EXPLORING THE RELATIONSHIP BETWEEN JOB SATISFACTION AND NURSE PERFORMANCES

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Abstract

Background *– Job satisfaction aspect was the important nurses paid attention because has impacted to behavior in giving health services. Society claimed the services with the concept of 'quality one step services', it is requirement of service in health care as a whole.*

Purposes *– The aims of study is to scrutinize association between job satisfaction (based on the Maslow theory) and nurse performance, and to explore how nurse performance is affected by a number of socio-demographic and within different rural hospital and public hospital.*

Methods *– This correlational study addressed among clinical nurse associates (CNAs) in Surakarta Central Java. The respondents of the study were hospital nurses in remote areas of Surakarta. The data was collected using self-administered questionnaires.*

Findings *– A total of 190 nurses participated on this study. The result of the study shows 60.5 per cent of clinical nurse performances were high level. Regarding the nurse satisfaction, 65.6 per cent said they satisfied with their safety need, both self esteem and self actualization need has the same percentages, while other needs still lower. Self actualization was the predictor independent of nurse performance.*

Keywords *– quality of health care, job satisfaction, nurse performance.*

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INTRODUCTION

The health care industry currently faces considerable strategic challenges and strong pressure to become more responsive to customers' demands by simultaneously improving quality and efficiency (Chow, Ganulin, & Williamson, 1998). Nurses comprise the largest human resource ingredient in healthcare organizations, and hence have a great impact on quality of care and patient outcomes. Organizational culture in health care organizations has gained increased consideration as an important factor that influences the quality of health care (Scott et al, 2003). Job performance has regularly been examined in radiance of work outlooks for instance job satisfaction. In Indonesia, interest has been raising on issues related to performance in health associations, as an expression of the increasing interest in quality improvement. Job satisfaction aspect was the important issue on remunerated interest because it has influenced to nurse behavior in health services. People claimed the services with the concept of *quality one step services*. It is a constraint in the health care delivery. This study examines job performance of the Clinical Nurse Associates (CNAs) in Surakarta, Province Central Java, focusing on the impact of job satisfaction. Although we knew that the specific effects of job satisfaction on performing outcomes have not been explicated.

THEORETICAL FRAMEWORK

Job performance
An additional managerial controlling responsibility is determining how well employees carry out the duties of their assigned jobs. This is done through performance appraisals. In performance appraisals, actual performance, not intent, is evaluated. Performance appraisals let employees know the level of their job performance as well as any expectations the organization may have of them. A performance appraisal waste time if it is merely an excuse to satisfy regulations and the goal is not employee growth. If the employee views the appraisal as valuable and valid, it can have many positive effects. Information obtained during the performance appraisal can be used to develop the employee's potential, to assist the employee in overcoming difficulties he or she has in fulfilling the job's role, to point out strengths of which the employee may not be aware, and to aid the employee in setting goals (Fandray, 2001). Nurse performance is vital to quality patient care outcomes and nursing leadership behaviours have been linked to nurse performance. Acknowledgment of job performance is central to staff nurse morale.

Job satisfaction and Job performance
Several organizational theories are based on the notion that organizations that are able to create a positive environment and make their employees happy will have more productive employees. Over the years, scholars examined this idea that a happy worker is a productive worker; however, evidence is not yet conclusive on this regard (Al Ahmadi, 2007). Empirical studies have produced several conflicting viewpoints on the relationship between job satisfaction and performance. Empirical evidence from research on nurses found job satisfaction to be linked to several aspects of job performance, including: patient satisfaction (El-Jardali et al, 2006), overall job performance (Nabirye, 2007; Judge et al., 2001; Packard & Motowidlo, 2000; Randall & Scott, 1998), turnover; productivity (Butler & Parsons, 1989; Robinson et al., 1991), organizational commitment, leadership (Al-Hussami, 2008). Again, the specific effects of job satisfaction on performance outcomes have not been explicated (Ruggiero, 2006).

In Jordan, Al-Badayneh and Sonnad (1993) studied job satisfaction of a sample of (303) registered nurses in five government and five private hospitals. The study identified a strong relationship between nurses overall effectiveness and overall satisfaction, as well as a moderate relationship between nurses' job satisfaction and performance. Packard and Motowidlo (1997) studied the relationship of subjective stress, job satisfaction, and job

performance among hospital nurses, through self reports that were obtained from 366 nurses, and performance ratings from 165 supervisors and 139 co-workers nominated by the original respondents. The findings were that stress, primarily acting through depression, is associated with lower levels of job performance, and that job satisfaction is unrelated to job performance. Again, Packard and Motowidlo (2000) also studied job performance which found that there is have positive relationship between subjective stress, job satisfaction and job performance. Then, in a meta-analysis of the literature, Judge et al. (2001) found a positive correlation between job satisfaction and job performance of nurses. In Uganda, Nabirye (2007) studied job performance of a sample of (333) hospital nurses in public and private not-for-profit. The study identified a negative relationship between occupational stress and job performance, and between occupational stress and job performance. Further, job satisfaction was significant predictor of job performance. Job satisfaction was shown to mediate the relationship between occupational stress and job performance.

Researchers have examined the relationship between performance and various aspects of job satisfaction. Some researchers supported the notion that performance causes satisfaction, and found a low but consistent relationship existed between performance and job satisfaction. Their argument is that performance leads to extrinsic and intrinsic rewards, which eventually lead to satisfaction. Extrinsic rewards (pay, promotion), and intrinsic rewards (recognition and self-actualization) lead to satisfaction. Some researchers found no relationship between job performance and job satisfaction. The controversy regarding the satisfaction-performance relationship is not fully resolved, as each approach has been supported by a number of empirical studies.

METHODS

The study employed a cross-sectional design to explore relationship between job satisfaction (Maslow basic needs theory based) and nurse performance. A cross-sectional design is appropriate for describing the status of phenomena or for describing relationships among phenomena. Cross-sectional data can most appropriately be used to infer time sequence under circumstance when a strong theoretical framework guides the analysis. The investigators were not concerned with manipulation of treatments or subjects.

Setting, Population and Sample
The study population was enlisted from two hospital representing a public and rural hospital in District of Surakarta. They were employing a total of 653 nurses of whom 415 worked at least 2 years in clinical wards. The chosen facility was located in the south eastern part of the Distric of Surakarta. Inclusion criteria for participation consisted of: nurses with minimum of worked experience 2 year or more and they are willingness to participate. The investigators administered over 209 questionnaires, and 190 questionnaires were completed. Therefore, the final sample for the study consisted of 190 participants.

Data Source
Data used for this analysis were collected from two hospitals – public and rural hospital. A questionnaire was administered in May 2007 from CNAs working at the hospital in District of Surakarta, Province Central Java. Appropriate ethics approval was received. There were 415 nurses employed at the hospital, and we received 190 completed responses, a response rate of 45.8%.

Two instruments were used for data collection: job satisfaction scale based on the Maslow's theory of human needs and self-reported performances six-scale. A socio-demographic profile sheet was also attached to the questionnaire to describe personal characteristics of the samples population. Internal consistency reliability was used of Cronbach's alpha with coefficients 0.67 to 0.74. An investigator-developed tool was designed to measure nurse performance,

which consisted of questions related to relation with their patients and colleagues, professional skills, opportunity to achieve, self-attitude for hospital and self-presenting. The six-item questionnaire was developed using guidelines from the Job Performance Theory (Marquis & Huston, 1998).

The job satisfaction scale was developed by the Minnesota Satisfaction Questionnaire modification derived from the Maslow's theory of human needs (Weiss, 1967 cit As'ad, 1990). There are four scales that comprise the survey: biological human need, safety human need, social human need, self-esteem and self-actualization human need. Fourteen question were developed to measure the perceptions of hospital members (nurses) on their satisfaction. Items for the job satisfaction indicators were measured by a 4-point Likert scale, ranging from 1 (strongly not satisfaction) to 4 (strongly satisfaction). Internal consistency reliability was used of Cronbach's alpha with coefficients 0.73 to 0.84.

Data Analysis
The data were analyzed by using descriptive statistics, including means, standard deviations, frequency, and percentages at 0.05 level of significance. All analyses were conducted using SPSS version 15.0 (Santoso, 2006). Descriptive statistics were employed to analyze research question 1, "What is the nurse performance level in both public and rural hospital?. Descriptive statistics and a Spearman rank of correlation were employed to analyze research question 2, "What are the job satisfaction of nurses that influence their job performance? Descriptive statistics were employed to analyze the data related to the five scales. As previously mentioned, the five scales were biological human need, safety human need, social human need, self-esteem and self-actualization human need. The maximum score for each scale was 32 and the minimum score was 8. For this study, those scoring 20 or less on each scale were considered as lower to moderate job satisfaction. To answered the research question 3, "Is there a significant relationship between facet of job satisfaction and nurse performance? A logistic regression analysis was employed. All of the study variables were placed in a logistic regression equation. Investigators performed a backward logistic regression (LR) analysis, which the first variable considered for backward entry into the equation is the one with the largest positive or negative correlation with the dependent variable.

RESULTS

A total of 190 questionnaires (45.8 percent) were returned. Demographic and work-related characteristics of nurses are reported in Table 1. The majority of the samples were women (85 percent), most of the respondents (70 percent) were less than 35 year old, and few (30 percent) were 35 year old and over. Most of the respondent (75 percent) was the Diploma Nursing level in their education background, while 10 per cent are nurse aide level (high school equivalent), and 15 per cent are a bachelor's nursing level. The majority of subjects (60 percent) had two to ten years' experience, while (40 percent) had more than ten years' experience.

Table 1 Statistical description of total sample by gender, age, and professional characters (N=190)

Group	N	%
Gender		
Male	28	15
Female	162	85
Age		
≤ 35 y.o	133	70
> 35 y.o	57	30
Education level		
Nurse aide (SPK)	19	10
Nursing college	142	75
Bachelor	29	15
Years' of experiences		
Two to ten year	114	60
More than ten year	76	40

Again, the percentages of the overall job performance and job satisfaction were reported in Table 2. Most of the job performances were relatively high (60.5 percent). Respondents in both public and rural hospital almost in the same proportion are 63.2 and 60.0 percent. Whereas, study reported that 62.6 percent respondent satisfied with the overall facet satisfaction.

Table 2 Statistical description of total sample by gender, age, and professional characters (N=190)

Group	N	%
Overall performance		
High	115	60.5
Low	74	39.5
Overall performance at Public hospital		
High	120	63.2
Low	70	36.8
Overall performance at Rural hospital		
High	114	60.0
Low	76	40.0
Overall satisfaction		
High	119	62.6
Low	71	37.4

Table 3 shows descriptive statistics of self-reported performance using single and total measures. Average scores were gained for each item as well as an overall measure was obtained by calculating the total average for all items. Overall performance is rated at (3.23), which relate to good or average performance on the four-point scale used in this study. Self-reported performance was valued above average for most items, highest scores was reported for self-presenting (3.53) and opportunity to achieve (3.49), while lowest score were reported for self-attitude to hospital (2.99) and professional skills (3.04), however, relation with patients (3.16) and relation to their colleagues (3.19) were the weakest points of performance. Job satisfaction scores are also presented in Table 3 to provide an overall picture of this independent variable. The data show that moderate levels of job satisfaction exist among nurses in this study. Highest satisfaction was reported with self-actualization need at average mean 3.62, and lowest satisfaction was reported with biological need at average mean 2.55.

Table 3 Work attitudes and job performance descriptive statistics (N=190)

Variables	Mean	SD
Overall nurse performance		
Performance items		
Relation with patients	3.16	0.91
Relation with colleagues	3.19	0.87
Professional skills	3.04	0.66
Opportunity to achieve	3.49	1.02
Self-attitude to hospital	2.99	1.36
Self-presenting	3.53	0.78
Overall job satisfaction		
Facet satisfaction		
Biological need	2.55	1.31
Safety need	3.28	0.89
Social need	2.63	1.03
Self-esteem need	3.49	0.76
Self-actualization need	3.62	1.12

Table 4 Results of t-test for comparison of means of performance according to selected personal factors (N=190)

Variables	Mean	Performance SD	t
Gender			
Male	2.98	0.63	2.36*
Female	3.69	0.71	
Age			
$\leq$ 35 y.o	3.10	0.72	1.61
> 35 y.o	3.19	0.80	
Education level			
Nurse aide (SPK)	3.02	0.66	1.48
Nursing college	3.34	0.75	
Bachelor	3.12	0.56	
Years' of experiences			
Two to ten year	2.66	0.79	2.41*
More than ten year	3.61	0.85	
Type of hospital			
Public	3.13	0.99	1.53
Rural	3.00	0.87	

Note: * Correlation is significant at the 0.01 level (two-tailed)

To obtain an overall depiction of self-reported performance according to socio-demographic characteristics of nurses, *t-test* was conducted as shown in Table 4. Self-reported performance was significantly higher among female than male nurses, nurse with more than ten year of experience compared to less than ten year of experience, however, was not significantly difference between nurse with age 35 year or over compared to age less than 35, nurse from diploma college compared to nurse aide and bachelor, and between public and rural hospital.

Chi-square test and Contingency coefficient technique was used to conclude the correlation of each of the socio-demographics variables (gender, ages, educational level, years of experience, and type of hospital) with overall job performance at 0.05 level of significant due to the socio-demographics characteristic were a categorical variables. The results of this analysis shows was not a significantly relationship between gender, ages, educational level, years of experience, type of hospital and overall performance (Table 5).

Table 5 Correlations between socio-demographics and overall performance (N=190)

Variables	1	2	3	4	5	6
1. Gender	1	0.17	0.22	0.19	0.09	0.05
2. Age		1	0.38	0.27	0.37	0.23
3. Educational level			1	0.07	0.16	0.21
4. Year of experience				1	0.28	0.41
5. Type of hospital					1	0.29
6. Nurse performance						1

*Note: *Correlation is significant at 0.05 level **Correlation is significant at 0.01 level (two-tailed)*

Spearman Rank of Correlation analysis was used to determine the correlation of each of the independent variables (biological need, safety need, social need, self-esteem need, and self-actualization need) with overall job performance at 0.05 level of significant because of its was a ordinal variables. The results of this analysis shows a significant positive relation between social need, self-esteem need, self-actualization need and overall performance with values as follows $r = .67$; $r = .71$; $r = .74$, respectively, however, was not significantly relation between biological need ($r = .49$), safety need ($r = .62$) and overall performance (Table 6).

Table 6 Correlations between facet job satisfaction and overall performance (N=190)

No	1	2	3	4	5	6
1. Biological needs	1	0.27	0.36	0.49	0.55	0.49
2. Safety needs		1	0.45	0.57	0.34	0.62
3. Social needs			1	0.46	0.53	0.67
4. Self-esteem needs				1	0.63	0.71
5. Self-actualization needs					1	0.74
6. Nurse performance						1

*Note: *Correlation is significant at 0.05 level **Correlation is significant at 0.01 level (two-tailed)*

Table 6 summarizes the results of the regression analysis. Regression analysis procedure designed to get a better understanding of the strength of relationship between facet job satisfactions and overall performance. The regression coefficients (ß) indicate a change in satisfaction, measured on a four-point scale, associated with a one-unit change in the independent variable. In the Backward Logistic Regression (LR) selection, the first variable considered for forward entry into the equation is the one with the largest positive or negative correlation with the dependent variables. For this question the order that investigators entered the independent variables were: biological, safety, social, self-esteem, and self-actualization need. The dependent variable was nurse performance.

Results of the regression analysis indicate that several variables contribute to overall self-reported performance. Other factors examined were not shown to be predictors of job performance, including biological need, safety need, social need, self-esteem need. The model explained 16 percent of the variance in self-rated performance as measured by

formulate $p = \dfrac{(1)}{(1 + 2.7^{-(-1.39)})}$. Only one variable were significant at the alpha level 0.05 which self-actualization need that was completed (Table 6). This variable served as a predictor of overall performance at the hospitals.

Table 6 Logistic regression of biological, safety, social, self-esteem, and self-actualization needs for sample population (N=190)

No Variables	B	S.E.	Wald	Sig.	Exp(B)
1. Biological needs	1.19	.45	1.10	.67	.08
2. Safety needs	1.16	.40	1.05	.39	.11
3. Social needs	1.20	.35	2.18	.18	.73
4. Self-esteem needs	1.32	.51	3.09	.09	1.18
5. Self-actualization needs	1.40	.48	7.08	.01	3.88
Constant	-2.79	.67	45.09	.00	.09

a. Variable(s) entered on step 1: biological, safety, social, self-esteem, and self-actualization need.

DISCUSSION

This study challenged to illuminate an important topic for healthcare organizations, which is nursing performance. Managerial controlling responsibility is determining how well employees succeed the duties of their assigned jobs. This is done through performance appraisals. Performance appraisals allowed employees know the level of their job performance as well as any expectations the organization may have of them. The study scrutinizes self-reported performance levels among nurses working in locality of Surakarta, Province Central Java. Medium to high levels of job performance were identified, however, some aspects of performance are lacking, specifically, self-attitude to hospital and professional skills. The fact that these two aspects of performance received the lowest self-rating is an indication of lack of self-attitude to hospital, and professional skills in this study. It may also be a reflection of the limited opportunities available for improving nursing rewards and competencies.

Major findings of this study suggested that nurse performance in general had a moderate level of their job performance. On the facet satisfaction, biological needs, safety needs and social needs had a low level of their satisfaction. But, their satisfaction on the self-esteem and self-actualization need was at a high level. According to Maslows' concept, theoretically that biological needs, safety needs, a half of social needs were the lowest of satisfaction, whereas, self-esteem needs and self-actualization needs were the highest of satisfaction (Marquis & Huston, 1998). Biological need consist of need for salary, health insurance etc. Nurse who acquired to obtain a salary, it means that the nurses' need was the lowest motivation. Previous study proposed that nurse motivation have a positive significantly correlation with job performance (Supratman, 2002).

Consistent with prior research, Nabirye (2007) found that the overall performance were different between public and private hospital. This study was related with Nabirye work, however, in this study we compared between public and rural hospital. Previous research conducted that job satisfaction were significant predictor of the job performance. Her studied shows that job satisfaction was mediator for the relationship between occupational stress and job performance. Conceptually, indicated that job satisfaction did not directly correlate with job performance.

Again, Germain & Cummings (2008) suggested that nurse performances are vital to quality patient care outcomes. Again, nursing leadership behaviors have been linked to nurse performances. They also suggested that nurse performance may be improved by addressing nurse autonomy, relationships among nurses, their colleagues and leaders, and resource accessibility. One of the main objectives of this study was to identify determinants of nursing performance, focusing on the content of job satisfaction. Job satisfaction was found to be strong predictors of nurses' performance. Result show that some aspects of job satisfaction are more able to predict job performance than others, specifically facet satisfaction on self-actualization need. These results confirm findings by other researchers that job satisfaction have positive effect on job performance (Randall & Scott, 1998; Packard., & Motowidlo, 2000; Judge et al, 2001; and Nabirye, 2007). Some research previously indicated that employees who perceive their supervisors to be adopting consulting behaviour, and participating leadership style are more committed to their jobs and satisfied, and have higher levels of their performance.

Implications for healthcare and nursing management were nursing managers and leaders may enhance their nurses' performance by understanding and addressing the factors that affect their abilities and motivation to perform. Nursing performance improvement is not only a result of well functioning systems, but depends on effective human resources strategies that succeed in recruiting and maintaining a committed and motivated workforce. Health organizations need to focus on factors that contribute to job satisfaction and job performance of nurses as the largest group of professionals in direct contact with patients.

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