

Managerial skills and its Relation with employee's participation in University of Medical Sciences

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Received: 01.07.18, Revised: 11.08.18, Accepted: 26.09.18

ABSTRACT

Participation can bring about improved employee performance within an organization. Thus, the present study was to determine the relationship between professional skills of managers and levels of employee participation in the management departments affiliated with the administration of Hamadan University of Medical Sciences. This study was of descriptive-analytic research type conducted in 2016 at the Chancellor Management departments of Hamadan University of Medical Sciences selected based on census method. To collect the required information, the standardized Questionnaire of Management Professional Skills composed of 40 items as well as Participation Level Measurement Questionnaire for organizations, employees, and managers with 27 items were used. The results of data collection were entered into the SPSS20 software and then analyzed using Pearson correlation coefficient and regression analysis tests with the significance level of less than 0.05. The average professional skills of managers and levels of participation were 157.8 and 113.8, respectively which were more than 75% of the total score obtained. In total, the results indicated that employee participation was significantly and directly correlated with professional skills of managers ($r=0.536$, $P\text{-value}=0.0001$). In other words; for each one-unit rise in scores for skills, the participation values increased by 0.388 units ($b=0.388$, $SE=0.092$, $P\text{-value}=0.001$) Since professional skills of managers was in a significant relationship with employee participation within an organization, it was concluded that improved professional skills of managers could enhance organizational culture of participation and employee participation and ultimately improve system performance and increase efficiency.

Keywords: Managerial skills, Employees participation, University of Medical Sciences.

INTRODUCTION

Considering employees as the biggest and the most important assets of an organization has been an increasingly growing phenomenon in the past two decades [1]. On the other hand, an important part of life or death within an organization is management. In today's complex situations, management tasks have also become very complicated and managers require specialized skills to perform their work-related tasks and activities. Robert L. Katz who developed the most common and accepted classification for managerial skills, in a research published in the early seventies argued that managers were in need of three essential skills and competencies including technical, human, and conceptual ones. He also found that the importance of such skills and competencies varied according to the ranks of management within an organization [2, 3, and 4]. Katz also defined skills as the abilities that are not inherent in how to perform tasks, but they can be fostered. He proposed the three above-

mentioned skills and competencies as the requirements of successful management [5]. In this respect, technical skills refer to the abilities acquired by experience as well as training and internship required to take advantage of knowledge, methods, techniques, and equipment used in doing specific tasks. Two scholars in this field considered human skills as the abilities and power of recognition to establish rapport and cooperation, to get work done, and to perform effective activities as a member of a group that involves understanding of motivation and use of effective leadership. Ability to perceive and think about abstract situations, view an organization as a whole, understand the relationships between components, and imagine how an organization has adapted to the environment are characterized as conceptual skills [6, 7]. In other words, skills of managers in the mentioned dimensions refer to the use of technologies and cooperation with other individuals in a framework of correct data processing

as well as understanding of an organization in order to achieve organizational goals more effectively. In recent years, diagnostic skills along with the concept of problem identification and problem-solving skills have been also introduced as the fourth skill of managers. Therefore; more effective managers endowed with such skills apply them in their management process, share profits and losses of an organization with their employees, and make their efforts for the survival and development of an organization through involvement in all decisions and activities; they also turn their own potentials into realities. In this respect, a study revealed that the amount of professional skills of managers in healthcare sector was at a moderate level [8]. From the viewpoints of different schools of management and particularly those of quality management, developed by Deming as its founder, work-related participation is essential not only for employees but also for customers. Different definitions have been proposed for the term participation by various experts who reflect roles, suggestions, comments, solutions, and work-related improvement and development. In this respect, Lyons believed that employee participation refers to a work-related method whereby the members of an organization with various organizational tasks cooperate to solve problems and use such solutions within an organization [9]. Davis enumerated numerous benefits for participation including better decision-making in workplace, use of creativity and innovation power in employees, enhancement of human dignity and social status, establishment of motivation and shared interests, employee encouragement to take on responsibilities, and improved morale for collaborative work [10]. Individuals who are consulted in an organization and contribute to its decisions feel a sense of belonging to the organization and align their goals with those of organization [11, 12]. Among the other positive effects of employee participation from the perspective of White is reduced stress and tension at work and more sense of attachment in employees towards organizational goals [9]. Conclusions associated with research findings in this respect suggested that successful implementation of participatory management depended on situations; and citing the situational leadership theory, he argued that the more the task-related maturity in employees, the more the likelihood of effective management for participatory procedure of a technique. Clock and Goldsmith also believed that employees in democratic organizations as well as those governed by collaboration and self-management could achieve better results compared to employees in autocratic force-based organizations managed by others [13]. In the same study; measured levels of participation in the healthcare sector were low in 40% of cases, but 38% of cases were placed at a moderate level [14]. University of Medical Sciences as a part of the Ministry of Health and Medical Education is a system

that is in charge of healthcare in the provinces of Iran. Thus, its performance can have impacts on all aspects of public life and health status as well as physical, psychological, and social dimensions and the variety of services including education, research, healthcare and prevention, treatment and health promotion which have made the activities of the given organization much more complicated. Therefore, management in such an organization is highly critical and directly related to the survival of individuals in society. Managers also need skills and competencies whereby they can arrange for maximum levels of employee participation in providing services [11]. Nevertheless, the impact of professional skills of managers on human resources particularly in the area of employee participation has received little attention by managers and organizational researchers. On the other hand, this issue has not been specifically investigated at the level of universities particularly in terms of their administration and management. Thus, the present study was to evaluate the relationship between professional skills of university managers and levels of employee participation in order to provide appropriate strategies to promote effective management systems.

Methods

This descriptive-analytic study was of correlational research type conducted in 2016. Since the study population included the 9 Chancellor Management departments of Hamadan University of Medical Sciences in west of Iran, no sampling method was implemented and only a census method was employed in order to collect and examine the required information in this study through questionnaires completed by employees affiliated with the given departments. To describe the data collected, the indices of mean and standard deviation were used and the relationship between the variables was examined through Pearson correlation coefficient and regression analysis tests. The data were also entered into the SPSS software (version 20) and data analysis was performed with a significance level less than 0.05. Given the research objectives, the data collection instruments included two standardized questionnaires that had been frequently used by researchers in a wide variety of research studies; therefore, the validity of the given questionnaires were confirmed.

- 1) Standardized Questionnaire of Management Professional Skills
- 2) Standardized Participation Level Measurement Questionnaire for organizations, employees, and managers

Questionnaire of Management Professional Skills contained 40 items measuring four human, technical, conceptual, and diagnostic skills [8]. The responses to these items varied based on a Likert-type scale ranging from "strongly agree" with score 1 to "strongly disagree" assigned with score 5. Items 1-

10 in the questionnaire measured technical skills, items 11-20 assessed human skills, items 21-30 were related to the measurement of conceptual skills, and items 31-40 evaluated diagnostic skills. The reliability of the given questionnaire was calculated using Cronbach's alpha method which was equal to 0.92 according to calculations made by the SPSS software. Participation Level Measurement Questionnaire (Belcher, 1987), was composed of 27 items including a) organizational characteristics (items 1-8), b) employee characteristics (items 9-12), and c) management characteristics (items 13-27). The responses to the questionnaire items were scored from 1 to 5 based on a Likert-type scale ranging from "strongly disagree" to "strongly agree" as well as a neutral option [15].

The validity of the questionnaire was equal to 0.81. The given questionnaire had been similarly confirmed by management professionals and it had

been administered in several studies including investigations by Shahbazi (2011) and Hamidi (2009) (11). The reliability of the given questionnaire had been also measured in the related literature. The results of this study using Cronbach's alpha coefficient method were also calculated by the SPSS software and the reliability coefficient obtained was equal to 0.82.

Results

In Table 1, the demographic characteristics of the study population were illustrated. The Table showed that 43.3% of study participants were female and 56.7% were male. Moreover, 22.2% of respondents had management-related education, 25.4% of participants were graduates of humanities, and 19% of participants were graduates of medical sciences. In total, 29% of participants had management-related experience.

Table 1. Distribution of the subjects based on demographic characteristics

Variable	Percent
Age (year)	
20-30	17.9
31-40	33.8
41-50	42.9
>50	5.4
Gender	
Male	56.7
Female	43.3
Educational level	
Less educated	3.2
Diploma	14.3
Beyond diploma	15.9
BSc	33.3
MSc	23.8
PhD	3.2
Field of Study	
Management Sciences	22.2
human Sciences	25.4
Medical Sciences	19
Management experience	
yes	29
no	71

Based on the results in Table 2, the mean and standard deviation of professional skills of managers were 157.8 and 30.6, respectively. Moreover,

technical skills obtained the lowest score and human skills received the highest score from the attitudes of employees. The scores for technical, human, conceptual, and diagnostic skills were separately illustrated in the following Table.

Table 2. Distribution of means for professional skills of managers in terms of technical, human, conceptual, and diagnostic skills

Managers Professional Skills Level		
Items	average	SD
Human Skills	37.4	8.8
Conceptual Skills	41	7.9
Technical Skills	40.9	7.1
Design Skills	39.2	8.2
Total professional Skills	157.8	30.6

In Table 3, the mean and standard deviation scores for participation were 113.8 and 17.8, respectively. Based on the attitudes of employees; the highest score for participation was associated with organizational participation (with a total score of

80.48%), and the lowest score was assigned to management participation (with a total score of 70.56%). The means and standard deviations for organizational participation, employee participation, and management participation were as follows.

Table 3: Distribution of means for organizational, employee, and management participation

Participation level		
Items	average	SD
Organizational participation	33	4.3
employee participation	17.3	3.5
Managers participation	62.8	13.6
Total participation	113.7	17.8

The results in Table 4 also suggested a relationship between professional skills of managers and three dimensions of participation. Accordingly, simple linear regression analysis was used to determine the relationship between professional skills of managers

and levels of employee participation. The results also showed the significant and positive effect of professional skills of managers on employee participation ($b=0.388$, $SE=0.092$, $p=0.001$). In other words, each one-unit increase in scores will add to participation scores by 0.388 units.

Table 4: Pearson correlation coefficients and significance level between professional skills of managers and dimensions of participation in the study population

items		Technical Skills	Human Skills	Conceptual Skills	Design Skills	Total professional Skills
Organizational participation	correlation	0.482	0.460	0.408	0.373	0.496
	P - value	0.0001	0.001	0.002	0.006	0.0001
Employee participation	correlation	0.546	0.519	0.460	0.490	0.558
	P - value	0.0001	0.0001	0.0001	0.0001	0.0001
Managers participation	correlation	0.434	0.517	0.404	0.438	0.438
	P - value	0.001	0.0001	0.002	0.0001	0.0001
Total participation	correlation	0.542	0.528	0.414	0.412	0.536
	P - value	0.0001	0.0001	0.003	0.003	0.0001

Discussion

The results of the present study revealed that the score for professional skills of managers based on the attitudes of employees was equal to 157.8 in which an average of 3.95 scores was assigned to each item. The highest mean scores were associated

with the dimension of human skills (41) and conceptual skills (40.9) and the lowest mean score was assigned to the dimension of technical skills (37.4). Given Katz's theory of management, top managers within an organization are required to have higher conceptual skills and they do not need technical skills to carry out activities at operational

levels. This study showed that the results of research on top managers of university who are at sovereignty level were consistent with Katz's theory. The results of a study by Verbonku in Romania also showed that those who were in charge of organizational leadership and management or other structural components and organizational procedures were required to have enough knowledge, capacities, and managerial skills in order to function within an organization because the foundations of management are decisions as well as supervisions over operations within an organization. Therefore, managers regardless of their positions should have enough management knowledge and appropriate skills to control this knowledge in practice [16, 11]. The issue of attracting employee participation in decision-making by various ways in order to enhance the survival of an organization was raised in the nineteenth century and developed after World War I [17]. The scores for the level of employee participation in this study were 113.8 in which 4.21 scores were assigned to each item on average. In a study, Shams obtained a mean score equal to 62.99 for employee participation in public hospitals in the city of Esfahan which was above average [1]. In this respect, Abbasi Moghaddam showed the level of employee participation within an organization equal to 53.44% [18]. In a study by Nadi in Esfahan Steel Company employee ownership with the highest mean score was highlighted among the strategies proposed to increase employee participation which had benefits for the organization as well as the employees at a very high level [9]. The results of this study also suggested a relationship between professional skills of managers and levels of employee participation. Thus, simple linear regression analysis was used to evaluate the relationship between professional skills of managers and levels of employee participation in which the results indicated the significant and positive effect of professional skills of managers on employee participation. Furthermore, the results of an investigation by Kenonen showed that positive atmosphere in the team (e.g. vision, safety, participation, task orientation, and support for innovation) could be nurtured in long-term via correct leadership but the reverse did not happen. As well, employees were considered as active agents and not passive targets in the formation of such an atmosphere [19]. The results of many study suggested that organizations were required to support their employees, empower them, and also involve them in decisions as organizational goals. Meeting the needs of employees could also lead them to become more effective citizens within an organization. In this regard, business could control potential citizenship behaviors by listening to their "voice" in decision-making and encourage them to share their ideas [20,21,22,23]. Likewise, the study by Manafi showed that only two measures in human

resources management including training and participation had significant impacts on innovations in large-scale and major electronic companies in Iran [24]. Another study in China also demonstrated that employee participation in management, monitoring, and decision-making by the new generation could have a positive effect on their work-related satisfaction. Moreover, it seemed that willingness of employees to participate (participation tendency) played as a mediator in true participation as well as employee satisfaction [25,26].

Conclusion

The results of this study showed that professional skills of managers were at a desirable level and the levels of human and conceptual skills could receive the highest scores. The results also revealed a very favorable level of employee participation in the Chancellor Management departments of Hamadan University of Medical Sciences which confirmed the relationship between professional skills of managers and levels of employee participation. In general, it was concluded that improved professional skills in managers could enhance the organizational culture of participation and employee participation and ultimately improved performance and increase efficiency within the administration of the given university.

Ethics approval and consent to participate

Ethical permission was obtained from Hamadan University of Medical Sciences, (No, UMSHA.REC.1394.82 IR). A formal letter of cooperation was written to the Management departments. Participants were informed about the purpose, benefit, risk, the confidentiality of the information, and the voluntary nature of participation. Data were collected only after informed written consent was obtained.

Competing interests

The authors declare that they have no competing interests.

Funding

The study was funded by Vice-chancellor for Research and Technology, Hamadan University of Medical Sciences. This study was supported by Hamadan University of Medical Sciences (No, 9405272979; Date: 18-8-2015).

Acknowledgments

The authors would like to acknowledge all managers and employees of the Chancellor Management departments of Hamadan University of Medical Sciences participated in this research for providing necessity data

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