

Contents lists available at Science-Gate

International Journal of Advanced and Applied Sciences

Journal homepage: http://www.science-gate.com/IJAAS.html



An investigation about the satisfaction and loyalty of workers in Taiwanese enterprises located in Vietnam



Thanh-Tuyen Tran*

Scientific Research Office, Lac Hong University, No. 10 Huynh Van Nghe, Bien Hoa City, Dong Nai, Vietnam

ARTICLE INFO

Article history:
Received 3 September 2018
Received in revised form
1 January 2019
Accepted 6 January 2019

Keywords: Job satisfaction Taiwanese enterprise Laborer Vietnamese industrial zone

ABSTRACT

Since open stage, Vietnam has created a very potential environment for all enterprises around the world to invest in. Statistics has shown that Taiwanese government has encouraged its business people to invest in Vietnam and other Southeast Asian countries. This study is to give better understanding for employee perception towards Taiwanese entrepreneurs in addressing the factors which will significantly improve the business success. After a long process to investigate workers in those companies by using multiple statistical analyses, including exploratory factor analysis, reliability analysis, mean point value, and multiple linear regressions. The results have shown that the most significant factors affecting laborers' loyalty towards Taiwanese companies in Vietnam were salary and compensation, labor safety and welfare, and management style. This research provides useful findings to managers who can take reference in the purpose of supporting policies for the laborers, who are directly working in the Vietnamese industrial zone.

© 2019 The Authors. Published by IASE. This is an open access article under the CC BY-NC-ND license (http://creativecommons.org/licenses/by-nc-nd/4.0/).

1. Introduction

Vietnam today has a potential economy with small and medium businesses appearing at every street corner (Meyer et al., 2006). Foreign investors who have been flocking to Vietnam since the early 1990s, with a new peak of FDI inflow in 2004 are seeking business opportunities in both the domestic market of over 80 million potential consumers and in low-cost production sites. Also all through the 1990s and up until today, investors from the neighbor countries such as Taiwan have been the number one investors in Vietnam (Nguyen and Bryant, 2004).

Taiwanese government has encouraged its business people to invest in Vietnam and other Southeast Asian countries (Wang and Hsiao, 2002). There are some reasons that explain why foreign investors in general and Taiwanese investors in this case choose Vietnam to invest. Firstly, among the developing economies, Vietnam has experienced a high level of economic growth and stable political policy. In the period 1991 - 2003, annual economic

 $\ ^{*}\ Corresponding\ Author.$

Email Address: thanhtuyentran@lhu.edu.vn https://doi.org/10.21833/ijaas.2019.03.001 © Corresponding author's ORCID profile: https://orcid.org/0000-0002-9900-8592 2313-626X/© 2019 The Authors. Published by IASE. This is an open access article under the CC BY-NC-ND license (http://creativecommons.org/licenses/by-nc-nd/4.0/)

growth rate is 7.6%, and in 2008-2013, despite the country suffering from financial crisis it still reached 5.6%. Many international organizations forecast that Vietnam's GDP will grow better in the period 2014-2015 and subsequent years (Anwar and Nguyen, 2011).

Secondly, in order to increase the inflow of FDI as well as to promote technology transfer from foreign to domestic firms, the Vietnamese government promulgated the Law of Foreign Investment in 1987 (Binh and Haughton, 2002). An important aim of this law along with other steps taken by the government is to encourage innovation and boost productivity of domestic firms thereby increasing the net-exports. FDI in Vietnam has helped the country transform itself from an agricultural based economy to an industrialized based economy. In fact from 2001 onwards the share of manufacturing sector in GDP has been consistently higher than that of the agricultural sector (Tsang et al., 2004).

Thirdly, Vietnam currently is in the period of gold population structure with 60% of people at working age (Nguyen and Tran, 2017). Located in the heart of East Asia, the country has a favorable and convenient geographical position of cultural exchanges and trade. Furthermore, being WTO members, Vietnam has participated in the framework of international economic links, including partners within and outside the region through the Pacific Strategic Economic Partnership Agreement (TPP). This basic advantage is always attractive to investors.

A major implication for this research is that these findings will be able to give better understanding for employee perception towards Taiwanese entrepreneurs in addressing the factors which will significantly improve the business success. The results of this study can also be used as reference for any Taiwanese entrepreneur who is interested to start their own business in Vietnam and also for any companies which are interested to continue to sustain and grow.

2. Literature review

2.1. Literature review for Taiwanese SMEs enterprise

Prior research documented that SMEs play a significant role in the economy of a country. Nguyen and Tran (2018) also emphasized that SMEs have

long been believed to be important in supporting economics development within a country.

Consequently, the performance of the SME sector is closely associated with the performance of the nation. One of the important roles of SMEs in this context includes poverty alleviation through job creation (Nguyen et al., 2015).

In Vietnam, for both foreign investor and domestic investor, SMEs account for a large proportion of the total establishments in the various sectors.

In this case of research, Taiwanese SMEs are currently investing in Vietnamese market in form of (1) 100% foreign capital; (2) venture; (3) joint-stock company; (4) business cooperation contract and they are employing a large number of Vietnamese workforce at 18 economy sectors (Tables 1 and 2), such as Agriculture, forestry, and fisheries; Arts and entertainment; and Garment.

Table 1: Types of Taiwanese investment into Vietnamese market

	Types of Investment	Number of Projects	Invested Capital (USD)	Authorized Capital (USD)			
1	100% foreign capital	1,917	19,360,817,724	8,360,548,884			
2	Venture	221	3,229,893,340	1,221,741,290			
3	Joint-stock company	21	359,590,386	149,039,475			
4	Business cooperation contract	11	33,069,000	32,869,000			
	Total	2,170	22,983,370,450	9,764,198,649			

Table 2: Taiwanese investment in Vietnamese market in the year 2013

	Sector	Number of Projects	Invested Capital (USD)	Authorized Capital (USD)
1	Processing and manufacturing	1,740	18,956,383,945	8,209,213,349
2	Real Estate	22	1,407,073,125	532,528,262
3	Construction	80	1,241,432,108	270,934,065
4	Agriculture, forestry, fisheries	181	638,144,816	285,912,125
5	Art and entertainment	8	244,842,464	170,236,000
6	Hotel and restaurant	13	152,255,031	66,348,000
7	Finance and insurance	8	134,200,000	121,080,000
8	Education and training	4	55,300,000	7,120,000
9	Information and communication	13	34,649,252	33,206,552
10	Administrative support services	5	29,850,000	10,850,000
11	Science and technology	34	25,015,000	15,022,000
12	Wholesale and retail	33	21,547,756	12,671,343
13	Transportation and warehouse	13	15,260,000	7,590,000
14	Repair work	6	10,282,500	5,782,500
15	Water supply; Waste	2	7,800,000	7,800,000
16	Mining	1	6,626,304	6,076,304
17	Electrical products	5	1,508,149	1,508,149
18	Health and social assistance	2	1,200,000	320,000
	Total	2,170	22,983,370,450	9,764,198,649

2.1.1. Taiwanese enterprises' motivation of investment in Vietnam

For years, Taiwanese businesses are interested in investing activities. Many Taiwanese have set up factories in Vietnam, but almost products are exported to European countries. But it has turned different into recent decades. Knowing Vietnam is a rapidly growing market, Taiwanese enterprises tend to introduce their product in Vietnam market. There are currently 251 Taiwanese enterprises are running business in Vietnam.

Compared with other countries, Taiwan has been the number one investor in Vietnam with a large amount of capital within the Asian area. Only in May 2012, Taiwan has registered 36 projects with the capital investment of USD 97.3 million, raising the total registered capital in Vietnamese market up to nearly USD 24 billion. According to the survey results of the Taiwan Ministry of Economic Affairs, although in recent years capital inflows and Taiwanese direct investment into Vietnam is somewhat reduced, this country still ranks third just after Japan and South Korea and Vietnam still remains as an important investment destination of Taiwan in the next 3 years (proportion of selected reaches 14.41%). Even compared with China, the selected proportion of Vietnam is just behind three coastal economic zone of China i.e. Jiangsu (30.9%), Cantonese (23.6%) and Shanghai (19.64%).

According to the analysis of the Foreign Investment Agency - Ministry of Planning and Investment, the motivation for choosing Vietnam as investment destination of Taiwan enterprises focuses on the following factors:

- (1) Low labor costs:
- (2) Low land costs, tariff preferences and other incentives;
- (3) Potential market;
- (4) Meet the need of the supply chain moving.

However, according to the survey conducted on Taiwanese businesses between 2011 and 2013, the importance and priority of 3 above factors have noticed of some changes. In 2013, even though labor costs still remained as the priority reason in investment decision, the reason of land costs and incentives are not important as the potential market.

Currently Taiwan has always showed their interest in the investment environment of Vietnam. In the future period, according to Statistics of Foreign Investment Association, Taiwan enterprises will continue to raise their investment in Vietnam in the fields of insurance, environmental, automotive spare parts, bicycle frames, food, cosmetics, appliances can sports, medical equipment, electrical equipment, etc. We hope Taiwan to ranks in the top of market-leading countries investing in Vietnam.

2.1.2. Factors impact to job satisfaction

The Herzberg's two- factors theory define that there are certain factor in the workplace that cause Job Satisfaction, while a separate set of factors cause dissatisfaction. It was developed by Frederick Herzberg, a psychologist, who theories that job satisfaction and job dissatisfaction act in dependently of each other (Herzberg et al., 2010).

Herzberg et al. (2010) analyzed the job attitudes of 200 accountant and engineers who were asked to recall when they had felt positive or negative at work and the reason why. From this study, Herzberg et al. (2010) suggested a two-step approach to understanding employee motivation and satisfaction (Fig. 1).

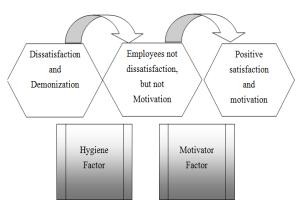


Fig. 1: Representation of Herzberg's two-factor theory

Job satisfaction is under the influence of a series of factors, i.e., the nature of work, salary, advancement opportunities, management, work groups and work conditions. The factors of job satisfaction can cause the phenomenon of job satisfaction (Spector, 2008).

In case of job satisfaction, benefits, bureaucracy, supervision, recognition, and fairness in pay are the

most important factors, which have significant impact on the overall social economic lives of female labor. The overall impact is defined as the social economic status of the workers, which consist of social status, income etc. (Kacel et al., 2005). Katt and Condly (2009) emphasized the variables related to worker's satisfaction are working environment; current health care facility; and overtime benefits.

3. Methodology

3.1. Research objectives

This study aims examining factors affecting Vietnamese laborer loyalty towards Taiwanese enterprises. In this study, Exploratory Factor Analysis (EFA), Reliability Analysis (Cronbach's Alpha) and Regression analysis are used with the assistance from a computer-software called Statistical Package for Social Sciences (SPSS). The whole method used in this research is briefly demonstrated in Fig. 2.

3.2. Research hypotheses and research framework

3.2.1. Research hypotheses

The precursor to a hypothesis is a research problem, usually framed as a question. Research hypotheses are all acceptable statements that give the researcher a focus for constructing a research experiment. The researcher must generate testable hypotheses which they can build the experiment and the research issue or the problem is pared into something testable.

The hypotheses help to provide focus and direction for the study. For that reason, the research hypotheses of the current thesis were formulated. They are as follows:

 H_1 : Salary and compensation has a positive effect on job satisfaction.

H₂: Working condition has a positive effect on job satisfaction.

H₃: Labor safety and welfare has a positive effect on job satisfaction.

 H_4 : Management style has a positive effect on satisfaction.

 H_5 : Promotion and award has a positive effect on job satisfaction.

H₆: has a positive effect on job satisfaction.

H₇: Laborer's satisfaction has a positive effect on laborer loyalty.

3.2.2. Theory foundation for the research framework

Wang et al. (2014) suggested that job satisfaction as a cluster of evaluative feelings about the job and identified nine factors of job satisfaction. These facts are pay amount and fairness of salary; the fairness of

promotion opportunities; supervision fairness; the fairness of compensation at work; high respect, recognition and appreciation; operating procedure-policies, procedures, rules, perceived red tape; competence and pleasantness among colleague; nature of career enjoyment; human relations and interaction.

Thanh-Tuyen and Nguyen (2016) divided job satisfaction into three levels and indicated some facts of job satisfaction. At level I, he emphasized policy, condition of service and payment has much impact on satisfaction. At level II, leader styles of headmasters and senior colleagues have much impact on job satisfaction. At level III, he listed some determinants related to iob satisfaction: organizational climate. individual's attitude. personality and emotion.

Determinants of laborer job satisfaction, according to the study of Donavan et al. (2004) can be summarized into some groups of variables as the followings:

- (1)Laborers' characteristics variables can be described by gender, family status, age, job experience, job position, qualification.
- (2) Human relations variables can be described by colleagues interaction and communication, meetings with the director, vice director, headmasters, and customers.
- (3) Work load can be described by company size and structure, employee performance, availability of facilities.
- (4)Compensation variables can be described as salary, insurance, bonus, flexible schedules, union help, holiday, and parental leave.

(5)Labor rule variables can be described as safety rules, safe guarding; first aid's facilities.

3.2.3. Research framework

The research framework of this current study is constructed based on the theories of job satisfaction. These theories, especially the theory of Herzberg et al. (2010), help to suggest the researcher to construct the research framework as the Fig. 3 follows.

4. Result analysis

4.1. Demographic analysis

The researchers delivered 334 questionnaires to the respondents at six Taiwanese-owned factories at Bien Hoa II and Song Than II industrial zones. In order to ask the respondents to fill out the questionnaire, the authors had to come to see them directly and luckily received the admission and a lot of supports from managers and workers who are working in there. After delivering and collecting questionnaires from the respondents, the authors worked on the process of filter. In the case of the workers did not answer the research questions, the questionnaires were discarded. Finally, there are 300 questionnaires were good enough to be analyzed, which represented a response rate of 89, 82%. Table 3 shows respondents' characteristics in detail and Table 4 shows the companies involved.

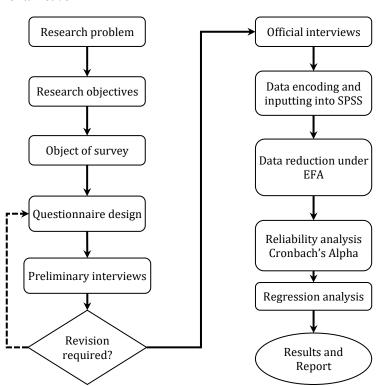


Fig. 2: Flow chart of research method in this study

4.2. Reliability analysis

4.2.1. Reliability analysis for determinants of job satisfaction

In order to analyze the data from the survey, it is important to check the consistency of the variables. Encoded data will be done with SPSS software to check questionnaire reliability. The results are shown in Table 5.

As shown in Table 5, reliability test was carried on 07 factors that affect labors' loyalty.

- 5-item scale of factor Salary and Compensation
- 5-items scale of factor Working Conditions
- 5-item scales of factor Labor Safety and Welfare
- 5-item scales of factor Management Style
- 5-item scales of factor Colleague and Teamwork
- 5-item scales of factor Promotion and Awards
- 5-item scales of factor Job Satisfaction

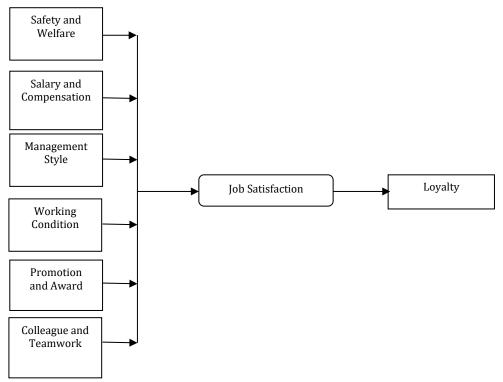


Fig. 3: Research framework

Table 3: Statistics of the sampled characteristics

Characteristic	Category	Frequency	Percentage
Gender	Female	111	38.30
	Male	179	61.70
Age	Less than 30	2	0.70
_	31- 40	237	81.70
	41-50	30	10.70
	51-60	17	6.20
	More than 60	2	0.70
Job Position	Managers	16	5.33
•	Mechanics	23	7.66
	Technicians	23	7.66
	Engineers	22	7.33
	Staff officers	36	12.00
	Internship students	10	3.33
	Security guards	15	3.00
	Factory Workers	131	43.66
	Others	24	8.00
Income	Less than \$200USD	113	37.66
	\$200USD-\$300USD	99	33.00
	\$300USD-\$400USD	45	15.00
	\$400USD-\$500USD	28	9.33
	Above \$500USD	15	5.00
Qualifications	Vocational school, college	123	41.00
-	Bachelor's	97	32.33
	Master's	64	21.33
	Ph.D.	16	5.33

Table 4: Sample factories

Table 11 bampie factories						
Number of Sample	Name of Factories	Business Field	Place			
35/300	Tainan Spinning Co, Ltd	Textile	Bien Hoa II iz.			
65/300	I Chong Co, Ltd	Garment	Bien Hoa II iz.			
48/300	Hung Yih Industry Co, Ltd	Wire-Electric	Bien Hoa II iz.			
52/300	Chiu-Yuan Co., Ltd	Wood Product	Bien Hoa II iz.			
14/300	Yaban Chain Industrial	Motorcycle chains	Song Than II iz			
36/300	Yang Lin Global	Car Glass	Song Than II iz			

Table 5: Cronbach's alpha

			onbach's alpha				
Item	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted			
	Salary and Compensation: Alpha= 0.876						
X1	18.40	11.402	.760	.840			
X2	18.28	12.906	.748	.841			
Х3	18.10	13.618	.652	.857			
X4	17.88	13.527	.706	.849			
X5	17.81	12.989	.649	.859			
		Working Condit	ion: Alpha= 0.713				
X6	3.73	.821	.554	.612			
X7	3.83	.691	.554	.632			
X8	4.73	.821	.654	.607			
X9	3.93	.691	.554	.657			
X10	3.44	.663	.666	.649			
		Labor Safety and W	/elfare: Alpha= 0.710				
X11	13.08	6.470	.522	.628			
X12	13.06	6.388	.514	.629			
X13	12.64	6.974	.406	.671			
X14	13.66	6.535	.567	.682			
X15	14.55	6.246	.633	.621			
	11.00		yle: Alpha= 0.808	.021			
X16	6.16	2.346	.644	.738			
X17	5.89	2.705	.653	.740			
X18	5.63	2.427	.662	.727			
X19	5.65	2.545	.654	.789			
X20	6.21	3.214	.687	.758			
1120	0.21		mwork: Alpha= 0.767	50			
X21	10.22	3.693	.568	.706			
X22	10.14	3.512	.644	.666			
X23	10.42	3.732	.544	.719			
X24	10.22	3.529	.510	.742			
X25	10.56	3.485	.548	.785			
ALS	10.50		ward: Alpha= 0.903	., 03			
X 26	6.99	3.090	.841	.831			
X27	6.88	3.145	.801	.864			
X28	6.81	3.143	.777	.885			
X29	6.54	3.547	.777	.877			
X30	6.57	3.845	.878	.894			
ASU	0.57		.878 n: Alpha= 0.915	.074			
X 31	6.25	2.240	.819	.931			
X31	6.41	3.135	.854	.844			
			.854 .714				
X33 X34	6.32 6.12	3.170		.859 .846			
		2.577	.601				
X35	6.45	3.715	.877	.814			

Cronbach's alpha for the variables related to 07 factors were larger than 0.6 which indicates acceptable internal consistency reliability. No item of this subscale was removed based on the item total correlation (> 0.30). Therefore; the above of 07 factors is suitable for further research's analyses.

4.3. Exploratory factor analysis

4.3.1. EFA for measurement scale of job satisfaction

The measurement in this current study includes 06 factors with 30 variables: (1) Salary and Compensation, (2) Working Condition, (3) Labor Safety and Welfare, (4) Management Style, (5) Colleague and Teamwork, (6) Promotion and Awards.

As shown in Table 6, the KMO is 0.812 and the significance is lower than 0.01. Then we concluded that the 30-subject questionnaire items of 06 factors above are suitable for factor analysis.

Table 6: KMO and Bartlett's test

Kaiser-Meyer-Olkin Measui	Kaiser-Meyer-Olkin Measure of Sampling Adequacy. 0.812					
	Approx. Chi-Square	2.037E3				
Bartlett's Test of Sphericity	df	210				
	Sig.	.000				

Factor analysis was removed the variables X6, X15, X16, X22 of the measurement scale the because of low factor loadings (<0.5).

After doing factor reduction, we have 26 variables remained in measurement scale. The EFA divided 26 items into 6 significant underlying factors (Table 7):

- 5-item scale of factor Salary and Compensation: X1, X2, X3, X4, X5

- 5-items scale of factor Working Condition: X7, X8, X9, X10
- 5-item scales of factor Labor Safety and Welfare: X11, X12, X13, X14
- 5-item scales of factor Management Style: X17, X18, X19, X20
- 5-item scales of factor Colleague and Teamwork: X21, X23, X24, X25
- 5-item scales of factor Promotion and Awards: X26, X27, X28, X29, X30

As shown in Table 9, the Eigen values for the first six components are all greater than 1 and these factors account for more than 69.896% of the total variance. This suggests that the scale items are unidimensional.

4.3.2. EFA for job satisfaction level

As shown in the Table 8, the measurement for Satisfaction Level was done by applying the method of principal component analysis. The results for this analysis are absolutely appropriate because of KMO is larger than 0.5, significant level is lower than 0.5 and cumulative is larger 50% (72.745%).

4.4. Mean value comparison

Table 10 shows mean value comparison between job satisfaction factors: (1) Salary and Compensation, (2) Working Condition, (3) Labor Safety and Welfare, (4) Management Style, (5) Colleague and Teamwork, (6) Promotion and Award.

Table 7: Pattern matrix

Component	1	2	3	4	5	6
X1	0.851					
X2	0.818					
Х3	0.721					
X4	0.701					
X5	0.638					
X10		0.758				
X7		0.851				
X8		0.768				
X9		0.987				
X11			0.773			
X12			0.820			
X13			0.740			
X14			0.854			
X17				0.766		
X18				0.784		
X19				0.837		
X20				0.965		
X21					0.663	
X23					0.608	
X24					0.741	
X25					0.789	
X26						0.797
X27						0.650
X28						0.600
X29						0.578
X30						0.789
Extraction Method: Principal Component Analysis: Rotation Method:						

Extraction Method: Principal Component Analysis; Rotation Method Varimax with Kaiser Normalization; Note: Rotation converged in 6 iterations.

Table 8: Rotation matrix

Table 6. Rotation matrix				
Item	Factor			
X31	.892			
X32	.873			
X32	.853			
X34	.829			
X35	814			
KMO	0.877			
Cumulative	72.745%			

Table 9: Total variance explained

	Table 9. Total variance explained								
Component	Initial Eigen values	% of Variance	Cumulative %	Extraction Sums of Squared Loadings	% of Variance	Cumulative %	Rotation Sums of Squared Loadings	% of Variance	Cumulative %
•	Total			Total			Total		
1	6.788	32.326	32.326	6.788	32.326	32.326	4.037	19.222	19.222
2	2.164	10.303	42.629	2.164	10.303	42.629	2.556	12.172	31.394
3	1.728	8.227	50.857	1.728	8.227	50.857	2.217	10.559	41.953
4	1.556	7.408	58.264	1.556	7.408	58.264	2.162	10.297	52.250
5	1.294	6.161	64.425	1.294	6.161	64.425	1.891	9.004	61.253
6	1.149	5.470	69.896	1.149	5.470	69.896	1.815	8.643	69.896
7	.906	4.315	74.211						
8	.684	3.259	77.470						
9	.635	3.024	80.494						
10	.568	2.706	83.200						
11	.544	2.464	84.523						
12	.522	2.485	85.685						
13	.461	2.197	87.882						
14	.416	1.983	89.864						
15	.412	1.900	90.456						
16	.379	1.803	91.667						
17	.356	1.696	93.363						
18	.306	1.457	94.820						
19	277	1.356	95.565						
20	.268	1.275	96.095						
21	.261	1.244	97.339						
22	.255	1.221	97.376						
23	.226	1.077	98.416						
24	.181	.864	99.280						
25	.178	.845	99.100						
26	.151	.720	100.000						
			Fytra	ction Method: Prin	cinal Componer	nt Analysis			

Extraction Method: Principal Component Analysis

Table 10: Means value summary statistic of six factors

Determinants of Job Satisfaction	Satisfaction Level
Determinants of Job. Satisfaction	Mean Value
Management Style	3.613
Working Condition	3.787
Salary and Compensation	3.275
Colleague and Teamwork	2.945
Promotion and Awards	3.417
Safety and Welfare	3.445

Among the components of job satisfaction, Working Conditions was valued with the highest score (3.787 with 1-5 Likert scale). This mean value indicates that Vietnamese workers felt satisfied with the working environment of Taiwanese-owned factories and also all aspects of an employee's terms and conditions of employment. This covers such matters as: condition of temperature, light and noise; facilities; the organisation of work and work activities; training, skills and employability; and workload, working time and work-life balance as shown in the survey in appendix. The item workload and nature of work is well-appreciated by Vietnamese worker with very high mean score (4.786/5.000). Table 11 clearly shows summary statistic of mean value of each item in this factor.

Table 11: Mean value of factor working condition

Variable	Item	Working Condition
	-	Mean Value
X7	Training, skills and employability	3.561
Х8	Balance between work and personal life	3.658
Х9	Condition of temperature, light and noise	3.123
X10	Workload and nature of work	4.786

Factor Management Style is valued with the mean score of 3.613 and ranked as the second important determinant that makes Vietnamese laborers satisfied at Taiwan factories. There is a direct correlation between staff engagement and the amount of guidance, feedback and autonomy that managers are willing to provide workers, according to research. In general terms, Vietnamese laborers feel more supported if their Taiwanese bosses focus on what they do, feel good about themselves in their role and act in a way that demonstrates commitment to the organisation's values and commitments. This factor contents items such as: top manager encourage cooperation among staff; top manager gives good evaluation and decision; employee receives good suggestion from top manager; top manager behaves politely as shown in the survey in appendix. The item top manager gives good evaluation and decision is well-respected by Vietnamese worker with highest mean score (3.965/5.000). Table 12 clearly shows summary statistic of mean value of each item in this factor.

Promotion and Awards was ranked as the third factor that has the very high mean score among six factors of job satisfaction (3.417 with 1-5 Likert scale). The award is meant to promote individual or team/group that has performed excellently for

sustainable growth and development of ar institution.

Table 12: Mean value of factor management style

Variable	Item	Management Style
		Mean Value
X17	Top manager encourage cooperation among staff	3.254
X18	Top manager gives good evaluation and decision	3.965
X19	Employee receives suggestion from top manager	3.845
X20	Top manager behaves politely	3.388

At any enterprise in general and at Taiwaneseowned factories in particular, in order to encourage laborer devote themselves to the company mission and vision, the bosses often propose the awards with different criteria to be achieved. In the current research, this factor Promotion and Awards contents items such as: promotion opportunity and awards is fairly; promotion opportunity is commensurate with outcomes; award is commensurate with effort; I am recognized for making a lot of effort at work for getting the promotion; I have been motivated a lot from company's policy of promotion and award. The item promotion is commensurate with outcomes is well-respected by Vietnamese worker with highest mean score (3.417/5.000). Table 13 clearly shows summary statistic of mean value of each item in this factor.

 Table 13: Mean value of factor promotion and award

Variable	Item _	Promotion and Award
		Mean Value
X26	Promotion opportunity and awards is fairly	3.698
X27	Promotion is commensurate with outcomes.	3.898
X28	Award is commensurate with effort	3.212
X29	I am effort at work for getting the promotion.	3.265
X30	I have been motivated from policy of promotion and award.	3.012

We examine differences in job satisfaction between low- and higher-paid workers within the Taiwanese-owned factories. Our results indicate that low- high wage employment is consistent with laborers' skill, experience, the quality jobs and the segmented labor market theory, which claims the existence of good and bad jobs. The items of paying, parental leave and bonuses can practically meet the workers' expectation with the mean score over 3.000 with 1.000-5.000 Likert scale (3.275/5.000). Specially, according to research interview. Vietnamese workers expect that Taiwanese-owned factories could pay them better for piecework and overtime work and they hope that these kinds of bonuses could increased annually be simultaneously. Also according to research interview, the way of payment (cash payment for overtime work) is not convenient for employees. Pay card is preferred because it provides the benefits of significant cost savings, convenience and security. The item I'm satisfied with long term incentives and parental leave is loved by Vietnamese worker with highest mean score (3.956/5.000); however, the item I'm satisfied with payment for bonuses and piece work is not supported by them with lowest mean score (2.786/5.000). Table 14 clearly shows summary statistic of mean value of each item in this factor.

Table 14: Mean value of factor salary and compensation

Variable	Item	Salary and Compensation
		Mean Value
X1	Salary is commensurate with experience	3.123
X2	I feel satisfied with my compensation.	3.566
Х3	Salary is paid in time and fairly.	3.654
X4	I'm satisfied with payment for bonuses and piece work.	2.786
X5	I'm satisfied with long term incentives and parental leave.	3.956

The factor Colleague and Teamwork need to be improved to meet the Vietnamese workers' expectation because its mean score less than 3.000 with 1.000-5.000 Likert scale (2.945/5.000). Taiwanese bosses should adjust a sense of teamwork among their employees in order to share the company's performance goals, joint work efforts and mutual accountability, which can productivity. The item Team leader has good knowledge and experience is agreed by most of Vietnamese worker with highest mean score (3.720/5.000); however, the two items Team leader creates team cooperation effectively and Team has strong working spirit are not supported with lowest mean score (2.156/5.000and2.659/5.000). Table 15 clearly shows summary statistic of mean value of each item in this factor.

 Table 15: Mean value of factor colleague and teamwork

Variable	Item _	Colleague and Teamwork
		Mean Value
X21	Team has strong working spirit.	2.659
X23	My peers respect the work of	3.245
	each other.	3.243
X24	Team leader has good	3.720
	knowledge and experience.	3.720
X25	Team leader creates team	2.156
	cooperation effectively.	

Among the components of job satisfaction, Safety and Welfare was valued with the average mean score (3.445 with 1-5 Likert scale). This mean value indicates that Vietnamese workers felt satisfied with Safety and Welfare condition provided by Taiwanese-owned factories. The 2 items *Workers are* provided with catered nutritious meals and First aid facilities are in good condition are not highly-appreciated by Vietnamese workers with pretty low mean score (2.761/5.000and2.356/5.000). However, the company's policy of protection and welfare still can meet laborers' expectation. Table 16 clearly

shows summary statistic of mean value of each item in this factor.

Table 16: Mean value of factor safety and welfare

Variable	Item	Safety and Welfare
		Mean Value
X11	Workers are provided with catered nutritious meals	2.761
X12	Company has good policy of protection and welfare.	3.523
X13	First aid facilities are in good condition.	2.356
X14	Walkways and fire exits always kept free of obstructions	3.228

5. Implications

In the below section, we will deeply discuss three factor (1) Salary and Compensation, (2) Labor Safety and Welfare, and (3) Management Style to give possible solutions for improving these factors.

5.1. Suggestions for factor salary and compensation

Based on the result, it is clearly demonstrated that Salary and Compensation is the factor which has strongest impact on job satisfaction of employees. It is not only the problem of the surveyed companies, but also the big issue of many organizations in the world. If the leader could solve this problem, it will make the overall satisfaction level of their employee increased.

The income of a worker depends on four elements: years of working experience, education background, skilful, position status and kind of factory. The salary of laborer has counted by the time of working experience and it can increase year by year. Besides, the management of the firm arrange skillful labor and the educated workers working as a team leader or technical guider. The salary of these people can higher than the workers with the same time of working. Workers are duly and directly paid on the 15th day after the end of the relevant month. In special cases, workers may be paid later but not after 10 days from the due day and are pre-paid at least 30% of that month's amount.

Although the Vietnamese workers in the survey were satisfied with the policies of income, the matter of payment for piece work and bonus is not supported by them. In this study, researcher suggests some solutions to solve the problem of apparel worker's low satisfaction toward salary.

Encourage payment for piece work in all factories:
 Piecework is any type of employment in which a
 worker is paid fixed piece rate for each unit
 produced or action performed. The piecework pay
 method compensates employees a set amount for
 each unit of work completed. The chance to earn
 more money motivates some workers to increase
 productivity. If the employee increases their work
 speed, they can finish more units of work in an
 hour. The worker could potentially make more per

hour than they would with a standard hourly rate. With an hourly pay rate, employees know they cannot make any more no matter how hard they work so they may be less likely to push themselves. Besides, in many work settings, the piecework pay method is cost effective, since the company is only paying for work completed. Obviously, this method motivates employees to work interestingly and it could raise income of workers. However, this model also discourages teamwork in the workplace because individual employees simply want to complete more of their own work and this method may encounter employees who stop worrying as much about quality, instead only worrying about the quantity of work completed for greater earnings.

• Diversification bonus: The manager of the company may provide some new bonus policies. This method encourages employee to morale, increase motivation, and productivity. Furthermore, it motivates worker to work with responsibility. Bonus shall be also given to those sections of the company that accomplish their work in the most expected manner, raise work performance in not only quantity but also quality. Besides, the policy maker should have some reward policies for the workers who have some measures to encourage saving fuel, electrical, water, etc. The 13th month wage is also a way to encourage workers to exert themselves to the utmost in work. This solution can directly impact to employee working with high efficiency and cost effect for the Company.

5.2. Suggestions for factor labor safety and welfare

The company should concern with the safety, health and welfare of people engaging in work or employment. The goals of occupational safety and health programs include fostering a safe and healthy work environment. Besides, the program may also protect co-workers, family members, employers, customers, and many others who might be affected by the workplace environment.

Occupational safety and health can be important for moral, legal, and financial reasons. In commonlaw jurisdictions, employers have a common law duty (reflecting an underlying moral obligation) to take reasonable care for the safety of their employees. Statute law may build upon this to impose additional general duties, introduce specific duties and create government bodies with powers to regulate workplace safety issues: details of this will vary from jurisdiction to jurisdiction. Good practices can also reduce employee injury and illness related costs, including medical care, sick leave and disability benefit costs.

Another factor creating competition among the company and the others and was also the key to improve the working productivity and helped long-term commitment to the company at the same time is social welfare. Therefore, nearly 80% of

respondents in this survey agreed that the company should fulfil social benefits.

Social welfare consists of two main parts: the benefit under welfare law and the company's voluntary application to motivate employees and to maintain and attract talents for the company. Welfare is one of the benefits of workers that the companies need highly focus on. In addition to social insurance in accordance with the State, the company should purchase health insurance for employees in order to cover the hospital fee. They are just two forms of social welfare but they have essential impact on employees. Besides, one of the common benefits that the company should be applied to further improve the satisfaction of the workers is the bonus shares for the workers who work well in a month. Moreover, the company should have periodic health examination program. Because the workers contact daily with machinery and other dusty materials, the periodic health examination would help the workers know their health status to make rational decisions in order to ensure their safety and health. The health of workers is an important factor that directly affects productivity so it impacts to production activities of the company. It is necessary for the managers to understand the importance of social welfare, whether it is one of the main factors creating the satisfaction of employees.

5.3. Suggestions for factor management style

Employees feel more supported if their bosses focus on what they do, feel good about themselves in their role and act in a way that demonstrates commitment to the organization's values and commitments. But motivation levels also increase if managers show an interest in staff as individuals, offer feedback, praise and recognition, review and guide them in their work and empower them by providing them with appropriate levels of autonomy to get on with tasks themselves.

Management style is one of the factors which have strongest impact on the overall satisfaction of employees. Keep the workplace fair and peaceful with more support and encourage requires much from the good leader. If the leader could solve this problem, it also means the overall satisfaction level can increase. A good leader should consider about the influence of staff over policy and practices. The organization can be only operated effectively if its staff can self-recognize themselves as important resources that have scarified all their lives for the development of working place. In order to improve employee's satisfaction toward organization policy, it is necessary to put their rights as priorities.

6. Benchmarking

The most salient result of this survey is the clear indication of job satisfaction and the factors which most have strong impact on job satisfaction. Based on the findings of this research, we can conclude that most of the Vietnamese laborers in this survey show their satisfaction with their job taken at Taiwaneseowned factories. However; even though workers feel satisfied with all the factors, their real satisfaction towards some factors is still lower than what they expected. Based on the findings in this study, the researcher investigated job satisfaction among the Vietnamese workers who are working in Taiwaneseowned factories. The empirical result of this research may contribute towards improving job satisfaction of workers in the organization. The study also contributed to other future researches in this field and carried practical significance.

The result of this research demonstrated that there are 03 main factors strongly impacted on job satisfaction of workers are (1) Salary and Compensation, (2) Labor Safety and Welfare and (3) Management Style. During the study, the research indicates the backlog that exists in the workforce of Vietnam and how to exploit this resource.

Enhancing worker's satisfaction is the solution to increase work performance. According to the statistics of Vietnam Apparel Association, although Vietnam has giant human resource but the average work efficiency of Vietnam companies are lower than other countries in Asian.

This research finding is particularly significant for the policy-makers of Taiwanese-owned factories. It reminds the management supporting policies for the laborer who are directly working in the industrial zones. This result may help the owner aware the difficulty of the laborer and deal with this emergency. For instance, to enhance the level of satisfaction, the policy-makers should consider worker's expectation of paying carefully. In addition, they should recognize that low salary is a barrier for laborer who wants to work in industrial zones.

To sum up, the author would like to state again the research's results as follow:

- The results extracted from exploratory factor analysis (EFA) and reliability analysis drawn on the final research model for the current study. These steps on the analysis pointed out that six Salary and Compensation. factors Working Conditions, Labor Safety and Welfare. Management Style, Colleague and Teamwork, and Promotion and Awards are necessary to build on research model to measure laborers' satisfaction in the case of research.
- Through multiple linear regressions (MLR), the author concluded that, firstly, only three factors (1) Salary and Compensation, (2) Labor Safety and Welfare, and (3) Management Style have strong impact on laborers' satisfaction; secondly, the regression model demonstrated that satisfaction level has positive effect on loyalty level.

Compliance with ethical standards

Conflict of interest

The authors declare that they have no conflict of interest.

References

Anwar S and Nguyen LP (2011). Foreign direct investment and trade: The case of Vietnam. Research in International Business and Finance, 25(1): 39-52.

https://doi.org/10.1016/j.ribaf.2010.05.004

Binh NN and Haughton J (2002). Trade liberalization and foreign direct investment in Vietnam. ASEAN Economic Bulletin, 19(3): 302-318.

https://doi.org/10.1355/AE19-3E

Donavan DT, Brown TJ, and Mowen JC (2004). Internal benefits of service-worker customer orientation: Job satisfaction, commitment, and organizational citizenship behaviors. Journal of Marketing, 68(1): 128-146. https://doi.org/10.1509/jmkg.68.1.128.24034

Herzberg F, Mausner B, and Snyderman B (2010). The motivation to work. 12th Edition, Transaction Publishers, New Brunswick, Canada

Kacel B, Miller M, and Norris D (2005). Measurement of nurse practitioner job satisfaction in a Midwestern state. Journal of the American Academy of Nurse Practitioners, 17(1): 27-32. https://doi.org/10.1111/j.1041-2972.2005.00007.x PMid:15679881

Katt J and Condly S (2009). A preliminary study of classroom motivators and de-motivators from a motivation-hygiene perspective. Communication Education, 58(2): 213-234. https://doi.org/10.1080/03634520802511472

Meyer KE, Tran YTT, and Nguyen HV (2006). Doing business in Vietnam. Thunderbird International Business Review, 48(2): 263-290.

https://doi.org/10.1002/tie.20095

Nguyen NT and Tran TT (2017). Optimizing mathematical parameters of Grey system theory: An empirical forecasting case of Vietnamese tourism. Neural Computing and Applications.

https://doi.org/10.1007/s00521-017-3058-9

Nguyen NT and Tran TT (2018). Raising opportunities in strategic alliance by evaluating efficiency of logistics companies in Vietnam: A case of Cat Lai Port. Neural Computing and Applications.

https://doi.org/10.1007/s00521-018-3639-2

Nguyen NT, Tran TT, Wang N, and Nguyen NT (2015). Optimization of strategic alliances by integrating DEA and grey model. Journal of Grey System, 27(1): 38-56.

Nguyen TV and Bryant SE (2004). A study of the formality of human resource management practices in small and mediumsize enterprises in Vietnam. International Small Business Journal, 22(6): 595-618.

https://doi.org/10.1177/0266242604047412

Spector PE (2008). Industrial/organizational psychology: Research and practice. John Wiley, New York, USA.

Thanh-Tuyen T and Nguyen NT (2016). Determinants affecting Vietnamese laborers' decision to work in enterprises in Taiwan. Journal of Stock and Forex Trading, 5(2): 1-9.

Tsang EW, Nguyen DT, and Erramilli MK (2004). Knowledge acquisition and performance of international joint ventures in the transition economy of Vietnam. Journal of International Marketing, 12(2): 82-103.

https://doi.org/10.1509/jimk.12.2.82.32901

Wang CN, Nguyen NT, and Tran TT (2014). The study of staff satisfaction in consulting center system-A case study of job consulting centers in Ho Chi Minh City, Vietnam. Asian Economic and Financial Review, 4(4): 472-491.

Wang H and Hsiao MHH (2002). Social capital or human capital? Chinese professionals in overseas Taiwan company. Journal of Contemporary Asia, 32(3): 346–362.

https://doi.org/10.1080/00472330280000241