



The Factors Affecting Work Motivation of Employees in the Organizations: Research Case Study of the Enterprises in the Industrial Parks in Vietnam

Doan Viet Dung, PhD.

National Economics University, Vietnam

Dao Quyet Thang, PhD.

Quy Nhon University, Vietnam

Abstract

Nowadays, the economy has been developing, therefore the enterprises are facing several economic challengers. High quality employees who are loyal to the enterprises would create great advantages in the competition of the enterprises in the industrial parks. Finding out the factors affecting the work motivation of employees in the industrial parks would help the enterprises working out solutions about stimulating work motivation. This study was used the results of a survey of 225 employees working in the industrial parks in Vietnam in combination with EFA method and regression of OLS to find out the factors affecting work motivation of employees. It is shown that there are five factors that were found positively impacting on work motivate, and in which the nature of work is the strongest influence while material is the weakest factor affecting work motivation.

Keyword: Work motivation, Employees, Enterprises, The industrial parks, Vietnam

1. Introduction

Work motivation plays an important role in increasing labor productivity when other inputs do not change. Besides, the research by Buelens & Van (2007) in Belgium and Nawab et al. (2011) in Pakistan demonstrates the difference in work motivation among the public and private sector. This shows that not all the management theories that has been applied successfully in public sector may work well in private sector. In addition, the scholars such as Nevis, 1983; Hofstede, 1984; Trompenaars, 1993 (-quoted in Gambrel & Cianci, 2003) conclude that theories about work motivation come from Europe or America, which are individualistic culture, and need to be appropriately adjusted before they can be applied to countries with collective culture such as China, Hongkong, Taiwan and Vietnam. Therefore, the formation of a study in which the basic characteristics of the private sector and the indigenous cultural element are carefully considered is absolutely necessary.

This study aims to research the factors affecting work motivation of employees working in the enterprises in Vietnamese industrial parks through the exploratory factor analysis (EFA) and ordinary least squares regression (OLS). Thereby, the authors point out the important factors

that impact on work motivation of employees, and suggest policies to improve the work motivation of workers in industrial parks in Vietnam.

2. Literature Review

There are different theories of scholars about work motivation. The majority of researches about work motivation approach in two ways which are content theories and process theories. Content theories shows how to approach the needs in management, including: Maslow hierarchy of needs theory (1943), Two factor theory of motivation by Herzberg (1959) which are hygiene factors and motivation factors, McClelland's Motivation theory (quoted in Denibutun, 2012) (Power, Achievement and Affiliation). Process theories focus the how motivation occurs, including: Expectancy theory by Vroom (1964), Equity theory by Adams (1963), Reinforcement theory by Skinner (1938).

Based on the above theories, some studies research deeply the factors affecting the work motivation. Kovach (1987) shows ten factors affecting work motivation, in which job satisfaction plays an important role in group of high income labor, and for the low income labor, they concern salary as the important factor. Hackman and Oldham (1976) argue that job characteristics are the most important factor affecting work motivation. Salary is one of parts of work motivation (Tullock, 1965; Brehm and Gates, 1997). Work motivation is also impacted by the diversity and interesting of the work (Romzek, 1990). Besides, flexible working time and work promotion are two factors affecting work motivation (Daley, 1986; Emmert and Taher, 1992). Janet Cheng Lian Chew (2004) shows that work motivation depends on leadership behavior, relationships in the workplace, culture and organizations' structure and work environment. Buelens & Van (2007) study provides that gender, age, management hierarchy make differences in work motivation among employees.

3. Research Methodology

3.1. Research Site

Vietnam is a developing country that leads the development of setting up industrial parks and enterprises in these industrial parks gradually take advantages in the market. However, style of working of employees in Vietnam is not effective, and work motivation in the firms has not been improved. This study conducts to assess the factors affecting work motivation of employees working in the enterprise in the Vietnam's industrial parks.

3.2. Data Collection

Quantitative data are collected by a two-page survey to examine the factors affecting work motivation of employees working in the enterprise in the industrial parks. Feedbacks are measured by a five-step likerts scale from 1 (completely disagree) to 5 (strongly agree). Data were obtained by surveying 225 employees aged 18 to 50 with 52% of female. The response rate of the survey gets 90%.

3.3. Processing Techniques

In order to find out the factors affecting work motivation of employees working in the enterprise in the industrial parks, this study used the exploratory factor analysis (EFA) for five independent variables with 25 items and one dependent variable with 7 items.

+ Work motivation (WM ~~DL~~): is defined as an effort to get goals (Bedeian, 1993), is also a push from inside individuals to meet unsatisfactory needs (Highins, 1994). This dependent variable includes 7 items built based on the research by Lind (1994 - quoted in Bjorklund, 2001)

+ Social needs factor (SON ~~XH~~): Truong (2011), Pham (2009), Song et al. (2007) believe that an employee who wishes to have a closer relationship with their colleagues would make them more motivated to voluntarily support their colleagues at work. This factor includes 6 items based on studies of Halepota (2005), Smith (2003), Re'em (2010), Dinibutun (2012)

+ Physiological needs (PN ~~SH~~): In the enterprises, physiological needs of an individual refer to salary, pension, and material facilities. Song et al. (2007), Truong (2011) show that the desire for a high salary would motivate the employees to work harder and more effectively which aims to satisfy the individual material goals. This factor has 4 items which are found out from the studies of Halepota (2005), Dinibutun (2012), Truong (2011)

+ Safety needs (SAN ~~AT~~): In the public organizations, safety needs of employees include individual safety and institutional safety (Smith, 2003). The research of Song et al. (2007) and Truong (2011) is noted that safety needs are factors which positively affect work motivation. There are 5 items of this factors researched by Smith (2003), Halepota (2005), Truong (2011), Dinibutun (2012).

+ Esteem needs (EN ~~TF~~): Song et al. (2007), Pham (2009), Truong (2011) also agree that in order to get the higher hierarchical levels in the organization, the employees would strive to show positive behaviors to achieve the goals and recognition of their colleagues and leaders. This factor has 4 items (Halepota, 2005; Truong, 2011; Dinibutun, 2012).

+ Self-actualization (SA ~~TH~~): Song et al. (2007), Pham (2009), Truong (2011) all believe that the desire to experience challenging jobs will positively impact employees' work motivation, make them more diligent, and try to solve difficult tasks. This element consists of 6 items built from the studies of Smith (2003), Halepota (2005), Truong (2011), Dinibutun (2012).

After finding out factors from EFA analysis, the authors continue to use the regression (OLS) to assess the impact of factors on work motivation.

Results and Discussions

3.4. The exploratory factor analysis

Table 1: Quality test scale

Factors	Item	Cronbach's Alpha
Social needs factor	SON1, SON2, SON3, SON4, SON5, SON6	0.880
Physiological needs	PN1 PN2 PN3 PN4	0.665
Safety needs	SAN1 SAN2 SAN3 SAN4 SAN5	0.855
Esteem needs	EN1 EN2 EN3 EN4	0.676
Self-actualization	SA1 SA2 SA3 SA4 SA5 SA6	0.725
Work motivation	WM1 WM2 WM4 WM5 WM6 WM8 WM9	0.918

Source: Analysis from the survey results of 225 workers in Vietnam

One factor is rated higher when the Cronbach's alpha coefficient is greater than or equal to 0.8, the Cronbach's alpha coefficient of 0.6 or higher is usable (Peterson, 1994). Thus, it is shown that Cronbach's Alpha of the factors is greater than 0.66 > 0.6 through above table, so the scale quality is good.

Table 2: The exploratory factors for independent variables

Rotated Component Matrix^a					
	Component				
	1	2	3	4	5
SA1- Get more proactive in work	.903				
SAN4- Allowances for sick leave/maternity/family events...	.885				
SAN2- Work pressure	.878				
SAN3- Long-term stable work	.866				
SAN1- Labor safety	.835				
SA6- The interesting nature of the work	.835				
SA5- Clearly describable responsibility for the work	.819				
SA4- The work is suitable for the working capacity	.768				
SON2- Have positive relationship with the managers		.829			
SON6- Received support from leaders and colleagues		.793			
SON5- Have a good relationship with local communities where they reside		.759			
SON3- Have a good relationship with citizens/customers		.728			
SON4- Have a good relationship with members of family		.718			
SON1- Have a good relationship with colleagues		.693			
EN3- Motivated and encouraged by leaders			.834		
EN2- Acknowledge the contribution to the organization			.824		
PN3- The care of leaders			.801		

SAN5- Labor unions protect legitimate rights for workers			.725		
EN4- Be respected by colleagues			.674		
PN4- Facilities, machinery and equipment for work				.863	
PN2- Current income				.845	
EN1- Satisfied with the position in the organization				.815	
PN1- Salary				.764	
SA3- Many opportunities to advance at work					.850
SA2- Many opportunities to be educated and trained					.838
Eigenvalues	8.47	3.11	2.69	1.99	1.52
Cumulative (%)	33.9	46.3	57.1	65.0	71.1
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.					.763
Bartlett's Test of Sphericity	Approx. Chi-Square				4732.118
	Df				300
	Sig.				0.000
Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization.					
a. Rotation converged in 5 iterations.					

Source: Analysis from the survey results of 225 workers in Vietnam

According to the results in Table 2, KMO = 0.763 so factor analysis is appropriate. Bartlett's examination examines hypothesis H0: the correlation between zero observed variables in the overall. If this test is statistically significant ($\text{Sig} \leq 0.05$), the observed variables are correlated with the overall (Hair et al., 2006). Accordingly, the sig of the above test is 0.000 so the variables are correlated with each other in the overall. With the results of KMO coefficient and Bartlett testing in the above table, it is shown that there are enough conditions to conduct factors analysis.

5 factors, which have Eigenvalues (the amount of variation is explained by the factors) and are greater than 1, are extracted from the original 25 items; and Cumulative with a value of 71.1% shows that these 5 factors explain 71.1% of the variability of data (Gerbing and Anderson, 1988).

Thus, based on Rotated Component Matrix from EFA analysis, there are 5 factors that are created from 25 items: Factor 1 includes 8 items, named as the nature of work (NW); Factor 2 includes 6 items, named as Social relations (SR); Factor 3 includes 5 items, named as The interest and recognition of leaders and colleagues (IRLC); Factor 4 includes 4 items, named as

Material elements (ME); Factor 5 includes 2 items, named as Study and promotion opportunities (SPO).

Table 3: The exploratory factors for dependent variables

Component Matrix^a

	Component	
	1	
WM6- voluntarily bring home work to do		.928
WM9- my working time passes quickly		.909
WM5- spend more time on working		.865
WM2- like relatives choose the same job		.800
WM8- looking forward to returning to work at the end of the holidays		.792
WM4- a full time work is a challenge		.776
WM1- find to be stimulated by tasks at work		.771
Eigenvalues		4.901
Cumulative (%)		70.009
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.850
Bartlett's Test of Sphericity	Approx. Chi-Square	1217.673
	Df	21
	Sig.	.000

Extraction Method: Principal Component Analysis. a. 1 components extracted.

Source: Analysis from the survey results of 225 workers in Vietnam

According to the results in Table 3, KMO = 0.85 so factor analysis is appropriate. Accordingly, sig. of Bartlett's test is 0.000, so the variables are correlated in the overall (Hair et al., 2006). With the results of KMO coefficient and Bartlett testing in the above table, it shows that there are enough conditions to conduct factors analysis.

A factor with Eigenvalues (variable amount explained by factor) which is greater than 1 is extracted from 7 original items; and Cumulative with a value of 70.009% indicates that one factor explains 70,009% of the variability of data (Gerbing and Anderson, 1988).

Thus, based on Component Matrix from EFA analysis, there is a factor created from 7 items, named WM: work motivation.

3.5. Descriptive statistics of variables

In total of 350 votes issued, there were 325 feedback votes accounting for 90%. Characteristics of the samples are shown in the following table:

Table 4: Descriptive statistics of survey samples

		Count	Column N %	
Gender	Male	108	48.0%	
	Female	117	52.0%	
Aged	Under 30	63	28.0%	
	30 – 45	153	68.0%	
	Over 50	9	4.0%	
Marital Status	Single	36	16.0%	
	Married and no children	9	4.0%	
	Married and have children	180	80.0%	
Number of working years	Under 1 năm	18	8.0%	
	1- under 3 years	27	12.0%	
	3 – under 5 years	27	12.0%	
	Over 5 years	153	68.0%	
Position	Director, deputy director or more	27	12.0%	
	Managers, deputy managers	36	16.0%	
	Official staff	117	52.0%	
	Probationary staff	9	4.0%	
	Other	36	16.0%	
Education	Unskilled labor	102	45.3%	
	Vocational training, Associate Degree	26	11.6%	
	Bachelor's degree	97	43.1%	
		Mean	Maximum	Minimum
Average of income (mil.vnd)		7.1	35.0	3.0

Source: Analysis from the survey results of 225 workers in Vietnam

Descriptive statistical results show that the answers to the statements of the variable scale are quite diverse. There are very agreeing opinions and there are very disagreeable opinions, specifically they are shown in Table 5.

Table 5: Descriptive statistics of observed variables

The variable scale	Mean	Std.Deviation	The variable scale	Mean	Std.Deviation
SAN1	4.23	0.82	SON1	3.72	1.02
SAN2	4.14	0.79	SON2	3.81	0.91
SAN3	4.17	0.83	SON3	3.85	0.91
SAN4	4.15	0.79	SON4	3.95	0.74
SA1	4.16	0.77	SON5	3.86	0.88

SA4	4.19	0.84	SON6	3.90	0.86
SA5	4.08	0.84	SR	3.85	0.70
SA6	4.15	0.80	PN1	2.96	0.80
NW	4.16	0.71	PN2	3.05	0.84
PN3	3.25	0.98	PN4	3.14	0.89
SAN5	3.57	0.90	EN1	3.08	0.89
EN2	3.47	0.95	ME	3.06	0.71
EN3	3.53	0.91	SA2	3.49	0.92
EN4	3.79	0.82	SA3	3.26	0.99
IRLC	3.52	0.73	SPO	3.38	0.82

Source: Analysis from the survey results of 225 workers in Vietnam

Table 5 shows the average values of variables varying from 2.96 points to 4.23 points. The group of factors that are most appreciated is NW with an average score of 4.16, the lowest rated group is ME with an average score of 3.06 points. This shows that the nature of the work is very interested in improving businesses such as a competitive and dynamic work environment, etc. However, material factors such as salary, income have not really been improved.

3.6. The impact of factors on work motivation of laborers in enterprises in Vietnam's industrial park

Table 6: The Models' Regression Results

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	-1.261	.205		-6.137	.000		
	NW	.372	.039	.376	9.497	.000	.746	1.341
	SR	.347	.041	.346	8.511	.000	.708	1.412
	IRLC	.259	.037	.270	7.085	.000	.810	1.235
	ME	.168	.035	.169	4.850	.000	.960	1.042
	SPO	.192	.029	.224	6.503	.000	.988	1.013
a. Dependent Variable: WM								
Adjusted R Square = .738				F (ANOVA) = 126.906			Sig. = .000	

Source: Analysis from the survey results of 225 workers in Vietnam

Result of verification of conformity of the model showed adjusted R Square = 0.738. This means 73.8% of change in investment capital is explained by independent variables.

Verification Tests of ANOVA result Sig. = 0.000 <0.01. Thus, the 99% significance level can conclude regression model was fit.

Through regression results, all 5 variables positively affect the work motivation of employees working in the enterprises in the industrial zones. In which the nature of work is most strongly affected with the Standardized Coefficients coefficient at 0.376, followed by the Social Relationship with Standardized Coefficients at 0.346. The next is the attention and acknowledgment of leaders and colleagues; and Study and promotion opportunities, Material element with Standardized Coefficients equals respectively 0.270, 0.224 and 0.169.

4. Conclusion

Work motivation is a very important for the enterprises, especially the enterprises in industrial parks in Vietnam. The research is based on an initial research model that consists of 5 groups of factors affecting the work motivation of the employees such as social needs, physiological needs, safety needs, esteem needs and self-actualization. The EFA analysis results of 5 groups of factors affecting the work motivation are re-named as "The nature of work", "Social relations", "The interest and recognition of leaders" and "Study and promotion opportunities" and "Material factors". Regression results support previous studies because it proves that all 5 variables have a positive effect on work motivation with a 99% significance level.

Thus, in order to promote work motivation of the employees working in the enterprises in the industrial zones, the enterprises need to prioritize reasonable work arrangements, and create conditions for employees to develop their professional capacity. At the same time, it is necessary to build an organizational culture to help employees sticking together. Besides, leaders of the company need to regularly pay attention, motivate, encourage employees, reward and create promotion opportunities for good employees. In addition, they should set up methods to save finance, increase revenue and decrease expenditure to build welfare funds, and improve the material life of employees.

References:

- Adams, J.S., 1963. Toward an understanding of inequality. *Journal of Abnormal and normal social psychology*, 67, pp 442 – 436.
- Anderson JC & Gerbing DW (1988). Structural equation modelling in practice: A review and recommended two-step approach. *Psychological Bulletin*, 103(3), 411- 423.
- Bjorklund, Christina (2001), *Work motivation - Studies of its determinants and outcomes*, Dissertation for the degree of Doctor of Philosophy, Stockholm School of Economics.
- Brehm, J. & S. Gates (1997), *Working, Shirking and Sabotage*, Ann Arbor: The University of Michigan Press.
- Buelens, Marc and Van den Broeck, Herman (2007), "An Analysis of Differences in Work Motivation between Public and Private Organizations", *Public Administration Review*, Vol.67, (No. 1), pp. 65 - 74.
- Chew, J. C. L. (2004). The influence of human resource management practices on the retention of core employees of Australian organisations: An empirical study (Doctoral dissertation, Murdoch University).
- Daley, D. M. 1986. Humanistic management and organizational success: The effect of job and work environment characteristics on organizational effectiveness, public responsiveness, and job satisfaction. *Public Personnel Management* 15: 131-142.

- Denibutun, S.Revda (2012), "Work Motivation: Theoretical Framework", *Journal on GSTF Business Review*, Vol.1, No.4, pp.133-139.
- Dinibutun, S. Revda (2012), "Work Motivation: Theoretical Framework", *Journal on GSTF Business Review*, Vol. 1, (No. 4), pp. 133-139.
- Emmert, M. A., and w. A. Taher. 1992. Public sector professionals: The effects of public sector jobs on motivation, job satisfaction and work involvement. *American Review of Public Administration* 22: 37–48.
- Gambrel, Patrick A. and Cianci, Rebecca (2003), "Maslow's Hierarchy of Needs: does it apply in a collectivist culture", *Journal of Applied Management and Entrepreneurship*, Vol. 8, (No. 2), pp. 143-161.
- Hackman, J.R. & Oldham, G. R., 1976.Motivation through the design of work: test of a theory. *Organizational Behavior and Human Performance*, 16, 250-279.
- Hair JF, Black WC, Babin BJ, Anderson RE, & Tatham RL (2006). *Multivariate Data Analysis*. Upper Saddle River NJ: Prentice – Hall.
- Halepota, Hassan All (2005), "Motivational Theories and Their Application in Construction", *Cost Engineering*, Vol. 47, (Issue 3).
- Herzberg, Frederick (1959), "The motivation to work", New York, Wiley Publisher.
- Kovach, K.A., 1987. Employee motivation: Workers and supervisors give different needsto answers.*Business Horizons*, Vol. 30, No.5, September – October 1987, 58-65
- Maslow, Abraham H. (1943), "A Theory of Human Motivation", *Psychological Review*, Vol. 50, (No. 4), pp. 370 - 396.
- Nawab, Samina & Ahmad, Jawwad & Shafi, Khuram (2011), "An Analysis of Differences in Work Motivation between Public and Private Sector Organizations", *Interdisciplinary Journal of Contemporary Research in Business*, Vol. 2, (No. 11), pp. 110-127.
- Peterson, R. A. (1994). A meta-analysis of Cronbach's coefficient alpha. *Journal of Consumer Research*, 21, 381–391.
- Pham, Bao Duong (2009), "Research scientific basis, propose policies to improve the operational efficiency of scientific and technological researchers in rural agriculture", *Institute of Policy and Strategy for Agriculture and Rural Development*, Vietnam
- Romzek, B S (1990) Employee investment and commitment The ties that bind *Public Administration Review*, 50 (3), 374-382
- Skinner, B. F. (1938). *The Behavior of organisms: An experimental analysis*. New York: Appleton-Century
- Smith, Louise Jane (2003), "Evaluating the applicability of Maslow's theory of motivation to ancillary staff", *Thesis of Doctor of Philosophy, Sheffield Hallam University*,
- Song, Lianke & Wang, Yonggui & Wei, Jiangru (2007) "Revisiting motivation preference within the Chinese context: an empirical study", *Chinese Management Studies*, Vol. 1, (No. 1), pp. 25 -41.
- Truong, Minh Duc (2011), "Quantitative model application assessing the level of work motivation for employees of ERICSSON Vietnam Limited Company", *VNU Journal of Science, Economics and Business* (Vol 27), page. 240 - 247.

Tullock, G. (1965), *The Politics of Bureaucracy*, Washington, DC: Public Affairs Press.

Vroom, V.H., 1964. *Work and motivation*. New York: Wiley. US

Yair Re'em (2010), "Motivating Public Sector Employees: An Application-Oriented Analysis of Possibilities and Practical Tools", A thesis submitted in partial fulfillment of requirements for the degree of Executive Master Public Management, Hertie School of Governance, Berlin, Germany.