered (Pintrich PR et al. 1993). In this way the items with the highest correlation can be applied as the instrument to explain each factor or element. Varimax or promax rotations were applied in order to investigate the coordination between the items and name the extracted parameters(Williams B et al. 2012; Hayton JC, 2004). The parameter rotation method was performed applying orthogonal and varimax rotation. Here is how the scores were analyzed:

- O to 26 points: too weak
- 27 to 52 points: undesirable
(There are more negative)
- 53 to 78: acceptable
(There are more positive pints)
- 79 to 104 points: desirable

Data was analyzed through SPSS 18, and descriptive and inferential statistical tests were applied, including statistical T-test (in order to investigate the relationship between the gender variable and different arenas) and ANOVA (in order to investigate the relationship between these arenas and management experience). In line with moral principles, we had a recommendation and presented to the managers, a concise and useful descriptions about our research and how valuable their participation would be, making them sure about the privacy of their information.

Results

Among 144 educational managers that participated in this research, 55.6% were men managers, while 44.4% were women. The longest management experience was 28 years, and the shortest was one year. In average, the participants had 8 years of management experience. 43 individual had less than five years of experience, 63 ones had five to ten years of experience, and 38 ones hade more than ten years of experience.

Table 1 illustrates the mean scores for each arena. According to this table, the means obtained for all arenas is in an average or higher level. The highest and lowest mean scores were respectively related to communication and goal setting (table 1).

Table 2 illustrates the comparison between the mean scores of the two gender groups. Based on this comparison and considering a confidence level of 95%, the difference between the mean scores of male and female educational managers are not statistically significant (table 2).

Table 1: Frequency percent and mean scores for each arenas

items	mean	never	Every once a while	Some times	often	always
Goal setting process mean score				10.38 ±1.01		
1	3.00	-	2.8	17.4	58.3	21.5
2	3.45	0.7	-	3.5	47.2	48.6
3	3.25	-	3.5	11.1	41.7	43.8
4	3.42	-	-	6.9	45.8	47.2
5	3.09	5.6	0.7	10.4	48.6	34.7
Communication mean score				16.22±1.94		
6	3.44	-	-	2.8	50	47.2
7	3.45	-	-	4.9	44.4	50.7
8	3.47	-	-	0.7	50.7	48.6
Feedback mean score				16.42±1.98		
9	3.27	-	3.5	5.6	51.4	39.6
10	3.22	0.7	2.8	9	47.9	39.6
11	3.39	-	4.9	4.9	36.1	54.2
12	3.36	-	-	8.3	46.5	45.1
13	3.16	-	-	17.4	49.3	33.3
Coaching mean score				16.89±2.00		
14	3.39	-	0.7	7.6	43.1	48.6
15	3.40	-	0.7	8.3	41	50
16	3.41	-	2.1	4.9	43.1	50
17	3.39	-	2.1	5.6	43.1	49.3
18	3.29	0.7	3.5	8.3	41	46.5
Result provision mean score				10.17±1.56		
19	3.35	-	2.1	9.7	38.9	49.3
20	3.36	-	3.5	8.3	36.8	51.4
21	3.45	-	0.7	6.2	39.6	53.5
Performance expectation mean score						
22	3.42	-	0.7	6.9	41.7	50.7
23	3.49	-	-	4.2	42.4	53.5
24	3.50	-	-	0.7	48.6	50.7
25	3.31	-	-	13.2	41.7	45.1
26	3.37	-	-	11.1	40.3	48.6

Table 2: comparison between the mean scores of men and women

Arena	Male	Female	P-value
	Mean ± standard deviation	Mean ± standard deviation	
Goal setting	15.98±1.87	16.53±1.99	0.78
feedback	16.22±1.93	16.67±0.02	0.32
coaching	16.86±1.86	16.93±2.18	0.47
Result provision	10.31±1.34	10.00±1.77	0.08
Performance expectation	17.100±1.50	17.12±1.73	0.72
total	86.77±5.63	87.76±7.29	0.34

The comparison between the scores of different arenas for each group of work experience is reported in table 3. According to the findings in this table, only the difference between performance expectations of the managers with less than five years of experience and those with longer experience is statistically significant (table 3).

Table 3: comparison between the mean scores of different arenas for managers with different years of management experience

	Less than 5 y	6 to 10 y	More than 10 y	
Arena	Mean \pm standard deviation	Mean \pm standard deviation	Mean \pm standard deviation	P-value
Goal setting	15.88 \pm 1.46	16.33 \pm 2.07	16.44 \pm 2.17	0.86
feedback	10.32 \pm 0.83	10.38 \pm 1.03	10.44 \pm 1.15	0.36
coaching	17.032 \pm 1.56	16.76 \pm 2.46	16.97 \pm 1.60	0.77
Result provision	10.06 \pm 1.53	10.14 \pm 1.71	10.34 \pm 1.36	0.72
Performance expectation	17.69 \pm 1.42	16.92 \pm 1.72	16.76 \pm 1.44	0.014
total	87.25 \pm 3.54	87.04 \pm 7.94	87.44 \pm 6.27	0.95

Discussion and conclusion

This research aims to investigate performance management behaviors of among the educational managers of Iran University of Medical Sciences. Of 144 participants, 64 managers were female and 80 ones were male. Here are the average scores of the different aspects of questionnaire: 10.38 for goal setting process, 16.22 for communication, 16.42 for feedback, and 16.89 for coaching, 10.17 for result provision, and 17.11 for development and surveillance of performance expectation. The total mean scores of male and female managers are respectively equal to 89.58 and 86.77. The total mean score and standard deviation of the questionnaire are respectively equal to 87.215 and 6.4224. These results indicate that the obtained means were average or higher for all aspects and educational managers have evaluated their standard performance management behaviors to be generally desirable. Although there is no significant difference between the scores in different arenas, managers obtained the highest scores in communication and goal setting aspects.

The total score of male managers was higher than women's. Nevertheless, in no aspect, the difference between the mean scores of male and female managers was statistically significant. As to the performance expectations, there was a significant difference between the scores of managers with less than five years of experience and the most experienced ones. This difference can be caused by the concentration of new managers on behaviors such as performance monitoring, accuracy evaluation and task validation, since they tend to achieve better results as one who have recently occupied the management position. Although the total mean scores of the managers with five to ten years of experience is lower than the other two groups, the difference is not statistically significant. Considering the fact that performance management behaviors expressed by the managers have not been investigated so far, only the related studies would be evaluated in this part. Nasiri et al. (2009) concentrated on the role of culture and cultural values in all aspects of performance management (Tabachnick BG, Fidell L, 2012). Brumback et al. (2003) also confirms that it is not enough to merely consider the results of performance evaluation in performance management, but some behaviors, particularly those related to values have to be regarded as well. In line with this, he suggests a four-step pattern: 1. setting performance expectations, 2. paying attention to the performance, 3. Performance evaluation, and 4. rewarding the performance (Nasiri R, et al. 2010; Brumback GB. 2003).

In their studies, Arasteh et al. (2001), Torkzadeh et al. (2012), Siadat et al. (2001), and DL et al. (2008) have all mentioned some problems during the implementation of performance management (Arasteh H. 2002). What almost all these studies have in common is that managers and employees' imperfect awareness of performance management tasks and the lack of transparency in the related concepts prevents the desirable implementation, continuance and promotion of this system. In other words, since the advantages of applying performance management in academic systems are particularly important, and due to the fact that this can be executed in the present situation, necessary arrangements and special attention are required. It should be mentioned that the instrument applied in this study is in fact a general tool in human resource management. Not only can it be used as a tool to evaluate the external performance management behaviors, but also as a guide for recognition of performance management tasks and competences or even a self-evaluation instrument for the management. Just like the present research, in which managers reported their own performance management behaviors.

The weak cooperation of universities and the inconsistency in filling the questionnaires because of their occupation are among the limitations in this research. This was almost resolved through explaining the managers about the limited number of samples and value of their cooperation, repetitive visits, reminding them, and in some cases sending the questionnaires through e-mail (Waal AD, Counet H. 2009).

Considering the fact that this questionnaire is a general instrument in human resource management studies, and it is not merely related to educational managers, other universities and organizations of the country are also recommended to apply this instrument and compare their results with the present study. While filling the questionnaires, it is also recommended to apply external evaluation in addition to the self-evaluation. Apart from decreasing the possible partiality, this paves the way for comparison of the results. A self-evaluation approach was taken in this study in order to investigate performance management behaviors among the educational managers of Iran University of Medical Sciences. In spite of many problems in implementation of performance management system in the universities, the educational managers of Iran University of Medical Sciences evaluated their performance management behaviors to be in a desirable level.

References

- Arasteh, H. (2002). Management at the universities affiliated to ministry of science, science and technology: challenges and deficiencies. *Research and planning at high education*. (21, 22):41-69. (Persian)
- Brumback, GB. (2003). Blending "We/Me" In Performance Management. *Team Performance Management: An International Journal*; 9(7/8):167-173
- Hayton, JC, Allen, DG, Scarpello, V. (2004). Factor retention decisions in exploratory factor analysis: A tutorial on parallel analysis. *Organizational Research Methods*; 7(2): 191-205.
- Karami, A. (2013). introduction to test construction and psychological tests. Tehran: ravansanji. [Persian]
- Kinicki, AJ, Jacobson, KJ, Peterson, SJ, Prussia, GE. (2013). Development and validation of the performance management behavior questionnaire. *Personnel psychology*;66:1-45
- Lawshe, CH. (1975). A quantitative approach to content validity. *Personnel Psychology*; 28: 563-557.
- Mansoorian, M, Karimi, Moonaghi, H, Yazdani, S, Ahmadi, S, Khosravan, S. (2013). The Necessity and Quality of Management Education in MD Program in Iran: A Qualitative Study. *Iranian Journal of Medical Education*;12 (12):903-915. [Persian]
- Najafi, H. (2007). *Research Methodology in Education and Psychology*. Tehran: ahsan. [Persian]

- Nasiri, R, Noornejad, K, Boroumand, M. (2010). Culture and its role in actions by director of human resources. *Tose ensani police*; 6(26):57-72. (Persian)
- Pintrich, PR, Smith, DA, García, T, McKeachie, WJ.(1993) Reliability and predictive validity of the Motivated Strategies for Learning Questionnaire (MSLQ). *Educational and psychological measurement*;53(3): 801-13
- Saboori-kashani, A, et al. (2004) Standardization of Student's Evaluation Based On the Two Theories. Tehran: seda. [Persian]
- Sarchami, R, Asefzadeh, S, Ghoorchian, N, Rahgozar, M. (2011) Competencies of education medical managers of country to achieve comprehensive scientific goals. *Proceeding of the 12th National Conference of Medical Education: Iran, Tehran*. [Persian]
- Siadat, a, shams, b, homaie, r, gharibi, l. (2006). Satisfaction of students and faculty members of graduate studies from educational services management at Isfahan university of medical sciences. *Iranian journal of medical education*, 93-101.[Persian]
- Tabachnick, BG, Fidell, L. (2012). *Using Multivariate Statistics*: New York: Harper & Row.
- The Performance Management and Development of Teachers in Australian Schools. available from: [http:// www.acer.edu.au/enews/0310](http://www.acer.edu.au/enews/0310). 2009Aug. Quality teaching matters most.
- Torkzadeh, J, Jafari, S. (2012). Possibility Assessment of Performance Management at Shiraz University from Viewpoints of Managers. *Quarterly Journal of New Approaches in Educational Administration*, 2(3):63-88. [Persian]
- Waal, AD, Counet, H. (2009). Lessons Learned From Performance Management Systems Implementations. *International Journal of Productivity and Performance Management*, 58(4):368-390.
- WHOQOL-Bref Introduction, Administration, Scoring and Generic Version of the Assessment, Field Trial Version. December 1996, Available at: [www. Who. Int/mental-health/media/en/76. pdf](http://www.who.int/mental-health/media/en/76.pdf), (accessed January 10, 2010)
- Williams, B, Brown, T, Onsmann, A (2012). Exploratory factor analysis: A five-step guide for novices. *J Emergency Primary Health Care*, 8(3): 1.
- Zare-Chahoki, M. (2010). *Multivariate Analysis Method in SPSS Software*. Tehran: Tehran University; Available at URL: <http://utcan.ut.ac.ir/member/syllabus/mazare/multivariate.pdf>