

Analysis of the factors that motivate human resources in the public sector

Soheil Hariri Movahhed 1 and Dr. Manuchehr Omidvari2

1 - Department of Industrial Engineering, Faculty of Industrial and Mechanical Engineering, Qazvin Branch, Islamic Azad University, Qazvin, Iran

2 - HSE management and Industrial Safety and Health Engineering

Assistant professor of industrial Engineering

Islamic Azad University, Qazvin Branch

Assistant professor of HSE Department of Science and Research branch Tehran

Safety industrial engineering/ Risk Assessment Modeling and Disaster management

ABSTRACT

Original Article:

Identification and prioritization the needs of employees are of a real importance for managers due to focus on these factors and consequently increase the level of motivation and human resources. Nowadays one of the most important assets of the organizations is human resources. In fact the motivated human resources are of much help to the organization improvement. Dare to be claimed that the public sector in Iran is the most important part of the economy that has low efficiency. One way to increase the efficiency of the public sector is to increase the efficiency of human resources belonging to this sector. For this purpose, staff motivation is crucial. In this research we have tried to examine the most important factors that influence the motivation of the human resources in the public sector. In this study, statistical analysis is used and data are derived from district six of Tehran municipal workers.

Received 10 Sep. 2014

Accepted 25 Nov. 2014

Published 30 Mar. 2015

Keywords:

1.Introduction

The word motivation means motivating, stimulating and encouraging and motivation means what inspires someone to do something, so motivation can be considered the driving force. For motivation, it is necessary to identify requirements and then try to fulfill them.

The main challenge of an organization is to create a balance between the general and specific objectives of the organization and the employees' own values. Thus motivation is the joint product and result of a person interaction with their situation.

The development of operations management in the public sector is a protracted process and trail.

Increasing efficiency in the public sector is strongly influenced by the efficiency and productivity of the human resources. To achieve this target and increase human resources efficiency, motivating the human resources is the key factor. We can conclude that not only in the public sector but also in other organizations, an increase in the employees' motivation would raise their efficiency and so increase the organization efficiency. Given the importance of motivation among employees we are able to identify and analyze the factors that affect the creation of motivation. In this study, we aim to identify and analyze the key factors affecting public sector employees.

The importance of human resources management was taken into consideration at the end. However, motivation got less attention the public sector in comparison with the private

sector. Given the great relevance of the public sector to fulfill the public requirements, one can realize the importance of efficiency and productivity in this sector.

Motivating employees is dependent on human resource management. The human resource management refers to the policies, practices and systems that affect behavior, attitude and performance of the employees. The human resources management is the strategic approach to attracting, developing, managing, motivating and achievement of the commitment of the organization key resources (people who work for the organization.) Human resource management process consists of four tasks: to attract, develop, motivate and retain human resources. There are two general approaches in human resource management: Hardware approach and Software approach.

Hardware approach: The employees considered like the other resources that need to establish the input-output equation and efficiently being run.

Software approach: It ponders more on this truth that we cannot manage employees in a way that we do with other resources, because unlike other resources, human resources, think and react. In this approach we place more emphasis on the strategies to achieve commitment by notifying staff of the mission, values, organization plans and environmental conditions and employee participation in decision making about how to do things and grouping of employees in teamwork with no formal monitoring.

In fact the hard approach focuses on personnel affairs management process, while the soft approach emphasizes

the attitudes of employees and how to handle them. Hardware approach considers systems, procedures, instructions and processes, while soft approach considers human factors and behavior.

Human resources management is a dynamic process that depends on the internal and external factors; the main goal of human resources management is to create harmony between goals and interests of the organization and the employee's interests and capabilities. So it seeks to motivate employees in a proper way.

Given the importance of human resources motivation in the public sector, we try to analyze the factors which motivate human resources. The structure of this study is to review literature in the third section and in the context of research, in the fourth section we present the research method, and in the fifth section the results and analyses is presented and finally we have conclusion.

2- Review of literature:

In this section review of literature is presented in the context of the research. A lot of scholars have addressed employees' motivation in the organization especially in the public sector that we will discuss some of them in the following parts.

Palidoskite (2007) analyzed and considered the factors of human resources motivation in the public sector. He began to identify the factors that are different in the public and private sector that are specific to the public sector. These factors specific to the public sector motivate employees and includes: Desire to serve the public interest, contribute to the development and implementation of public policy, loyalty and respect for authority, a commitment to justice and ideals of social justice, having good intentions against individuals and groups. These factors make difference between public sector and private sector when it comes to motivation.

Palidoskite and segalysien(2008) has identified the main factors in choosing to work in public sector over private sector. These factors include: Job content, social insurance, the desire to experience working in public service, and personal motivation. Among their internal motivations we can mention: Job content, possibility of education, the nature of responsibility in the public sector, the desire to contribute to the management of public affairs, Comply with government policy and a desire for power. These two researchers have introduced external factors in public sectors as well, such as: Social insurance, working conditions, wages, safe working environment, social status.

Androforhen and his associates (2010) addressed external and internal factors for employees' motivation. They used two different approaches to consider this issue. In one approach they reached to this conclusion: Doing paperwork in the public sector increases the satisfaction of the employees, but by applying of the second approach they noted that employees manner in the public sector is different from ones who work in the private sector. They have divided motivation factors to three sections: Public sector motivation, financial motivation, and group and team relationships.

Palidoskite and Vasioalvisit (2011) conducted a research that shows that public sector employees tend to be evaluated and rewarded. In this research they mentioned having intention to service people is not motivation for all the

employees but some of them. They are aware of the importance of the public service but they are not willing to take trouble to reach these concepts.

Anderson and Pederson (2012) in a study showed that how professionalism and job motivations have interconnection with each other. They showed that seeing the job as only a profession has an inverse relation with compassion and being service oriented, but being professional has a positive relation with political development.

Chen and Bozeman (2012) considered leaders and managers motivations in the public sector and also in the non-profit organizations. They addressed that manager in the non-profit organization faces with the aspects like: being voluntary, altruism, and sociability. Their study shows that public sectors managers tend to give service more than governmental organization managers.

Park and Rainey (2012) have analyzed internal and external factors which create motivation and all kinds of social relationships related to job aspects (Involvement with work, bureaucracy).

Anderson and kojeldson (2013) have analyzed the relevance between public service purposes and being service-oriented with job satisfaction. They showed that this relevance is different from public sector to private sector.

Pederson (2013) declared that public sector motivation is connected with activities of the employees, organization, responsibility and incentives and so increase job satisfaction.

Lambert and his associates (2001) analyzed the impact of employees' satisfaction on the companies turn over. They noted that on the one hand work environment has a significant impact on job satisfaction and on the other hand job satisfaction has a tangible impact on increasing in the companies turn over. They considered job satisfaction as the main contributor for it.

Comber and Baribal (2007) surveyed the most important factors in job satisfaction in increasing of the hospitals turn over. They studied nurses' job satisfaction and important factors about it, and the results showed that leadership issues and work stress are the most important factors in the job satisfaction among nurses and education levels and wages are also the most important factors in increasing the job satisfaction.

Chen and associates (2008) surveyed the factors which affect employees' satisfaction and are determinant of staying at or leaving the workplace. They noted that employees' satisfaction depends on equal treatment among them and also a friendly working environment and it really has a direct impact on leaving or staying at the workplace.

Spagnoly and his associates (2012) surveyed aspects of job satisfaction. They considered four aspects including management, reward, promotion and the job itself. They applied time series analysis using ANOVA method to study trend of the changes in job satisfaction. The result shows that any kinds of improvement in each factors has a different impact on the employees' job satisfaction. This means improvement in each factors specifically impacts on the employees' satisfaction separately. Thus managers are able to improve any factors and therefore improve employees' job satisfaction.

Eltentas(2014) studied factors which impact the job satisfaction. He studied the impact of education level on the job satisfaction. His research was undertaken at 14 schools of nursing in Turkey. Data were analyzed due to distribution repeat and percentage. Cronbach's alpha was used to check the reliability and it also used ANOVA and chi-square test to analyze data.

Eshlit and Zigler(2014) examined job perception and job effectiveness on the employees satisfaction. They hypothesized that job satisfaction is under influence of the job effectiveness and job perception has less impact in the employees' satisfaction. Research results proved this hypothesis and endorsed greater role of the job effectiveness.

Mihalsia (2014) surveyed the role of management and leadership on the employees' satisfaction at the retail companies. His research followed three targets: 1- Identification of the type of leadership that creates employee satisfaction.2- Finding the relation between leadership qualities and characteristics of the leaders.3- Finding the correlation between leadership style and professional-grade performance.

Using survey on the researches done in the past, we are able to categorize effective factors on the human resources motivation like this:

Financial factors: wage, bonuses.

Rewarding factors: gratitude, gifts, governmental awards, more power and responsibility, involvement in decision-making and job opportunities.

Self-expectancy factors: Possibility of doing interesting works and being responsible, capability of continual improvement.

Social factors: Good psychological environment, appropriate leadership style, more free time and pastime, management consideration, organization of teamwork.

Security factors: appropriate working condition, equipped workplace, social security.

3- Research method:

This research has three main stages: First through library study we have extracted effective factors on the governmental sector employees' motivation. Then through questionnaire we extracted the most important factors. These factors provide decision criteria. To identify and analyze these data, Statistical Hypothesis Testing is applied and to check reliability of the questionnaire, Cronbach's alpha is applied. The designed questionnaire is a kind of 5-choice Likert. The data were extracted from district six of Tehran municipal workers. T-test was used for statistical analysis. The statistical population of this research includes district six of Tehran municipal workers. Cochran's sample size formula will be used in the case of non-availability of community members. Given the fact that error measure has been shown with parameter d, the sample size is calculated based on the following formula:

$$n = \frac{Z^2 pq}{d^2}$$

In the above formula parameter d equals 0.1 and with level of confidence of 95 percent, amount of Z that is extracted from standard normal table is 1.96 and parameters of p and

q are 0.5. In these circumstances, the number of sample needed is shown as n that is equal to 96.

Cronbach's alpha is applied check reliability of the questionnaire. Cronbach's alpha has been invented by Cronbach and is among the most common measurement for checking the reliability of the questionnaires. With validity or reliability of the questionnaire we mean if the measured traits be measured with the same instrument and under the same conditions at the different times, we will have the same results. Cronbach's alpha is used for the measurement of how much dimensional the attitudes, beliefs are. In fact we want to know to what degree the respondents perception were the same. This coefficient is based on the scales. The scale is a bunch of numbers on continuum of individuals, object or behaviors is indicated to bring quality to quantity. The most common scale in social researches is Likert scale. Likert scale is based on this assumption that all Items are equiponderant, Thus every item is given numbers (for example 1 to 5 for the 5-Item Likert scale), and the sum of the numbers that an individual gives from items represents their tendency.

Generally, the Cronbach's alpha is applied by using one of these formulas:

$$\alpha = \frac{k}{k-1} \left(1 - \frac{\sum_{i=1}^k S_i^2}{\sigma^2} \right) \quad \text{یا} \quad \alpha = \frac{k\bar{C}}{\bar{V} + (k-1)\bar{C}}$$

K is number of the questions, S_i^2 is variance of number i question σ^2 is variance of total questions. \bar{C} is mean covariance between questions and \bar{V} is variance of mean questions.(Alain and Yen, 2002) The questionnaire includes options such as: very effective, effective, medium impact, low impact and no impact. To Undertake the T test in this research we assign above options numbers in this order: 1, 3, 5, 9, and 11. If average score of a question is bigger than 5, we conclude this factor is effective on the public sector employees motivation. To examine whether average score of a question is bigger than 5 or not, we apply Statistical Hypothesis Testing. Like this:

$$\begin{cases} H_0 : \mu \geq \mu_0 \\ H_1 : \mu < \mu_0 \end{cases}$$

Test Statistics for this paper is as follows:

$$T = \frac{\bar{X} - \mu_0}{S / \sqrt{n}}$$

Tests performed in this study is in the significant level of 95%, because the tests are one-way, if the P-value is bigger than 0.05, the null hypothesis will be accepted; otherwise we reject the null hypothesis.

4- Results and discussion:

In this section the results of the data analysis are presented. The following table summarizes the results of the questionnaires.

Table 1: Summary of the questionnaire

Row	Subject of the question	No impact	Low impact	Medium impact	effective	Very effective	Number of answers
۱	wage	0	0	19	38	38	96
۲	Bonus	0	5	10	33	48	96
۳	Appreciation of the staff	2	12	18	43	21	96
۴	Presents	7	38	17	11	23	96
۵	Governmental awards	23	24	16	24	9	96
۶	More responsibility and power	16	32	28	11	9	96
۷	Involvement in the process of decision-making	22	38	12	17	7	96
۸	Job opportunities	23	38	13	15	7	96
۹	Nature of job	15	30	17	14	20	96
۱۰	Possibility of continual improvement.	16	34	26	10	10	96
۱۱	psychological environment	8	5	10	33	40	96
۱۲	Leadership style	8	7	8	39	34	96
۱۳	Free time and pastime	4	5	6	30	51	96
۱۴	management consideration	16	10	23	34	13	96
۱۵	Organization of teamwork	16	30	13	20	15	96
۱۶	appropriate working condition	8	8	7	38	35	96
۱۷	Equipped workplace	7	17	38	11	23	96
۱۸	Insurance	6	8	18	40	24	96

With undertaking Cronbach's alpha test regarding this questionnaire with using the software of SPSS we have reached to this result:

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.706	.727	18

This indicates that the value of Cronbach's alpha reliability of this scale was good and the results are statistically reliable. If alpha is greater than 0.7, it can be considered that the results of the questionnaire are reliable and this has happened here.

Now for every question of this research, Hypothesis test is undertaken like this.

H_0 = Average score of question i is bigger than 5.

H_1 = Average score of question i is smaller than 5.

In this study, we use sample variance because we variance of society is unknown and also the number of data is more than 30. According to the above-mentioned matters and based on Central limit theorem it is possible to presume that the data has normal distribution. In the following statistical hypothesis test results are presented:

Table 3: hypothesis test results

Row	Subject of question	Average	P-value	Null hypothesis result
۱	wage	7.322	0.23	pass
۲	Bonus	3.083	0.00	Fail
۳	Appreciation of the staff	6.43	۱۸0.	pass
۴	Presents	5.104	0.06	pass
۵	Governmental awards	4.416	0.003	fail
۶	More responsibility and power	4.27	0.003	fail
۷	Involvement in the process of decision-making	3.93	0.00	fail
۸	Job opportunities	3.85	0.00	fail
۹	Nature of job	4.875	0.003	fail
۱۰	Possibility of continual improvement.	4.25	0.001	fail
۱۱	Psychological environment	6.91	0.15	pass
۱۲	Leadership style	6.75	0.15	pass
۱۳	Free time and pastime	7.479	0.25	pass
۱۴	Management consideration	5.375	0.05	pass
۱۵	Organization of teamwork	4.64	0.001	fail
۱۶	Appropriate working condition	6.75	0.23	pass
۱۷	Equipped workplace	5.541	0.05	pass
۱۸	Insurance	6.41	0.18	pass

According to the undertaken tests, it is possible to express the important and effective factors in the public sector employees' motivation in this way:

- Wage
- Appreciation of the staff
- Presents
- Psychological environment
- Leadership style
- Free time and pastime
- Management consideration

- Appropriate working condition
- Equipped workplace
- Insurance

According to above-mentioned matters we are able to conclude that the most important factors for motivation that the public sector employees are concerned about are ones which related to financial matters and after them there is working environment and management manner.

Average rating of each option:

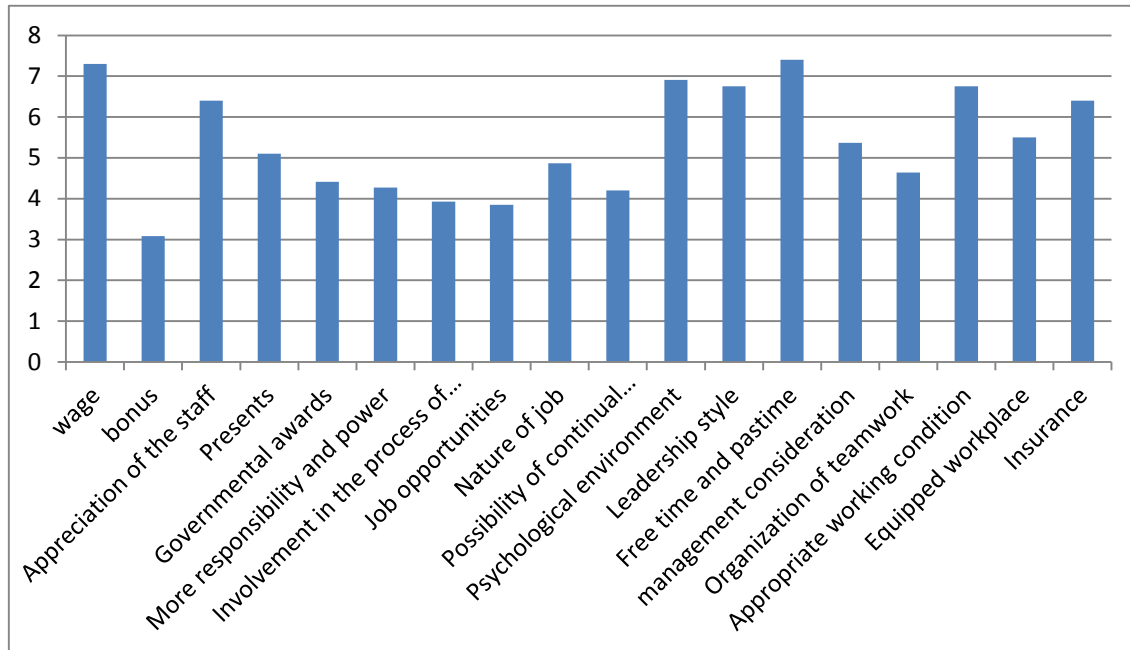


Chart 1: Average rating of the factors

The statistical results have been presented here. These results show that the most important factor to motivate the public sector employees is financial ones. With focusing on improving these factors, it is possible to increase the public sector employees' motivation thus promote the efficiency of the human resources in the public sector.

5- Conclusions

This study examines and analyzes the most important factors that affect the motivation of employees of the public sector in Iran. First, with applying the review of the literature in the context of this research, we extracted the most important factors in motivating the public sector employees, and then we used the questionnaire by the Likert scale to extract the public sector employees' opinion in Iran, then we applied Cronbach's alpha to check the reliability of the questionnaire. Next we used Statistical hypothesis testing to get the most important factors among the series of factors. With applying these factors we are able to motivate the public sector employees and therefore increase efficiency in this sector.

References

[1]. Palidaukaitė, J. (2007). Motyvacijos unikalumas valstybės tarnyboje [Uniqueness of public service motivation]. *Public Policy and Administration*, 19, 33–45.

[2]. Palidaukaitė, J., & Segalovičienė, I. (2008). Valstybės tarnautojų motyvacijos profilis Lietuvoje: empirinio tyrimo rezultatai ir analizė [The profile of public servants motivation in Lithuania: analysis of empirical research results]. *Management of Organizations: Systematic Research*, 47, 73–90.

[3]. Anderfuhren-Biget, S., Varone, F., Giauque, D., & Ritz, A. (2010). Motivating employees of the public sector: does public service motivation matter? *International Public Management Journal*, 13 (3), 213–246.

[5]. Palidaukaitė, J., & Vaisvalavičiūtė, A. (2011). Savivaldybės administracijos įdarbinamųjų valstybės tarnautojų motyvacijos tyrimo analizė [Analysis of public servants' working in municipality administration motivation research]. *Public Policy and Administration*, 10 (1), 127–140.

[7]. Andersen, L. B., & Pedersen, L. H. (2012). Public service motivation and professionalism. *International Journal of Public Administration*, 35(1), 46–57.

[8]. Chen, Ch., & Bozeman, B. (2012). Understanding public and nonprofit managers' motivation through the lens of self-determination theory. *Public Management Review*, 1–24.

[10]. Park, S. M. & Rainey, H. G. (2012). Work motivation and social communication among public managers. *The International Journal of Human Resource Management*, 23 (13), 2630–2660.

[12]. Andersen, L. B., & Kjeldsen, A. M. (2013). Public service motivation, user orientation, and job satisfaction: a question of employment sector? *International Public Management Journal*, 16 (2), 252–274.

[14]. Pedersen, M. J. (2013). Public service motivation and attraction to public versus private sector employment: academic field of study as moderator?

- [15]. International Public Management Journal, 16 (3), 357–385 .
- [16]. Lambert, Eric G., Nancy Lynne Hogan and Shannon M. Barton. (2001) "The Impact of Job Satisfaction on Turnover Intent: A Test of a Structural Measurement Model Using a National Sample of Workers." *The Social Science Journal* 38, no. 2: 233-250.
- [17]. Coomber, Billie and K. Louise Barriball. (2007) "Impact of Job Satisfaction Components on Intent to Leave and Turnover for Hospital-Based Nurses: A Review of the Research Literature." *International Journal of Nursing Studies* 44, no. 2: 297-314
- [18]. Chen, Hsing-Chu, Cheng- I. Chu, Ying-Hui Wang and Ling-Chu Lin. (2008) "Turnover Factors Revisited: A Longitudinal Study of Taiwan-Based Staff Nurses." *International Journal of Nursing Studies* 45, no. 2 : 277-285.
- [19]. Spagnoli, Paola, Antonio Caetano and Susana Correia Santos. (2012) "Satisfaction with Job Aspects: Do Patterns Change over Time?" *Journal of Business Research* 65, no. 5: 609-616.
- [20]. Altuntaş, Serap. (2014) "Factors Affecting the Job Satisfaction Levels and Quit Intentions of Academic Nurses." *Nurse Education Today* 34, no. 4: 513-519.
- [21]. Mihalcea, Alexandru. (2014) "Leadership, Personality, Job Satisfaction and Job Performance." *Procedia - Social and Behavioral Sciences* 127, no. 0: 443-447.
- [22]. Schlett, Christian and Rene Ziegler. (2014) "Job Emotions and Job Cognitions as Determinants of Job Satisfaction: The Moderating Role of Individual Differences in Need for Affect." *Journal of Vocational Behavior* 84, no. 1: 74-89. faculty members and physical education group in public university, *Movement Science and Sport journal*, 8, No. 12, pp.109-109.