



Correlation between Job Rotation and Visiting Number in Environmental Health Employees

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ABSTRACT

Aims Job rotation is considered as one of the human resource development methods. This study was carried out to investigate the correlation between job rotation and visiting number of Environmental Health employees.

Materials & Methods This descriptive cross-sectional study was done on environmental health employees in three health centers of North, North West and East of Tehran in 2011. 42 persons were selected using stratified sampling method. Data collected using the information collection form and using employee's monthly detailed statistics to evaluate their performance. Data were analyzed by SPSS 17 software using Mann-Whitney test.

Findings The mean of job rotation frequencies was 5.5 ± 5.0 (least 1 to the most 20 times). There was not a significant correlation ($p > 0.496$) between the visiting frequency of persons who had job rotation recently ($76.14 \pm 15.46\%$) and persons who had not job rotation recently ($73.53 \pm 16.34\%$). There was no significant correlation between the visiting number frequencies according to the number of rotations during work in four 1-5 ($77.36 \pm 16.30\%$), 6-10 ($74.02 \pm 13.20\%$), 11-15 ($67.17 \pm 22.43\%$) and 16-20 rotations ($66.37 \pm 17.09\%$) groups ($p = 0.31$).

Conclusion Environmental health employees' performance is independent from their job rotation condition, and job rotation does not improve employees' visiting number.

Keywords Environmental Health; Job Satisfaction; Organization & Administration; Humans

CITATION LINKS

[1] Workplace flexibility and job satisfaction: Some evidence from Europe [2] Job rotation in academic libraries: The situation in a Nigerian university library [3] Effect of job rotation on work demands, workload, and recovery of refuse truck drivers and collectors Hum Factors [4] Organizational behavior [5] Human resource management [6] A survey of the relationship between job rotation and job performance of the managers of bank Meli of Gilan province [7] A social capital theory of career success [8] Effects of job rotation and role stress among nurses on job satisfaction and organizational commitment [9] Job rotation in nursing: a study of job rotation among nursing personnel from the literature and via a questionnaire [10] The Effect of Management Skills on Managing Liquidity (Case Study: State Banks in the City of Sanandaj) [11] Job rotation as a learning mechanism [12] Study clarifies job-rotation benefits [13] Human resource management [14] Effects of ward rotation on subsequent transition processes of Japanese clinical nurses [15] The relationship between emotional intelligence and occupational burnout among nurses in critical care units [16] A Study of Relation between Job Rotation and Staff's Organizational Commitment (A Case Study at Ilam University) [17] The effect of job rotation on nurses performance in Tehran Social Security Hospitals [18] A reassessment of the relationship between job specialization, job rotation and job burnout: example of Taiwan's high-technology industry [19] Job rotation using the multi-period assignment model [20] Analysis on the use and impact of training on staff knowledge and skills [21] A simulated annealing approach to the solution of job rotation scheduling problems [22] A quantitative method for determining proper job rotation intervals [23] Analysis of worker performance measures utilizing a job rotation (AWPMUJR) [24] The effects of job rotation patterns on organizational outcome indicants of inter-organizational boundary spanner performance [25] The study of job rotation and staff performance in customs organization of Golestan and Mazandaran provinces

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Introduction

Nowadays, perhaps every organization and system dreams to have flexible, skilled and multi-skilled employees [1] and also to provide an opportunity to develop skill and generate motivation, generally [2]. Employee rotation is one of the approaches that are overture on human resources [3]. Job rotation is a process in which organization employees perform the duty at different, same family levels of an organization in the employees turn over form [4].

Using this approach, people can become familiar with more jobs, diversify their work, transform into an appropriate member of organization [5]. One of the benefits of job rotation plan is increasing the organizational commitment by reducing the gap between individual and organizational goals [6]. Job rotation is also called service education, which means that different career skills can be trained to a unit or a department employee in a special time period, and it is also assumed as a practical method for career enrichment and development [7].

Management experts believe that job rotation helps employees to enhance their capabilities and vision extent [8, 9]. Correct appointment can play an essential role in desirable human resources employment but it is never done forever rather person should be promoted to a higher job position or should be shifted to the jobs with different responsibilities according to achieved competences, experiences and knowledge. Vertical job rotation (promotion and demotion) and horizontal rotation (movement) and the other rotations, if done appropriate and ordered, not only enhance the human resources efficiency, but also can pull out departments from stagnancy and monotony, create employees satisfaction and consequently increase institution effectiveness and affectivity [10, 11]. Nowadays, formal training only cannot develop ministerial humans in different dimensions; because much of human capabilities develop practically and is one of the very effective methods to broad horizon view of job rotation. Moreover, job rotation leads to individual's knowledge and carrier experiences enhancement, as well as person's performance in different positions and responsibilities will be a good criterion to evaluate and measure her capabilities [12].

Due to training and job rotation; confidence, accountability, participation, usefulness perception, and other positive aspects of participatory occur in people, then it will lead to organizational improvement [13]. Job rotation is considered as one of the human resources development methods [14]. Nonetheless its impact on human performance in health and care organizations, in Iran it has been less investigated [15], and performed studies had chiefly related to industrial department, training, banking and customs affairs, etc. As a result, in spite of its importance, similar studies were not found to compare.

Shiri *et al.* have reported a significant relation between job rotation and organizational commitment in Ilam University [16]. Nasiripour *et al.* have identified that the scores of the nurses performance in the Tehran social security hospitals is independent from the status of their job rotation and, as was expected, has not improved the nurses performance [17]. Hsieh *et al.* have revealed in Taiwan's high-technology industry that by implementing job rotation or job specialization, systems as means to address issues related to employees' job burnout, organizations should not only consider the benefits to job management, but also adjust according to technology and environmental changes. Only by doing so could organizations release the maximum potential from human resources management systems [18].

According to complexity and specialization of the health and care department, compared to industry and also advantages and disadvantages of job rotation, this study aimed to investigate the correlation between job rotations and environmental health employee performance of Shahid Beheshti Medical Science Health Centers.

Materials & Methods

This descriptive cross-sectional study was done on environmental health employees in three North, North West and East health centers of Tehran in 2011. 42 persons out of 76 numbers were selected using stratified sampling method. The inclusion criteria were having the environmental health expert organizational position and at least one year job background; the person should have

worked the first 6 months of 2011 in a center continually and shouldn't have any job rotation during that 6 months.

Data was collected using the information collection checklist in two stages. At the first stage, the demographic factors of employees including age, sex, service background, marriage condition, educational level, organizational position, recruitment condition and the number of carriers was extracted from the employees' personnel file information. At the second stage, the visit number of each month from April to September 2011 were extracted according to detailed statistics form of health affairs undersecretary of Shahid Beheshti University of Medical Sciences which were offered monthly to the health centers by employees. Visiting frequency was calculated as the percentage of total done activities relative to software calculated expected number (115 visits per month).

Data were analyzed by SPSS 17 software using Mann-Whitney test for analysis the correlation of visiting frequencies with employees' job rotation condition (had or had not a job rotation recently) and with number of job rotations during work.

Findings

The mean age of samples was 33.9 ± 8.2 years and the average of employees' service record was 9.7 ± 8.9 years. 22 persons (52.4%) had been and 20 persons (47.6%) hadn't been rotated, recently. 26 persons (61.9%) were formally recruited and 17 persons (38.1%) worked as a project member in the health centers. There were no significant correlations between visiting frequencies according to gender, marriage status, recruitment status, age groups and service background years ($p > 0.05$).

The mean of job rotation frequencies was 5.5 ± 5.0 (least 1 to the most 20 times). There was not a significant correlation ($p > 0.496$) between the visiting frequency of persons who had job rotation recently ($76.14 \pm 15.46\%$) and persons who had not job rotation recently ($73.53 \pm 16.34\%$). There was no significant correlation between the visiting number frequencies according to the number of rotations during work in four 1-5 ($77.36 \pm 16.30\%$), 6-10 ($74.02 \pm 13.20\%$), 11-15

($67.17 \pm 22.43\%$) and 16-20 rotations ($66.37 \pm 17.09\%$) groups ($p = 0.31$).

Discussion

There was no significant correlation between job rotation and visiting numbers which is consistent with Delpasand *et al.* study reporting nurses' performance in the studied hospitals is independent of their job rotation and assumed that job rotation did not improve nurses' performance [13].

Bahadury & Radovilsky also reported that although job rotation leads to job satisfaction enhancement but does not improve performance [17]. Environmental health experts did not use job rotation to enhance performance and affectivity of environmental health employees, but it can be used to increase general employees' satisfaction, this result is consistent with Hwang and Grift's result which shows that job rotation has a positive correlation with managers and employees satisfaction [18].

Managers can create satisfaction deception in environmental health employees using increasing amount of opportunities for job promotion, providing an environment for employees based on confidence and without fear, encouraging employees to participate to make decision related to work and using new technologies to decrease task load, considering employees' job and duty and creating a friendly and acceptable relationship between employee and supervisor and experts. In contrast, the lack of significant correlation in this research can be interpreted that due to the organizations culture in Iran, especially employees' interest and prejudice to their job and also insecurity deception in job security, job rotation should be carried out carefully, otherwise it can cause problems such as job stress and establishing some informal groups that are non-coextensive with administrator. These results are coextensive with a study which showing that without schematization and in an inappropriate method job rotation can expose person to stress and decrease administrators group work [19].

Environmental health employees can use the proposed schematizations that are based on using scientific and documentation methods to provide services to enhance performance.

The present research was done to evaluate environmental health experts' performance collecting their statistics information in the first midyear, it can be concluded that the lack of relationship between performance and job rotation and also differences of current study with other studies are due to factors like season and climate conditions, summer holiday time, beginning of new years, closing and reopening of schools, etc which can affect environmental health employees and their performance from the point of view of physical, spiritual and job hardship [20]. Alinia has concluded that there are some improvements in performance scale with increase of job rotation level and became multi-skilled [21]. Sweeney concluded that job rotation had a desirable effect on their performance, cause to enhance organizational performance and quicker access to organizational purposes [22]. Rashki concluded that there is a positive correlation between job rotations and productivity [23]. Low motivation and support of managers in performing research projects was from the limitations of this study. Since the results of this study show that the number of visitors had an inverse relationship with job rotation, it is suggested that the geographical areas and the spirit and desires of employees be considered in rotation.

Conclusion

Environmental health employees' performance is independent from their job rotation condition, and as it is expected job rotation does not improve employees' visiting number.

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References

1- Origo F, Pagani L. Workplace flexibility and job satisfaction: Some evidence from Europe. *Int J Manpower*. 2008;29(6):539-66.

- 2- Olorunsola R. Job rotation in academic libraries: The situation in a Nigerian university library. *Library management*. 2000;21(2):94-8.
- 3- Kuijter PP, de Vries WH, van der Beek AJ, van Dieën JH, Visser B, Frings-Dresen MH. Effect of job rotation on work demands, workload, and recovery of refuse truck drivers and collectors *Hum Factors*. 2004;46(3):437-48.
- 4- Griffin R, Moorhead G. *Organizational behavior*. 10th ed. Boston: Cengage Learning; 2011.
- 5- Price A. *Human resource management*. Boston: Cengage Learning; 2011.
- 6- Hosseini SM, Sourati P, Kargar M. A survey of the relationship between job rotation and job performance of the managers of bank Meli of Gilan province. *J Appl Sci Res*. 2015;11(1):60-5.
- 7- Seibert SE, Kraimer ML, Liden RC. A social capital theory of career success. *Acad Manag J*. 2001;44(2):219-37.
- 8- Ho WH, Chang CS, Shih YL, Liang RD. Effects of job rotation and role stress among nurses on job satisfaction and organizational commitment. *BMC Health Serv Res*. 2009;9(1):8.
- 9- Järvi M, Uusitalo T. Job rotation in nursing: a study of job rotation among nursing personnel from the literature and via a questionnaire. *J Nurs Manag*. 2004;12(5):337-47.
- 10- Ghaderi H, Nazariipoor M, Khaksar M. The Effect of Management Skills on Managing Liquidity (Case Study: State Banks in the City of Sanandaj). *J Basic Appl Sci Res*. 2013;3(6):65-78.
- 11- Ortega J. Job rotation as a learning mechanism. *Manag Sci*. 2001;47(10):1361-70.
- 12- Cheraskin L, Campion MA. Study clarifies job-rotation benefits. *Per J*. 1996;75(11):31-8.
- 13- Hendry C. *Human resource management*. New York: Routledge; 2012.
- 14- Fujino M, Nojima Y. Effects of ward rotation on subsequent transition processes of Japanese clinical nurses. *Nurs Health Sci*. 2005;7(1):37-44.
- 15- Delpasand M, Nasiripoor A, Raiisi P, Shahabi M. The relationship between emotional intelligence and occupational burnout among nurses in critical care units. *Iran J Crit Care Nursing*. 2011;3(3):79-86.
- 16- Shiri A, Yari AB, Dehghani M. A Study of Relation between Job Rotation and Staff's Organizational Commitment (A Case Study at Ilam University). *Trends Adv Sci Engin*. 2012;5(1):82-6.
- 17- Nasiripoor AA, Raeisi P, Delpasand M. The effect of job rotation on nurses performance in Tehran Social Security Hospitals. *J Health Administ*. 2009;12(37):23-8.
- 18- Hsieh A-T, Chao H-Y. A reassessment of the relationship between job specialization, job rotation and job burnout: example of Taiwan's high-technology industry. *Int J Human Resource Manag*. 2004;15(6):1108-23.
- 19- Bahadury J, Radovitsky Z. Job rotation using the multi-period assignment model. *Int J Prod Res*. 2006;44(20):4431-44.
- 20- Behyan M, Talebi H, Salimi G. Analysis on the use and impact of training on staff knowledge and skills. *J Facult Admin Sci Econ Isfahan Univ*. 2005;17(1):21-45.
- 21- Seçkiner SU, Kurt M. A simulated annealing approach to the solution of job rotation scheduling problems. *Appl Math Comput*. 2007;188(1):31-45.

- 22- Tharmmaphornphilas W, Norman BA. A quantitative method for determining proper job rotation intervals. *Ann Oper Res.* 2004;128(1-4):251-66.
- 23- Alinia S, Pourtalari M, Morsali Sh, Mohajer K. Analysis of worker performance measures utilizing a job rotation (AWPMUR). Tehran: The First International Conference on Ergonomics; 2008. [Persian]

- 24- Sweeney DL. The effects of job rotation patterns on organizational outcome indicants of inter-organizational boundary spanner performance [Dissertation]. Texas: University of Texas; 2007.
- 25- Rashki Z, Hasanqasemi A, Mazidi A. The study of job rotation and staff performance in customs organization of Golestan and Mazandaran provinces. *Kuwait Chapter Arab J Bus Manag Rev.* 2014;3(7):186-95.