

Factors Affecting Job Satisfaction of Construction Workers in Can Tho City, Vietnam

Nguyen Hoang Phuong¹, Nguyen Quoc Nghi²

¹Vinatrans branches in Can Tho, ²Can Tho University, Vietnam

Corresponding Author: Nguyen Hoang Phuong

ABSTRACT

The study aims to identify factors affecting the job satisfaction of construction workers in Can Tho City, Vietnam. Research data were collected from 145 workers who have been working on construction projects in Can Tho City. The Exploratory Factor Analysis (EFA) and the multivariate linear regression were applied to achieve the results. The research results show that factors that positively affect job satisfaction of construction workers are working condition, Work environment, Nature of work, Compensation and benefits, and Leadership style. Finally, the study proposes several administrative implications to improve job satisfaction of construction workers in Can Tho City.

Keywords: level of satisfaction, job, construction worker.

1. INTRODUCTION

Human resource management is an essential part of the organizational development process. This comes from the business philosophy, which considers employees are the capital and core foundation in business; moreover, they contribute to the development of the organization. To ensure the growth goal can be achieved, the organization needs to provide employees with commitment and cooperation through policies that help increase their job satisfaction. The satisfaction of employees creates a dynamic working environment. Employees who have high job satisfaction then develop into job loyalty and commitment to higher productivity. Therefore, studying about job

satisfaction is concerned not only by managers but also by many researchers.

In recent years, the face of Can Tho City has changed thanks intensely to many urban upgrading projects was implemented. As a result, the housing market and real estate market become more and more active. In the first six months of 2017, the housing market in Can Tho City had a stellar growth, especially in Ninh Kieu District and Cai Rang District. In these six months, the two districts have the highest increase in project land prices (from 20 to 40%). This leads to a high demand for human resources for construction projects. Construction companies are required to have a source of high-quality and enthusiastic workers who can meet customer needs. Therefore, construction workers have not only high-intensity work but also risky job nature. So, how to retain an excellent workforce and attract potential resources when the requirements of the construction industry in Can Tho City are rising? To answer the question, the study of "factors affecting job satisfaction of construction workers in Can Tho City, Vietnam" was conducted. The study brings necessary management implications to improve the job satisfaction of workers as well as attract and retain high-quality human resources for the construction industry of the city.

2. RESEARCH METHODOLOGY

2.1 Literature review and research model

Job satisfaction is the extent to which workers are interested in their job. It is an attitude (positive or negative) based on workers' perceptions of their employment or

the working environment (Ellickson and Logsdon, 2002). Küskü (2003) claimed that workers' job satisfaction reflects the extent to which their needs and desires are satisfied, and they recognize other employees appreciate them. Job satisfaction is a reflection of the employee's level of job interest. It is also the feeling or emotion towards the job (Luddy, 2005).

According to Hill and Wiens-Tuers (2002), the first-concerned strategy to enhance job satisfaction and job loyalty are raising the wage level. Mulinge and Mullier (1998) also stated that the internal cause of job satisfaction is the salary and benefits of the job. Recognizing that the above elements are not enough to describe the motivations expressed in job satisfaction, the factor of training and developing skills for employees (Woodruffe, 2000) was applied through underlying principles of continuous learning. However, Champion-Hughes (2001) argued that previous studies included one aspect of human resource management only. A holistic approach must consist of fair wage and benefits, working conditions, and career development support.

According to Bhatt (2004), the essential factor affecting employee

satisfaction is job characteristics. The jobs whose job tasks are changing daily will make employees feel more comfortable and excited than the tasks that repeat every day. Research results by Peltier et al. (2009) emphasized that recognition, respect, and listening to opinions are factors that affect employees' job satisfaction. In a study in 2005, Luddy highlighted the factors affecting employee satisfaction are job position, supervisor support, job characteristics, compensation, promotion, working environment, and organizational structure. Research by Nguyen (2014) pointed out the factors that positively affect employee satisfaction are working environment, leadership style, job characteristics, compensation, promotion opportunities, and working conditions.

Based on the aforementioned theoretical framework, the study used the group discussion method (qualitative research) with nine experienced construction workers to identify the factors that affect the level of job satisfaction. Therefore, the study proposed six elements that impact the job satisfaction level of construction workers are the Working condition, Working environment, Compensation and benefits, Nature of work, Promotion opportunities, and Leadership style (Figure 1).

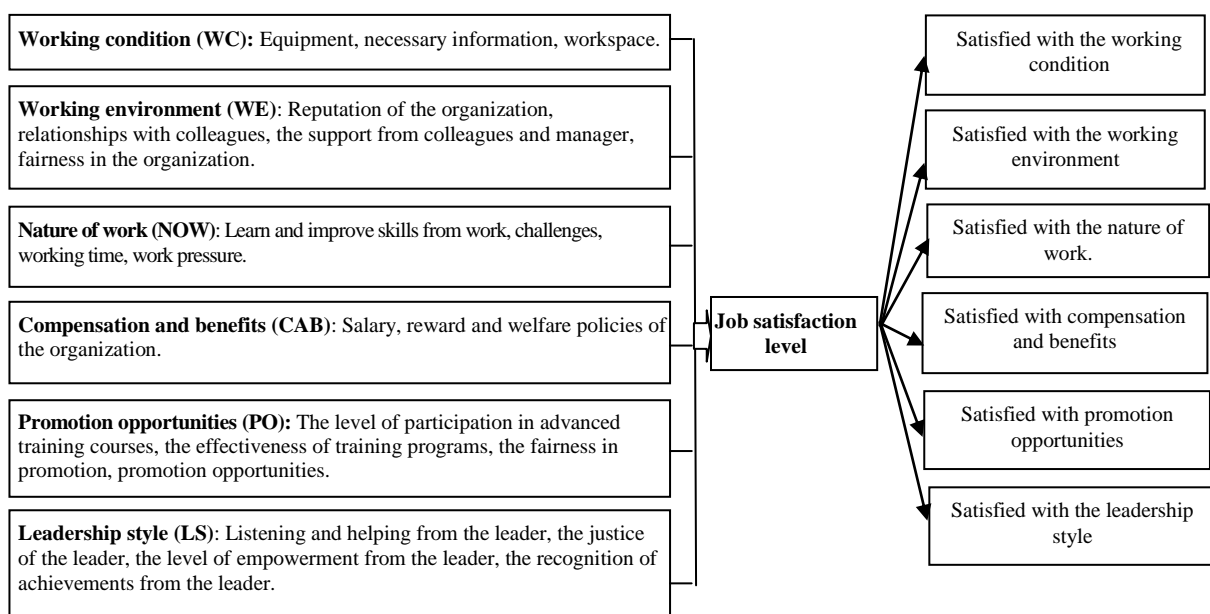


Figure 1: Proposed research model

The equation for determining factors affecting job satisfaction of construction workers is as follows:

$$JSL = f(WC, WE, NOW, CAB, PO, LS)$$

In which: JSL (job satisfaction level) is the dependent variable; WC, WE, NOW, CAB, PO, LS are independent variables. The scales used for evaluating observed variables are 5-level Likert scales, with 1 = totally disagree and 5 = totally agree.

2.2 Analytical method

The quantification process of factors affecting the job satisfaction level of construction workers is carried out in 3 steps. Step 1: Cronbach's Alpha coefficient is used to test the correlation of items in the scales. Step 2: Exploratory Factor Analysis (EFA) is applied to test the convergent validity and discriminant validity of the scales in the research model. Step 3: Multivariate linear regression is used to determine factors and the impact level of each element on job satisfaction of construction workers in Can Tho City.

2.3 Data collection method

The research uses the quota sampling method to survey 145 construction workers who are working on building projects in Can Tho City. Recently, many researchers stated that the bigger the sample size, the better. According to Hair et al. (2006), the ratio between the variable's observations and the measured variable should be 5:1 in EFA, meaning that each measured variable requires at least five

considerations. Specifically, there are 25 observed variables in the research model, so the minimum sample size needed for the study is $22 \times 5 = 110$. In fact, the study conducted 145 observations from October 2017 to November 2017. Thus, the collected data ensure the requirement of the sample size.

3. RESEARCH RESULTS AND DISCUSSIONS

Applying SPSS 22.0 software to test the research model of "factors affecting job satisfaction of construction workers in Can Tho City", the results are shown as follows:

Step 1: Assess the reliability of the scales

All the scales are assessed for safety by the Cronbach's Alpha coefficient. Cronbach's Alpha is used to eliminate variables with "garbage value", whereby variables that have "Corrected item-total Correlation" less than 0.3 will be removed (Nunnally, 1978; Peterson, 1994; Slater, 1995). The scale will be selected if its Cronbach's Alpha coefficient is more significant than 0.6 (Nunnally & Bernstein, 1994). The analysis results in Table 1 shows that all the scales (Working condition, Working environment, Compensation and benefits, Nature of work, Promotion opportunities, Leadership style, and Job satisfaction level) have high-reliability coefficients ($\alpha \geq 0.7$). Therefore, all variables can be used for Exploratory Factor Analysis (EFA).

Table 1: Results of Cronbach's Alpha analysis

Scale	Number of variables	Minimum Item-Total Correlation	Cronbach's Alpha
Working condition (WC)	3	0.417	0.723
Working environment (WE)	4	0.463	0.748
Nature of work (NOW)	4	0.514	0.785
Compensation and benefits (CAB)	3	0.544	0.794
Promotion opportunities (PO)	4	0.468	0.781
Leadership style (LS)	4	0.522	0.791

Source: Survey data, 2017

Step 2: Exploratory Factor Analysis

The EFA is used twice with guaranteed tests: (1) Reliability of variables (Factor loading > 0.5); (2) Research model's suitability test ($0.5 < KMO = 0.724 < 1.0$); (3) Bartlett's test for correlation of variables (Sig. = $0.00 < 0.05$); (4) Cumulative variance test = $64.25\% > 50\%$ (Gerbing & Anderson, 1988). The WE3 variable (with a factor loading < 0.5) was excluded from the research model because of not meeting the significance of the factor (Hair et al., 1998). Seven factors are formed with Eigenvalue = 1.114 and there is no variable disturbance among factors, so the names of factors remain the same.

Table 2: New factors formed from Exploratory Factor Analysis (EFA)

Sign	Observed variable	Factor
F ₁	3 variables: WC1, WC2, WC3	Working condition
F ₂	3 variables: WE1, WE2, WE4	Working environment
F ₃	4 variables: NOW1, NOW2, NOW3, NOW4	Nature of work
F ₄	3 variables: CAB1, CAB2, CAB3	Compensation and benefits
F ₅	4 variables: PO1, PO2, PO3, PO4	Promotion opportunities
F ₆	4 variables: LS1, LS2, LS3, LS4	Leadership style

Source: Survey data, 2017

Step 3: Linear regression analysis.

The result in table 3 indicates that the significance level (Sig.F = 0.00) of the model is much less than $\alpha = 5\%$, so the model is appropriate. The adjusted R^2 is 62.45%. This proves that independent variables explain the variation of job satisfaction at a high level. The Durbin-Watson test achieves a value of 2.048. This means the research model has no autocorrelation (Hoang and Chu, 2008). Besides, the Variance Inflation Factor (VIF) values of variables are less than 10, so the multicollinearity of the research model is negligible (Mai, 2008).

Table 3: Multivariate linear regression analysis result

Variable	Estimated coefficient	Significance level	VIF
Constant	2.257	0.000	-
F ₁ : Working condition	0.156	0.024	1.846
F ₂ : Working environment	0.122	0.038	1.851
F ₃ : Nature of work	0.108	0.000	1.842
F ₄ : Compensation and benefits	0.154	0.005	1.348
F ₅ : Promotion opportunities	0.047	0.241	1.188
F ₆ : Leadership style	0.034	0.045	1.315
Sig.F = 0.00; Adjusted $R^2 = 62.45$; Durbin – Watson coefficient = 2.048			

Source: Survey data, 2017

Based on the above results, factors including (F₁) Working condition, (F₂) Working environment, (F₃) Nature of work, (F₄) Compensation, and benefits, and (F₆) Leadership style are statistically significant and they are positively correlated with the job satisfaction of construction workers. In other words, if a construction worker has a pleasant working environment, a suitable work nature, a satisfactory salary and benefits, and a high-appreciated leader, his level of job satisfaction will be higher than others. The survey results also confirm that construction workers pay attention to occupational safety and health. Besides, they concern about the income because it is used to cover their family's standard of living. Therefore, the two most important factors that affect the job satisfaction level of construction workers are Working condition and Compensation and benefits.

4. CONCLUSION AND ADMINISTRATIVE IMPLICATIONS

In general, the research goals were achieved, which is to identify factors affecting the job satisfaction level of

construction workers. In particular, five factors that positively impact job satisfaction of construction workers are Working condition, Working environment, Nature of work, Compensation and benefits, and Leader style. In which, the two factors having the most substantial impact on the satisfaction level of construction workers are Working condition and Compensation and benefits. Therefore, the study proposes several administrative implications to improve job satisfaction of construction workers as follows:

Firstly, improve working health. Administrators need to pay attention to the equipment and tools that can support construction workers to complete tasks. This is a necessary condition for workers to complete the work under quality and time standards. Also, providing adequate job-related information and creating a comfortable working space will help workers feel confident and pleasant to finish assigned tasks. This is the key to increase job satisfaction and motivate construction workers effectively.

Secondly, ensure compensation and benefits. This is the factor that every employee concerns the most. It promotes its capacity and motivates them to devote to the organization. Consequently, administrators should ensure the appropriate salary according to the ability of each worker, and the reward is satisfactory with the achievements of each individual. Furthermore, the welfare policy must be consistent with the dedication of each worker. In addition to this, creating opportunities to diversify sources of income or promoting the enthusiastic spirit among workers are should be taken into consideration.

Thirdly, enhance the working environment. Administrators need to offer and create a friendly, comfortable, and fair working environment in the organization. The support and encouragement from colleagues and leaders are significant, this helps promote the working spirit of each worker. Besides, the appreciation and compliments from the manager about the performance of each worker are essential. The leader should listen to all comments and has reasonable feedback for the staff.

REFERENCES

1. Anderson, J. C., & Gerbing, D. W. (1988). Structural equation modeling in practice: A review and recommended two-step approach. *Psychological Bulletin*, 103(3), 411-423.
2. Champion-Hughes, R. (2001). Totally integrated employee benefits. *Public personnel management*, 30(3), 287-302.
3. Ellickson, M. C., & Logsdon, K. (2002). Determinants of job satisfaction of municipal government employees. *Public Personnel Management*, 31(3), 343-358.
4. Peltier, J., Dahl, A., & Mulhern, F. (2009). The relationship between employee satisfaction and hospital patient experiences. In *Forum: For People Performance Management and Measurement*.
5. Küskü, F. (2003). Employee satisfaction in higher education: the case of academic and administrative staff in Turkey. *Career Development International*, 8(7), 347-356.
6. Hoang, T., & Chu, N. M. N. (2008). Analyze research data with SPSS. Hanoi: Hong Duc Publishing House.
7. Luddy, N. (2005). Job satisfaction amongst employees at a public health institution in the Western Cape (Doctoral dissertation, University of the Western Cape).
8. Mai V. N. (2008). *Econometrics textbook*. Hanoi: Culture and Information Publishing House.
9. Mulinge, M., & Mueller, C. W. (1998). Employee job satisfaction in developing countries: The case of Kenya. *World Development*, 26(12), 2181-2199.
10. Nunnally, J. C. (1978). *Psychometric Theory: 2d Ed.* McGraw-Hill.
11. Nunnally, J. C., & Bernstein, I. H. (1994). *Psychometric theory (3rd ed.)*. New York: McGraw-Hill.
12. Parasuraman, A., Zeithaml, V. A., & Berry, L. L. (1985). A conceptual model of service quality and its implications for future research. *Journal of marketing*, 49(4), 41-50.
13. Peterson, R. (1994). A Meta-Analysis of Cronbach's Coefficient Alpha. *Journal of Consumer Research*, 21(2), 381-391.
14. Nguyen Q. N. (2014). Factors affecting job satisfaction of banking staff in Can Tho City. *Journal of Banking Science and Training*, 147, 61-67.
15. Bhatt, R. J. (2004). A Case Study of Job Satisfaction among Bank Employees of Leading Nationalised Banks of Gujarat State. Retrieved March, 13, 2014.
16. Slater, S. F. (1995). Issues in conducting marketing strategy research. *Journal of strategic Marketing*, 3(4), 257-270.
17. Wiens-Tuers, B. A., & Hill, E. T. (2002). Do they bother? Employer training of temporary workers. *Review of Social Economy*, 60(4), 543-566.
18. Woodruffe, C. (2000). *Development and assessment centres: identifying and assessing competence*. CIPD Publishing.

How to cite this article: Phuong NH, Nghi NQ. Factors affecting job satisfaction of construction workers in Can Tho city, Vietnam. *International Journal of Research and Review*. 2020; 7(6): 29-33.
