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Job Characteristic of Health Care Worker in Public Hospitals in NamDinh Province

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Abstract

The main objective of this study was to identify, evaluate, and to measure the attributes of job characteristic of health care worker in public hospitals in NamDinh province, Vietnam. The study was based on a field survey using a semi-structured questionnaire on a sample of 150 health care workers. But, only 120 filled questionnaires were satisfactory and therefore included in the analysis. By using several statistical analytical tools, i.e., descriptive statistics, Cronbach's Alpha analysis, Independent T-test and ANOVA, the study has identified and measured five (5)

attributes of job characteristic of health care worker in public hospitals in NamDinh province, that have great effects on employees (or in this case study, health care worker). There is not, statistically, significant difference in the level of job characteristic of health care worker in public hospitals in NamDinh province from these different genders and between the mentioned three groups of age. Based on the findings, some recommendations are given for public hospitals to improve the job characteristic of health care worker.

Keywords: Job Characteristic, Health Care Worker, Public Hospitals, Human Resources, Labor Economics

JEL classification code: M10, M51, M52, M54

1. Introduction

The administrator cares about the nature of work and improves as well as creates favorable conditions for employees in the process of working, which will make them really satisfied with the job, thereby, not only work efficiency but also productivity is higher, and at the same time, strike and leave are significantly reduced. The nature of work has a positive impact on employees' job satisfaction, thereby contributing to enhancing benefits for employees and firms.

The medical profession requires a combination of scientific and artistic skills. Healthcare workers need to possess the necessary knowledge, attitudes, and abilities to aid individuals, families, and communities in enhancing and preserving their health, preventing and treating diseases, mitigating both physical and mental pain, and knowing how to practice self-care.

Smith (2007) [22] argues that work plays a central role in people's lives, thus the level of satisfaction with the work is a critical component of the overall happiness of workers. The satisfaction level of employees is achieved when they feel satisfied with the opportunity for training, career advancement, consent to the supervision of their superiors and have a harmonious relationship with colleagues.

By and large, medical staff capacity is still limited, and only capable of a few dimensions of their duties such as medical care, examination, and treatment; whereas employees' attitudes and communication skills with patients still need improvement. Therefore, understanding how medical staff assesses the characteristics of their job is one of the pressing goals that hospitals in general, and the public hospital of Nam Dinh province in particular, need to focus on. In order to achieve this goal, they must first understand the current context and the job characteristics of the medical staff at public hospitals in Nam Dinh province. From the above reasons, researching job characteristic of health care worker in public hospitals in NamDinh province is necessary and meaningful.

2. Theoretical background and literature review

The job characteristics' theory of Hackman and Oldham (1980) [10]

Hackman and Oldham (1980) [10] constructed a job characteristics model with five core aspects. The two authors said that if managers design works with the help of this model, employees will be satisfied with the job and as a result getting the high levels of performance. According to Hackman and Oldham (1980) [10], internal motivation is something a desire that causes a

person to strive and capture some accomplishment just because their work is worth doing and brings them a sense of satisfaction. The two authors described this motivation as the work itself. The five aspects of the work proposed by Hackman and Oldham (1980)^[10] are:

1. Skill variety: The job enables people to sharpen and develop their skills and talents which they have a high demand for. If it assists them to enhance their professional competencies and promote their strengths, then they will realize the meaning of the work they are doing, thereby being satisfied and intrinsically motivated at work.
2. Skills variety is described as "The degree to which a job requires a variety of different activities in carrying out the work, which involves the use of a number of different skills and talents of the employee" (Hackman & Oldham, 1975)^[8]. Empirical research has shown that skills variety is one of the best predictors of job satisfaction (Becherer *et al.*, 1982; Glission & Durick, 1988)^[4, 7], and people with diverse occupational skills are frequently more committed to the organization (Glission & Durick, 1988; Hunt *et al.*, 1985)^[7, 14].
3. Task identity: The job clearly shows employees the completion degree of each part as well as the whole work. The requirement of work designing is to clarify the job specifications and the extent to which they have to complete. This is also a fundamental factor in motivating workers.
4. Task Identity is "The degree to which the job requires completion of a "whole" and identifiable piece of work—that is, doing a job from beginning to end with a visible outcome." (Hackman & Oldham, 1975)^[8]. Previous studies have shown that task identity is rarely perceived as a strong predictor of job performance (Dodd & Ganster, 1996; Snyder *et al.*, 1982)^[6, 23].
5. Task significance: What they are doing is valuable to others. Workers feel more motivated to attain greater productivity if they treasure the value of their contributions to others and the community.
6. Task significance is "the degree to which the job has a substantial impact on the lives or work of other people—whether in the immediate organization or in the external environment." (Hackman & Oldham, 1975)^[8]. Empirical research has found that work significance is positively correlated with job satisfaction (Becherer *et al.*, 1982; Glission & Durick, 1988; Katz & Kahn, 1978; Kulik *et al.*, 1988)^[4, 7, 16, 17] and commitment to the organization (Glission & Durick, 1988)^[7].
7. Autonomy: The job allows people to be free, independent and have the right to decide or take part in the planning and controlling their performance. Autonomy at work can flourish virtual human capacities and responsibilities which leads to constant progress in coordination and work procedures.
8. Work autonomy is defined as "The degree to which the job provides substantial freedom, independence, and discretion to the employee in scheduling the work and in determining the procedures to be used in carrying it out" (Hackman & Oldham, 1975)^[8]. Several empirical studies have found that work autonomy is highly correlated with organizational commitment (Agarwal & Ramaswami, 1993; Hunt *et al.*, 1985; Losocco, 1989)^[2, 14, 18]; work performance efficiency (Hackman &

Oldham, 1975)^[8]; and job satisfaction (Becherer *et al.*, 1982; Katz & Kahn, 1978; Kulik *et al.*, 1988)^[4, 16, 17].

9. Feedback: The job allows workers to receive direct and clear information about their work performance. Hackman and Oldham (1980)^[10] suggested that in step with the other job characteristics, if the organization gives feedback on employees' work performance, people will be more satisfied and their motivation will increase. Therefore, employees will be less absent and less likely to quit the job.
10. Supervisor feedback is defined as "the extent to which workers receive clear information regarding their performance" (Hackman & Oldham, 1975)^[8]. Bassett (1994)^[3] assumes that feedback is the most effective tool to improve performance. Empirical research has shown that supervisor feedback is a significant predictor of an employee's job satisfaction (Churchill *et al.*, 1976; Becherer *et al.*, 1982)^[5, 4], with a positive correlation with organizational commitment (Agarwal & Ramaswami, 1993; Hunt *et al.*, 1985; Moch *et al.*, 1979; Porter & Steers, 1973)^[2, 14, 19, 21].

According to Hackman and Oldham (1980)^[10], the first three aspects play a significant role in developing a wide range of skills, clear tasks and meaningful work that increases the value of work for an individual. Workers feel that what they contribute is important, valuable and helpful to everyone. The fourth aspect of work, "autonomy", suggests that if employees are empowered at work, they will execute their finest novelties and thoughts with the sense of responsibility. And if the job provides feedback on their performance (the fifth aspect), workers will know how to do it effectively. These incentives will lead to psychological expression of the individual (through attitude, behavior) and organizational effectiveness.

According to Hackman and Oldham (1980)^[10], internal motivation is something a desire that causes a person to strive and capture some accomplishment just because their work is worth doing and brings them a sense of satisfaction. The two authors described this motivation as the work itself.

Other perspectives on job characteristics

Job characteristics include a number of factors such as: role ambiguity, role conflict, role overload, task significance, autonomy career scope and skill variety (Suman & Srivastava, 2012)^[24].

3. Research Subject and Methodology

Research Subject: The subject of this research is job characteristic of health care worker in public hospitals in NamDinh province, Vietnam.

Qualitative Research Methodology:

This research used a qualitative research methodology based on some in-depth interviews with three (3) lecturers with extensive experiences in human resource management in public hospitals of the National Economics University and University of Labour and Social Affairs. These are the two leading universities in Vietnam in training human resource management. At the same time, three (3) experts were also interviewed who are head of human resources department in public hospitals. The contents of the interviews focused on the subject of job characteristic of health care worker in public hospitals.

Based on findings from a number of previous studies and findings from the interviews with those experts, this research has identified job characteristic of health care

worker in public hospitals (JC) in five (5) attributes as presented in Table 1 below.

Table 1: Attributes of job characteristic of health care worker in public hospitals

Code	Scale	Sources
Job characteristic (JC)		
JC1	I find my work amusing	Hackman & Oldham (1975); Hackman and Oldham (1980); Becherer <i>et al.</i> (1982); Glission & Durick (1988); Hunt <i>et al.</i> (1985); Dodd & Ganster (1996); Snyder <i>et al.</i> (1982); Katz & Kahn (1978); Kulik <i>et al.</i> (1988), Agarwal & Ramaswami (1993); Losocco (1989), Bassett (1994), Churchill <i>et al.</i> (1976), Agarwal & Ramaswami (1993) ^[8, 10, 4, 7, 14, 6, 23, 16, 17, 2, 18, 3, 5, 2]
JC2	I have all the concordant authority and responsibilities for my job	
JC3	My job allows me to exercise my full capacity	
JC4	I am entitled to handling professional tasks proactively	
JC5	I get feedback on my performance	

Quantitative Research Methodology

For the purpose of this research, a questionnaire was designed which consisted of five (5) variables with a 5-point Likert scale from 1: “Strongly disagree” to 5: “Strongly agree”. The method of data collection was accomplished through the survey with a number of health care workers in public hospitals in NamDinh province. A total of 150 questionnaires were sent and received the filled questionnaires with full information for data entry and analysis from 125 respondents. The size of this sample was consistent with study of Hair *et al.* (1998) ^[11] that the research sample must be at least 5 times the total number of indicators in the scales. The questionnaire of this study included five (5) indicators, and therefore, the minimum sample size to be achieved is 5 * 5 = 25 observations. Then, data from these 125 questionnaires was cleaned and coded with the necessary information in the questionnaires, inputted the analyzed by using SPSS.

4. Research Results

4.1 Descriptive Statistics

Information of data collected is shown in Table 2. It shows that among the 125 respondents, about 53.6% were male while the remaining 58 (46.4%) were female. Of these, 61 of them (or 48.8%) were from 27 to 35 years old, 31 of them (or 24.8%) were less than 27 years old, and 26.4% of the participants were over 35 years old. Among the respondents, 53.6% of the participants have work experiences for 5 years to 10 years, 24.8% of the participants have work experiences for less than 5 years, and over 10 years accounted for 21.6%.

Table 2: Respondents by gender, age and work experience

	Frequency	Percent	Cumulative Percent
Gender			
Male	67	53.6	53.6
Female	58	46.4	100.0
Age			
From 27 to 35 years old	61	48.8	48.8
Less than 27 years old	31	24.8	73.6
Over 35 years old	33	26.4	100.0
Work experience			
Less than 5 years	67	53.6	53.6
From 5 to 10 years	31	24.8	78.4
Over 10 years	27	21.6	100.0
Total	125	100.0	

Next, Table 3 indicates that the respondents agree with the dependent variables of “job characteristic of health care worker in public hospitals in NamDinh province” where five attributes were quite high with an average of 3.78 compared

with the highest of the Likert 5-point scale. All 5 attributes were rated at an average of 3.63 or higher.

Table 3: Descriptive analysis of attributes of job characteristic of health care worker in public hospitals in NamDinh province

	N	Minimum	Maximum	Mean	Std. Deviation
JC1	125	2.0	5.0	3.63	0.561
JC2	125	3.0	5.0	3.76	0.614
JC3	125	2.0	5.0	3.82	0.688
JC4	125	2.0	5.0	3.80	0.622
JC5	125	3.0	5.0	3.90	0.615
Valid N (listwise)	125			3.78	

4.2 Cronbach’s Alpha

Job characteristic of health care worker in public hospitals in NamDinh province has been measured by the Cronbach's Alpha. Results of testing Cronbach’s alpha of attributes are presented in Table 4 below. The results also show that attributes of the dependent variables have Cronbach's Alpha coefficients that are greater than 0.6, and the correlation coefficients of all attributes are greater than 0.3. So, all the attributes of the dependent variables are statistically significant (Hair *et al.*, 2010; Hoang & Chu, 2008) ^[12, 13].

Table 4: Results of Cronbach’s Alpha Testing of Attributes

	Cronbach's Alpha		N of Items	
	.734		5	
	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
JC1	15.28	3.413	0.458	0.702
JC2	15.15	3.082	0.565	0.661
JC3	15.10	2.975	0.518	0.680
JC4	15.11	3.084	0.552	0.666
JC5	15.01	3.411	0.391	0.726

4.3 Independent T-test

Comparison of the results of the evaluation of job characteristic of health care worker in public hospitals in NamDinh province between participants have different genders (male and female) can be seen in Table 5. According to the results shown in Table 5, Sig Levene's Test is 0.489, which is more than 0.05. The variance between male and female is not different. Moreover, Sig value T-Test = 0.799 > 0.05, which means that there is not, statistically, significant difference in the level of job characteristic of health care worker in public hospitals in NamDinh province from these different genders (Hair *et al.*, 2010; Hoang & Chu, 2008) ^[12, 13].

Table 5: Differences of job characteristic of health care worker in public hospitals in NamDinh province between participants have different genders - Independent Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
								Lower	Upper	
JC	Equal variances assumed	0.481	0.489	-0.255	123	0.799	-0.02014	0.07904	-0.17659	0.13632
	Equal variances not assumed			-0.256	122,127	0.798	-0.02014	0.07869	-0.17591	0.13564

4.4 ANOVA

ANOVA test was needed to make a comparison of the results of the evaluation of job characteristic of health care worker in public hospitals in NamDinh province between the three subjects, including participants were from 27 to 35 years old, participants were less than 27 years old and participants were over 35 years old. Table 6 shows that Sig Levene Statistic of 0.351 is more than 0.05, which means that the hypothesis of homogeneity variance among the variable value groups (different age) has not been violated. Table 7 shows that, Sig. = 0.359 is more than 0.05, which indicates that there is no, statistically, significant difference in the level of job characteristic of health care worker in public hospitals in NamDinh province between the mentioned three groups of age (Hair *et al*, 2010; Hoang & Chu, 2008).^[12, 13]

Table 6: Test of Homogeneity of Variances

JC			
Levene Statistic	df1	df2	Sig.
1.058	2	102.068	0.351

Table 7: ANOVA

JC					
	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	0.398	2	0.199	1.033	0.359
Within Groups	23.504	122	0.193		
Total	23.902	124			

5. Discussion and Implications

All five of those job features help employees obtain a strong desire to improve themselves, have more intrinsic job satisfaction, feel happier, and become more motivated while performing tasks and duties, as well as be less likely to intend to quit (Oldham, 1996)^[20].

In public hospitals, doctors with different professional qualifications will have different tasks. Interdepartmental feedback is always updated frequently so that doctors are kept closely informed about the patients to make suitable arrangements and transfers of patients among departments. If the workload is rotated reasonably, it will help doctors enjoy their jobs more, thereby motivating them to work more effectively. However, as each department has its own nature, it'll be difficult when manpower support is required, for example, Casualty Department may need Outpatient Department's staff to support but they may be unaware of Casualty Department's procedures, and so do the staff of the other departments.

The job of a doctor is often synonymous with a high sense of responsibility and great pressure at work. This also affects motivation and engagement with work. The survey result of the job characteristics from 125 medical workers has formed a clearer view of their perception of their job

characteristics. The majority of health workers appreciate their jobs.

Based on the model of Hackman & Oldham (1976)^[9], the work autonomy of medical workers is relatively high. For example, medical workers can have significant management over patients' medical examination and treatment process. The significance of their work is highly appreciated by the medical staff who are directly involved in the examination and treatment, affecting the patient's promotion of health. Alternatively, other characteristics of work such as skill variety are underachieved as doctor's main duty is to examine and treat patients, while that of others (pharmacists, midwives, nurses, medical technicians, community health) is to support doctors to take care of patient's health.

Basically, the higher score the job characteristics have, the better the jobs are, so are the motivation and work performance, and job satisfaction of employees. Therefore, public hospitals should consider the effects of these job characteristics when designing and improving jobs.

Hospital staff is less likely to leave their work if their work is challenging, stimulating, and enjoyable. This result is consistent with previous research by Abbot (2000)^[11], Karsh *et al.* (2005)^[15]. This could be attributed to the fact that the more challenging and diverse the job is, the more satisfaction and enthusiasm the workers have with their job and the organization. Consequently, by combining the previously mentioned characteristics in medical examination and treatment; hospital managers can diversify the duties of medical staff, which in turn can lead to stronger job commitment.

Public hospitals need to pay attention to solutions and suitable job development policies to motivate medical staff in the future and create an enthusiastic work environment. In addition, the managers of public hospitals in Nam Dinh need to have visions to design suitable tasks, consistently empower medical employees to show their creativity, and contribute more to their specialty by, for example, undertaking practical projects. Furthermore, public hospitals also need to create conditions for medical staff to develop their expertise and working skills through knowledge-sharing activities initiated and held within the department.

The work of medical staff can be designed more creatively by adding tasks that require skill variety along with their main missions. A way to do this is to create a harmonious balance between examining, administering treatments, researching, and conducting other activities with patients and team members.

By providing timely and accurate responses to how well the medical staff is doing their work, hospital managers can show that they are supporting and caring for their medical staff. This can embody an even stronger commitment among medical staff.

According to an investigation, most hospital staff have a quite good understanding of the rights and responsibilities of a medical officer as well as of a good doctor and get a firm grasp of the rules and guidelines according to the standard professional ethics and laws. Most medical staff must have scientific, medical, and pathological knowledge to apply them to procedures of medical care. Hospitals need to further improve this strong suit in the entire medical staff in general and the Medical Team, in particular, to elevate the health care quality of the hospital, so that patients and their families are more satisfied.

Most hospital doctors possess computer competencies, time-and-task management skills, and teamwork skills relatively well. This is a positive point that doctors need to sharpen and improve at the moment and in the future. Doctors at management levels in departments have decent leadership skills. This helps managers organize their work efficiently.

Most doctors have passion, love, and pride in their work, and their relationship and communication with colleagues, patients, and patients' family members are relatively decent, making their work go more smoothly.

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