

Organizational Commitment and Rewards in Vietnam, with Comparison between University Graduates and Others

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Abstract

This study investigates the relationship between extrinsic, intrinsic and social rewards, and the organizational commitment (OC) of 5,522 employees who work for 8 Japanese companies in Vietnam. Hierarchical regression analysis revealed that variables included to measure extrinsic, social and intrinsic rewards were strongly related to OC. Especially, intrinsic rewards had the strongest association with OC. These findings suggest that the antecedents of OC in Vietnam are different from those in the West and China. The comparison between university graduates and others showed that fatigue and autonomy had stronger influence on OC in university graduates than in others. Discussions and implications concerning human resource management in Vietnam are offered.

Keywords: exploratory factor analysis, Japanese companies, organizational commitment, rewards, university graduates, Vietnam

1. Introduction

Since economic and political reforms under Đổi Mới launched in 1986, Vietnam has experienced rapid economic growth and development and transformed itself from one of the world's poorest nations to a lower middle-income country. Since 1990, Vietnam's GDP per capita growth has been among the fastest in the world, averaging 6.4 percent a year in the 2000s. Despite uncertainties in the global environment, Vietnam's economy remains resilient being supported by the country's fundamental drivers of growth, namely resilient domestic demand and export oriented manufacturing (World Bank, 2017a).

Especially, foreign direct investment (FDI) is an important source of capital and economic growth as it provides a package of new technology, management expertise, finance and market access for the production of goods and services (Vuong & Yokoyama, 2011). Vietnam has successfully attracted large volumes of FDI, sustaining levels of around 10-12 billion USD per year over the recent several years. Accordingly, foreign invested companies play an increasingly important role in Vietnam economy. FDI sector exports reached 67 percent of the country's total exports in 2013 and foreign invested enterprises' share of the GDP came to account for 18 percent (U.S. Department of State, 2014). Japanese firms in particular appear eager to increase manufacturing investment and continue to benefit from Vietnam's growth remaining one of the leading investors in Vietnam. Japan's foreign direct investment accounted for 26.6% of the total FDI in 2013 and became Vietnam's largest source of foreign capital (Vietnam Ministry of Planning and Investment, 2013). Vietnam was the third promising destination of overseas operation for Japanese manufacturing companies over medium term just behind China and India, and the fifth over the long term following India, China, Russia and Brazil (Japan Bank for International Cooperation, 2008).

However, 66.6% of Japanese companies answer that 'increase of employment cost', mainly due to 14.9% increase of minimum wage from 2013 to 2014, is an obstacle for investment to this country (Japan External Trade Organization, 2014). Besides, employees' voluntary turnover rate is high, 12.7% for multinational corporations (MNCs) and 17.2% for local companies in 2014 respectively (Mercer & Talentnet Corporation, 2015). Then the managers who intend to manage subsidiaries in Vietnam may have come to the stage where they should consider not only of using low cost labor force but of how to utilize talented employees truly necessary for the company. In this situation, it is necessary to determine how companies can reduce their employee turnover rates or attract the best employees in Vietnam. So, this study analyzes antecedents of OC which is

considered to be effective to attain such goals.

Furthermore, our concern is not only of Vietnamese employees as a whole but about difference between university graduates and other workers. In Vietnam, a shortage of skilled employees at all levels, particularly managerial and professional has been a constraint. According to official estimates, the country requires 10,000 to 15,000 skilled employees each year in fields such as information technology, tourism, management, finance and banking to cope with demand. However, with the present training capacity, the country can only satisfy 40-60 percent of human resource needs. With increasing FDI to Vietnam, recruiting skilled employees for technical and management positions has become increasingly difficult. In addition, due to cultural differences and the legacy of the command economy, it is said that the bulk of local workers in Vietnam are not well matched to the demands of MNCs. Besides, although MNCs need personnel who have experience in modern business and can speak English, the pool of people at hand is rather limited and hence high salaries are often paid (Collins 2009; Cox 2013; Vo, 2009). Accordingly, to employ good skilled employees, companies in Vietnam have to cope with the sellers' labor market which may facilitate the employees to become more individualistic and acquisitive. With such understanding, the researcher also should like to test the modification role of educational background in relation between rewards and OC in this paper.

2. Literature review

2.1 Organizational rewards in Vietnam

The achievement of an organization does not only rely on how the organization utilizes its human capitals and competencies but also on how it incites commitment to the organization (Beukhof, 1998). Hence, there is growing evidence to suggest that organizations can enhance the commitment of their workforce through the provision of organizational rewards (Newman, Thanacoody, & Hui, 2011). The social exchange theory supposes that when an individual is happy with the rewards provided by their organization, they will reciprocate by developing positive attitudes towards their organization such as higher levels of commitment (Haar & Spell, 2004). Besides, it was shown that enhancement of OC brings lower turnover intention in the West (Meyer, Stanley, Herscovitch, & Topolnysky, 2002) and also in Vietnam (Hai, 2012). However, despite tremendous research on OC (Meyer, et al., 2002), there is little research on OC and its antecedents in non-Western countries and Vietnam in particular. So, before proceeding to concrete analyses, it will be better to review characteristics of the Vietnamese culture as members of a culture will have similar sets of preferences built into how they view the world (Hofstede, 2001).

The Vietnamese culture can be described as large power distance, high collectivism, maintaining face, etc. (Nguyen, 2002; Ralston, Nguyen, & Napier, 1999; Truong & Nguyen, 2002). Among them, high collectivism characteristic of Vietnamese culture is reflected in values associated with the Vietnamese kinship system, where the parent-children relationship is viewed by the Vietnamese as basic to social life and thus most Vietnamese retain very close ties with their families. As this culture facet also affects very much in the Vietnamese organizational characteristic, the superior-subordinate relationship is not limited within the organization; it is extended to the life outside the organizations as well (Nguyen, 2002). In line with this, Japanese investors also appreciate not only the country's advantageousness in a dense and young population with high literacy rate but also employees' diligence, hard-working, skillfulness as well as their kindness and trustworthiness. Moreover, it is noteworthy that Vietnamese labor could share the similarity in thinking and characteristics with Japanese employers which have contributed to facilitate the Japanese business activities in the country (Vuong & Yokoyama, 2011).

However, apart from many advantages of Vietnamese labor characteristics, some investors are still worried about the lack of middle managers in Vietnam and difficulty in keeping skilled labor to continue working for the company. It is a fact after recruiting the employees in Vietnam, the firms have to bear all the cost for training labor; however, when the workers are skillful enough, they want to move to another places with better payment rather than staying loyally in the company. Investors also doubt about ability of time-management and teamwork of labor forces (Vuong & Yokoyama, 2011) as they feel Vietnamese employees are relatively individualistic: they do not want to do work more than assigned; they are reluctant to teach their skills to others as they believe their skills are source for their life; they are less interested with other people and do not like to admit that they are responsible for any fault which occurs in workplace (Nakamura, 2009). So, despite their high collectivistic culture, Vietnamese tend to be individualistic at work. These contradictive features are said to be because they are originally from autonomous village, where each village people feel an intimacy and mutual support only within itself, existing quite independently from the others (Nguyen & Aoyama, 2013).

Considering these cultural characteristics, this study aims to gain a deeper understanding into the different

effects of extrinsic, social and intrinsic rewards on the development of the OC of employees who work for Japanese companies in Vietnam. Porter and Lawler (1968) defined intrinsic rewards as the satisfaction that a person derives from doing the job and extrinsic rewards as tangible benefits obtained as a result of doing the job, such as pay and promotions. On the other hand, according to Mottaz (1985), social rewards refer to those that are derived from interpersonal relationships with colleagues and supervisors. As there is little research in this field in Vietnam, the researcher picks up China as a substitute to estimate the relation between OC and rewards in this research because China shares with Vietnam some similarities not only on political features (e.g. Socialism, Confucianism), geographical positions, economic stages, etc. but also on human matters such as collectivism, power distance, mutual respect, face-saving, and politeness which dominate all levels of the relationship among organizational members (Nguyen, 2002), and there are more stocks of research than in most other Asian countries. Previous works in the West and China are summarized as: (i) intrinsic rewards have a greater impact on OC of employees in the West than extrinsic or social rewards (Eby, Freeman, Rush, & Lance, 1999; Malhotra, Budhwar, & Prowse, 2007; O'Reilly & Caldwell, 1980); and (ii) extrinsic and social rewards have a greater impact on OC of Chinese employees than intrinsic rewards (Miao, Newman, Sun, & Xu, 2013; Newman & Sheikh, 2012).

As it was found by Hofstede (1980) that culture of a country changes as its economy develops, difference between '(i)' and '(ii)' might be attributed not only to geographical features such as the West and the East but also to economic stages on which each country is placed. Furthermore, Boyacigiller and Adler (1991) argue that the commitment of employees with collectivist values may arise from ties with managers, owners, and co-workers, whereas the commitment of employees with an individualist orientation may be due to the job itself or the compensation system. If these assertions are true, the reason of '(i)' might be attributed as follows: as Western countries are overall more developed than others, employees are more individualistic and intrinsic rewards are accordingly more important for OC. On the other hand, for '(ii)', it may be assumed that: as China is less developed than Western countries, employees are less individualistic and social rewards are accordingly more important for OC. The reason why extrinsic rewards are more important for OC of employees in China in spite of its collectivistic culture will be that economy of China is still in transition and most employees have to work for resources for subsisting.

Supposing worldwide applicability of such relationship between economic or educational level and collectivistic or individualistic culture, what can we consider about effective rewards for enhancing OC in Vietnam? As Vietnam's economic level 2,111 USD GDP per capita in 2015 is far behind that of China 8,069 USD (World Bank, 2017b), it may be reasonably assumed that extrinsic and social rewards are more associated with OC than intrinsic rewards in Vietnam in line with '(ii)'. In addition, Japanese companies may reasonably adapt to Vietnamese collectivism because a company in Japan is considered to be a second family which encourages intensive socialization (Jackson & Tomioka, 2004) and require managers closely involved with a work group (Whitney, 1994, p.100), even though nowadays Japanese management changes and parts from such family-like style due to economic stagnation and the influence of globalization (Haghirian, 2010). On the other hand, taking into account cultural features of this country, i.e., Vietnamese are said to be individualistic at the work and nowadays become more individualistic than before as a result of rapid industrialization (Hoang, 2008), it is also possibly considerable that intrinsic rewards are more associated with OC than extrinsic and social rewards in line with '(i)'. Accordingly, the researcher should like to assume that intrinsic, extrinsic and social rewards have positive effects to OC in Vietnam. The present study is the first to test whether such assumption is true and should enable us to advise managers who work for companies in Vietnam as to what strategies may be utilized to foster high levels of OC amongst their employees.

2.2 Extrinsic rewards

2.2.1 Benefit satisfaction

The provision of benefits (i.e. salary and position) should lead the employees to reciprocate through exhibiting higher levels of OC. Empirical work in the West (Mottaz 1988; Loscocco 1990; Williamson et al., 2009) and in Vietnam (Hai, 2012) is generally supportive of such assertions, although some work finds contradictory evidence (Malhorta et al., 2007). Besides, recent work suggests that Chinese employees typically rank benefits highly in comparison with intrinsic factors (Chiu, Luk & Tang, 2002; Newman & Sheikh, 2012). This leads us to the following hypothesis:

Hypothesis 1: Benefit satisfaction is positively related to OC.

2.2.2 Fatigue

A number of studies demonstrate that exhausted workers exhibit lower levels of OC and then finally, there is a

possibility of finding employment elsewhere (Azeem, 2010; Lee & Ashforth, 1996; Wright & Cropanzano, 1998). On the basis of the ongoing argument, the researcher feels it is needed to check the relationship of emotional exhaustion and OC in workplaces in Vietnam. This leads us to the following hypothesis:

Hypothesis 2: Fatigue is negatively related to OC.

2.3 Social rewards

2.3.1 Supervisor support

Empirical studies have provided evidence that perceptions of supervisory support positively affect employees' motivation and OC (Eisenberger, Huntington, Hutchison, & Sowa, 1986; Mottaz, 1988). Recent work conducted in Chinese organizations (He, Lai, & Lu, 2011; Miao, et al., 2013; Nazir, Shafi, Qun, Nazir, & Tran, 2016; Newman & Sheikh, 2012; Wang, 2008) and Vietnamese organizations (Hai, 2012) demonstrates a strong relationship between supervisor support and OC, too. However, recent empirical work on private sector employees in the UK provides limited support for such assertions (Malhorta, et al., 2007).

This difference may result from the fact that supervisors have a greater influence on the work activities of their subordinates in Chinese and Vietnamese organizations than is the case in the West, due to a cultural context in which there is respect for seniority, strict hierarchies in the workplace and limited subordinate participation in decision-making (Chan, Feng, Redman, & Snape, 2006; Cheng, Jiang, & Riley, 2003; Chen, Tsui, & Farth, 2002; Nguyen, 2002). This leads us to the following hypothesis:

Hypothesis 3: Supervisor support is positively related to OC.

2.3.2 Co-worker support

As an important channel for the dissemination of workplace knowledge and newcomer socialization into the organizational culture (Korczynski, Shire, Frenkel, & Tam, 2000), the provision of support by co-workers should engender greater feelings of emotional attachment to the organization (Mottaz, 1988). Empirical work typically confirms a positive relationship between co-worker support and OC of Western employees (Chiaburu & Harrison, 2008; Self, Holt, & Schaninger, 2005; Steijn & Leisink, 2006) and Chinese employees (He, et al., 2011; Miao, et al., 2013; Nazir, et al., 2016), although some recent works on Chinese employees find no evidence of such relationship (Newman & Sheikh, 2012; Wang, 2008).

According to Hofstede (1980), Vietnam is a member of collectivist cultures which are characterized as having high loyalty towards an organization and its goals, seeing themselves as interdependent with others, taking action jointly on a cooperative rather than competitive basis, and as valuing joint efforts and group rewards. Besides, Japanese companies typically have an organizational setting in which there are close-knit relationships between individuals as are similarly observed in Vietnamese culture. This leads us to the following hypothesis:

Hypothesis 4: Co-worker support is positively related to OC.

2.4 Intrinsic rewards

2.4.1 Autonomy

Autonomy is the degree to which employees are allowed freedom, independence and discretionary powers when performing their job tasks and responsibilities (Sims, Szilagyi, & Mckemey, 1976). The more autonomy an employee has about what, when and how to do work, the greater he/she would feel a sense of responsibility for the job tasks, feel they are needed in the workplace and engender high levels of OC (Williamson, et al., 2009). Empirical findings generally support such assertions in organizations in the West (Eby, et al., 1999; Malhorta, et al., 2007; Steijn & Leisink, 2006). Besides, recent work conducted in Chinese organizations demonstrates a strong relationship between autonomy and OC (Chen & Aryee, 2007; Froese & Xiao, 2012; Miao, et al., 2013; Nazir, et al., 2016; Newman & Sheikh, 2012). Some pieces of research conducted in other Asian countries, such as the work of Gautam, van Dick, & Wagner (2001) in Nepal, are also supportive.

Accordingly, autonomy is considered to be associated with OC also in Vietnam. Beside, despite high collectivistic culture, it is said that Vietnamese tend to be individualistic at work due to the nature of villages they were brought up (Nguyen & Aoyama 2013). As autonomy tends to have higher correlation with OC in individualistic society, we are lead to the following hypothesis:

Hypothesis 5: Autonomy is positively related to OC.

2.4.2 Training provision

The greater the sense of debt incurred with the training program, the employee becomes more committed and devoted to the organization (Barrett & O'Connell, 2001). Specifically, the employees that viewed training as the

most relevant to their current jobs were able to attain more positive commitment outcomes and had less of intention to quit (Burke, 1995). Some findings from empirical work on employees in the West are supportive of a link between training provision and OC (Bartlett, 2001; Owens, 2006; Wayne, Shore, & Liden, 1997) but some other studies found insignificant relation (Shore & Barksdate, 1998) or significant but negative relation (Smeenk, Eisinga, Teelken, & Doorewaard, 2006). The reasons of such mixed results may partly be because of market imperfection in which a company is not always successful to employ a person whose skill is compatible to what the company needs. In this setting, training will not be fully effective to enlarge an employee's skill and cause his/her reciprocity. Another reason might be that skills obtained through training are sometimes not specific to a company but general and portable to elsewhere. In this setting, a company may not induce an employee's OC fully (Becker, 1993).

In Chinese setting, Newman, et al. (2011) found a significant impact of training on OC of employees working for multinational enterprises in China. On the other hand, Miao et al. (2013) found no significant relationship between training and OC in public sector in China in which political loyalty is more important to career progression than professional competence and training provision is unlikely to lead to higher levels of commitment, especially amongst employees with limited connection to the Communist Party (Miao et al., 2013). Likewise, Hai (2012) found no significant relationship between training and OC in small and medium sized companies (SMCs) in Vietnam. It may be because it is often believed that effective ways to please the supervisor is not to gain the ability of task accomplishment but to treat him specifically in less modernized companies in Vietnam (Nguyen, 2002). As Japanese companies seemingly have different culture from Chinese public sector or Vietnamese SMCs, provision of training is considered to be effective to enhance OC. This leads us to the following hypothesis:

Hypothesis 6: Training provision is positively related to OC.

2.5 Comparative importance of rewards

It is assumed that Vietnamese have both characteristics of individualistic and collectivistic cultures as are discussed above. Accordingly, the researcher expects that intrinsic, extrinsic and social rewards are all associated with OC in Vietnam. However, it is expected at the same time that intrinsic rewards are more associated with OC than other rewards because Vietnamese employees are often said to be individualistic at workplace and because they are considered to become more individualistic than before as a result of rapid industrialization. This leads us to the following hypothesis:

Hypothesis 7: Intrinsic rewards are more significantly related to OC than extrinsic and social rewards.

2.6 The level of education and comparative importance of rewards

In line with above arguments, university graduates are considered to be more modernized or westernized and have more individualized view than the other employees. Then, antecedents of OC are considered to be different between university graduates and 'others', i.e. employees except university graduates. Concretely, university graduates may be more concerned with financial benefits than 'others'. However, as 'others' are normally in low income level and have to work for resources for subsisting, they may accordingly have as keen interest in treatments as university graduates. This leads us to the following hypothesis:

Hypothesis 8: There is no difference on relationship between benefit satisfaction and OC between university graduates and others.

As university graduates may be as individualistic and rich as to give priority to their own work-life balance, they may like to avoid getting tired on the work. On the other hand, 'others' normally work for substituting and may bear up under heavy workload. Actually, empirical cross-country research shows that employees from individualistic countries reported a higher perceived workload and higher turnover intentions than their counterparts in collectivistic countries while working the same number of hours (Yang, et al., 2012). This leads us to the following hypothesis:

Hypothesis 9: Relationship between fatigue and OC is negatively stronger for university graduates than others.

Contrary to the nation's overall collectivistic culture, university graduates are considered to be individualistic through westernized higher education. On the other hand, 'others' are also sometimes said to be individualistic as described above. So, it is accordingly expected that both parties share collectivistic and individualistic features and demand human support to the same degree. This leads us to the following hypotheses:

Hypothesis 10: There is no difference on relationship between supervisor support and OC between university graduates and others.

Hypothesis 11: There is no difference on relationship between co-worker support and OC between university graduates and others.

On the other hand, as university graduates may be considered more individualistic than others being intensified in the current environment of sellers’ market. This leads us to the following hypothesis:

Hypothesis 12: Relationship between autonomy and OC is positively stronger for university graduates than others.

Different approach may be required for considering the difference of association between training provision and OC by educational backgrounds. University graduates are normally expected to utilize their own specialty in a company, whereas ‘others’ are assigned more standard operations which less require specific skill or knowledge. Besides, university graduates are typically more individualistic than others and may give priority to self enhancement than others. Accordingly, university graduates may well respond to training provision. However, a mismatch in employment, which prevents a company’s provision of training to be perceived as a reward worthy for reciprocation by receivers, may more easily occur in university graduates than ‘others’ as a company may sometimes fail to meet the former’s demand. The nation’s current problem, i.e. scarcity of talented labor forces in the labor market, may further facilitate their devaluation of such rewards. Furthermore, ‘others’ may more easily perceive training as a reward as they have lower opportunity to obtain assuming the nation’s current training capacity. By canceling out of these possible effects, we are lead to the following neutral hypothesis:

Hypothesis 13: There is no difference on relationship between training provision and OC between university graduates and others.

Among them, Hypothesis 9, 10, 11 and 13 are common with those of previous survey in Thai setting (Kokubun, 2017a). However, Hypothesis 8 and 12 are different: In previous research (Kokubun, 2017a), benefit satisfaction had stronger effect towards OC in University graduates than in ‘others’; autonomy had equal effect towards OC between university graduates and ‘others’. The former difference in this paper is derived due to lower Vietnamese economic level: Its per capita GDP is still less than half of that of Thailand 5,815 USD (World Bank, 2017b). In such a setting, ‘others’ in Vietnam are considered to be more eager for earning better benefit than those in Thailand and may possibly as eager as university graduates in Vietnam. The latter difference is due to labor market particularity, i.e., seller’s market for university graduates in Vietnam. University graduates in this country are considered to have more alternatives of workplaces and accordingly expected to express stronger response to autonomous work as a reward.

Accordingly, we propose following model (Figure1):

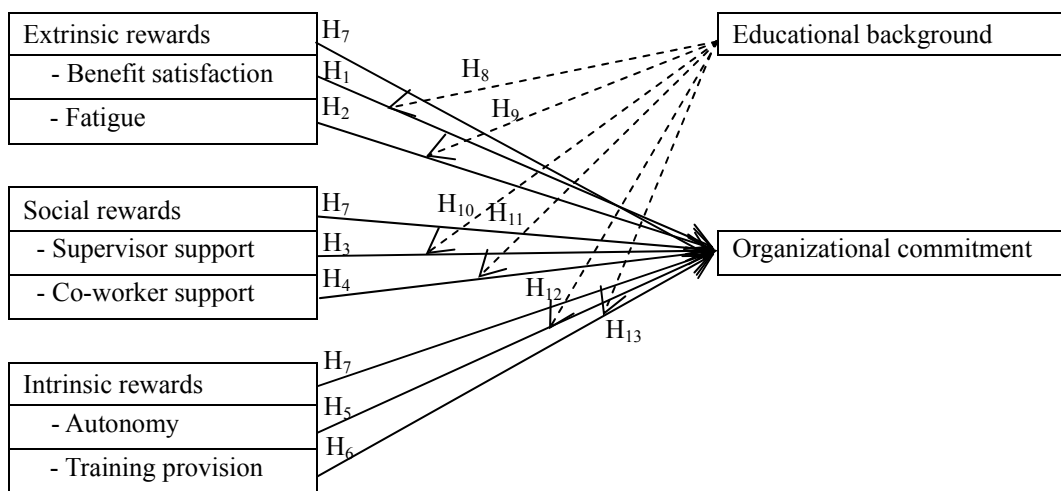


Figure 1. The moderating effect of education background on the organizational commitment-rewards relationship

Note. —————> : OC-rewards relationship (Hypothesis 1 to 7)
 - - - - -> : Moderating effect of educational background (Hypothesis 8 to 13)

3. Methods

3.1 Participants

We sent questionnaires to employees in 8 Japanese companies in Vietnam. We purposely selected Japanese companies in Vietnam instead of other kinds, such as state-owned or other private companies as they have a different set of HRM practices and many organizational variables would not be eligible for legitimate comparison with Japanese counterparts. 20,000 questionnaires were distributed via the HR department of participant companies. The participation was basically compulsory. With a promise to present the summary results, the HR department of each firm administered the questionnaires by distributing and collecting completed questionnaires. Each respondent was requested to put the completed questionnaire into an envelope that the researcher provided along with the questionnaire and seal it for him/her self to guarantee complete anonymity. Overall, 15,735 surveys were collected, reflecting a response rate of 78.7%. We eliminated 10,213 surveys due to missing values (5,072 surveys) or inappropriate characteristics such as contract workers, Japanese expatriates, etc (5,141 surveys). Consequently, the final samples comprised 5,522 Vietnamese participants. Among them, 583 participants are from a company in South East (Ho Chi Minh City and surrounding provinces) and the other 4,939 participants are from 7 companies in Red River Delta (Hanoi and surrounding provinces). Other demographic information of the participants is shown in tables of appendix.

3.2 Measures

The questions are obtained from Kokubun (2006), in which OC was correlated with various rewards in Malaysian setting. Recent research by Kokubun (2017a; 2017b; 2017c) confirmed such correlations in setting of Thailand, Malaysia and China using the same questions, too. Accordingly, the researcher expects the similar association between the variables of reward and OC described below because these countries and Vietnam share similarities in geographical and cultural spheres (e.g., collectivism, high-power distance, etc. Cf. Hofstede, 1980). They are measured on a five-point scale. The original questionnaire was developed in English and then translated into Vietnamese. To ensure the accuracy of the translation, the questionnaire was then translated back.

3.2.1 Benefit satisfaction

The items were measured on a two-item scale. The alpha reliability was 0.630 for university graduate and 0.601 for others.

3.2.2 Fatigue

The items were measured on a three-item scale. The alpha reliability was 0.826 for university graduate and 0.804 for others.

3.2.3 Supervisor support

The items were measured on a four-item scale. The alpha reliability was 0.859 for university graduate and 0.858 for others.

3.2.4 Co-worker support

The items were measured on a four-item scale. The alpha reliability was 0.778 for university graduate and 0.792 for others.

3.2.5 Autonomy

The items were measured on a three-item scale. The alpha reliability was 0.690 for university graduate and 0.650 for others.

3.2.6 Training provision

The items were measured on a two-item scale. The alpha reliability was 0.756 for university graduate and 0.736 for others.

3.2.7 Organizational commitment

The items were measured on a three-item scale. The alpha reliability was 0.747 for university graduate and 0.730 for others.

3.2.8 Control variables

Several demographic variables were included to control for individual differences. Answered figures without any conversion were used for age and organizational tenure. Sample dummy shows university graduates or others. Gender, turnover experience, marital status, indirect/direct department, managerial/non-managerial position were also measured. Seven dummy variables were created to control for the eight different companies.

4. Results

4.1 Analysis

We conducted an exploratory factor analysis of all items (except control variables) to examine measurement invariance between university graduates and others. The results of the factor analysis with varimax rotation are presented in Table 1, confirming a seven-factor solution for all the items of benefit satisfaction, fatigue, supervisor support, co-worker support, autonomy, training provision and OC. The factor structure was the same for university graduates and others; therefore, we are convinced that both university graduates and others ascribed the same meanings to the scale items used in the current study (Milfont & Fischer, 2010). For reference, applying another side of the same reasoning, the researcher did not use the item 'role clarity' (Kokubun, 2017a; 2017b; 2017c) to which the parties did not ascribe the same meaning according to the result of exploratory factor analysis in this research to prevent multicollinearity with other variables.

Descriptive statistics for both university graduates and others are presented in Table 2. We tested our hypotheses using hierarchical regression analysis. We entered the control variables in Step 1 and main effects of benefit satisfaction, fatigue, supervisor support, co-workers support, autonomy and training in Step 5. In Step 6, we entered sample variable (1 for university graduates and 0 for others), its interaction terms with main effects for the entire sample to test university graduate moderation. Variables forming the interaction term were entered to minimize multicollinearity among the interaction terms and their components (Aiken & West, 1991). In Step 2 to 4, main effects were separately entered by the kind of rewards (extrinsic, social and intrinsic rewards) to test their comparative importance. In addition, we conducted separate regression analysis using university graduates and others. All regression results are presented in Table 3.

Step 1 presents the results when only the control variables are included in the regression to predict OC. Four out of seven demographic variables were found to influence OC. Among them, age, marital status and position were positively and gender was negatively related to OC. That means that employees of aged, married, higher position and women tend to have higher OC than those of younger, single, lower position and men.

Step 2 presents the results when two variables of extrinsic rewards are added to the regression. Likewise, Step 3 and 4 presents the results when two variables of social rewards and two variables of intrinsic rewards are respectively added to the regression. All the six reward variables were significantly associated with OC. Observing adjusted R^2 , extrinsic, social and intrinsic rewards explained 15%, 16%, 27% of additional variance in OC, respectively. This implies that all of three types of reward are important for OC, in the order of intrinsic, social and extrinsic rewards. Specifically, the figures are much different between intrinsic rewards and the others, supporting Hypothesis 7.

Step 5 presents the results when all the six reward variables are added to the regression. Fatigue was negatively and the other five reward variables were positively associated to the regression significantly ($p < 0.01$). This model provides support for Hypotheses 1-6.

At step 6, the relationship between fatigue and OC was moderated by the sample, showing that their relationship was negatively stronger for university graduates than others ($\beta = -0.12$, $p < 0.01$). In other words, university graduates' OC was more affected by fatigue compared with others. On the other hand, the relationship of autonomy with OC was positively stronger for university graduates than others ($\beta = 0.09$, $p < 0.10$), which suggests that autonomy is more important in forming OC for university graduates than others. The significant results of these moderation tests are consistent with Hypotheses 9 and 12. We can also find from the coefficient of sample that university graduates are typically lower than others in OC ($\beta = -0.17$, $p < 0.05$). The relationships of other variables with OC showed no significant difference between university graduates and others, supporting Hypotheses 8, 10, 11 and 13.

In separate regression analysis using university graduates and others, all the reward variables were associated to the regression significantly ($p < 0.05$). Observing adjusted R^2 , extrinsic, social and intrinsic rewards explained 21%, 20%, 30% of additional variance in OC for university graduates, whereas 12%, 15%, 25% for others, respectively. These confirm that all of three types of reward are important for OC in both parties, although with large difference on the degree of contribution between intrinsic rewards and the other two rewards.

Table 1. Results of exploratory factor analysis.

Items	University graduates					Others								
	Benefit satisfaction	Fatigue	Supervisor support	Co-workers support	Autonomy	Training provision	Organizational commitment	Benefit satisfaction	Fatigue	Supervisor support	Co-workers support	Autonomy	Training provision	Organizational commitment
My position or rank at the working place.	0.614	-0.126	0.207	0.243	0.157	0.149	0.105	0.549	-0.092	0.193	0.287	0.146	0.148	0.168
Amount of my salary or wage.	0.486	-0.141	0.190	0.146	0.076	0.173	0.151	0.444	-0.241	0.209	0.179	0.074	0.194	0.132
I often feel exhausted.	-0.084	0.909	-0.117	-0.084	-0.064	-0.059	-0.117	-0.073	0.901	-0.118	-0.096	-0.073	-0.071	-0.118
After finishing my work, I feel exhausted.	-0.070	0.694	-0.073	-0.060	-0.016	-0.028	-0.070	-0.079	0.642	-0.093	-0.094	-0.044	-0.045	-0.051
I feel exhausted when I wake up in the morning.	-0.100	0.683	-0.093	-0.126	-0.069	-0.058	-0.137	-0.067	0.670	-0.097	-0.095	-0.082	-0.064	-0.134
My boss/supervisor is trustful.	0.206	-0.082	0.768	0.189	0.103	0.158	0.127	0.163	-0.134	0.723	0.226	0.140	0.124	0.104
My boss/supervisor treats employees fairly.	0.084	-0.111	0.750	0.162	0.141	0.148	0.131	0.071	-0.108	0.762	0.199	0.152	0.101	0.133
My boss/supervisor deals with employees' complaints effectively.	0.201	-0.109	0.673	0.205	0.116	0.133	0.134	0.175	-0.108	0.651	0.257	0.133	0.116	0.124
My boss/supervisor trusts workers.	0.056	-0.112	0.595	0.193	0.271	0.114	0.092	0.070	-0.106	0.637	0.187	0.183	0.083	0.114
Evaluation by my co-workers and subordinates.	0.089	-0.053	0.196	0.762	0.094	0.064	0.117	0.064	-0.110	0.216	0.769	0.123	0.110	0.099
Relationship with my co-workers and subordinates.	0.011	-0.110	0.278	0.737	0.098	0.142	0.122	0.045	-0.125	0.282	0.692	0.132	0.103	0.116
Ability of my co-workers and subordinates.	0.197	-0.068	0.065	0.535	0.113	0.059	0.060	0.216	-0.090	0.156	0.557	0.094	0.081	0.105
Human relationship at my working place.	0.167	-0.150	0.174	0.461	0.205	0.102	0.141	0.193	-0.089	0.202	0.449	0.164	0.090	0.166
The level of my skill in the company is higher than the average.	0.275	-0.176	0.232	0.168	0.511	0.222	0.293	0.273	-0.170	0.233	0.186	0.466	0.145	0.298
I can fully utilize my talent/ability in my work.	0.231	-0.053	0.227	0.187	0.508	0.257	0.181	0.154	-0.063	0.204	0.125	0.578	0.136	0.218
My own ideas are fully utilized in my work.	0.015	-0.011	0.189	0.183	0.453	0.097	0.146	-0.023	-0.068	0.179	0.183	0.409	0.123	0.113
For the past one year, I was given useful training to develop ability and achieve my target.	0.151	-0.053	0.209	0.121	0.134	0.688	0.139	0.240	-0.097	0.222	0.205	0.179	0.536	0.236
In my work, I can master new skills and develop my ability.	0.162	-0.085	0.201	0.150	0.212	0.675	0.181	0.156	-0.162	0.207	0.199	0.297	0.628	0.224
I have strong will to work hard in this company.	0.176	-0.146	0.160	0.121	0.146	0.150	0.871	0.113	-0.108	0.118	0.114	0.108	0.115	0.873
I am willing to contribute to development of this company.	0.023	-0.135	0.137	0.176	0.147	0.123	0.575	0.011	-0.097	0.107	0.152	0.117	0.128	0.586
I want to be employed by this company as long as possible.	0.300	-0.200	0.144	0.112	0.294	0.133	0.451	0.178	-0.130	0.127	0.087	0.223	0.066	0.523

Table 2. Descriptive statistics and correlations.

	Mean		SD		Others\ University graduates													
	University graduates	Others	University graduates	Others	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1 Gender	0.671	0.510	0.470	0.500	0.075***	-0.027	0.141***	-0.066***	-0.293***	0.039	-0.010	-0.002	0.041	0.069***	0.063***	0.105***	0.004	0.132***
2 Age	28.477	27.028	3.977	4.302	0.238***	0.832***	0.221***	0.519***	0.215***	0.495***	0.052**	-0.059**	0.053**	0.000	0.186***	-0.027	0.079***	0.132***
3 Tenure	3.813	4.886	3.419	3.471	0.172***	0.790***	0.094***	0.509***	0.188***	0.534***	0.042*	-0.018	0.034	-0.015	0.154***	-0.057**	0.079***	0.079***
4 Turnover experience	0.727	0.474	0.446	0.446	0.041***	0.101***	-0.076***	0.120***	-0.040	0.017	-0.064**	-0.040	0.022	0.041	0.095***	-0.021	0.047*	0.047*
5 Marital status	0.542	0.614	0.498	0.487	0.030**	0.447***	0.461***	-0.022	0.106***	0.251***	-0.034	0.025	-0.029	-0.080***	0.049**	-0.063**	0.026	0.026
6 Indirect department	0.314	0.165	0.464	0.371	-0.043***	0.033**	-0.059***	0.089***	-0.032**	0.181***	0.066***	-0.120***	0.067***	0.028	0.069***	-0.094***	0.04	0.04
7 Position	0.106	0.020	0.308	0.140	0.046***	0.207***	0.204***	0.053***	0.061***	0.009	0.141***	-0.030	0.124***	0.047	0.188***	0.031	0.108***	0.108***
8 Benefit satisfaction	2.965	2.698	0.929	1.062	-0.109***	0.028*	-0.006	0.000	-0.015	0.058***	0.090***	-0.289***	0.445***	0.409***	0.449***	0.407***	0.428***	0.428***
9 Fatigue	2.999	3.367	1.143	1.212	0.082***	-0.066***	-0.014	-0.002	-0.036**	-0.090***	-0.022	-0.329***	-0.292***	-0.269***	-0.251***	-0.203***	-0.354***	-0.354***
10 Supervisor support	3.551	3.184	1.014	1.222	0.005	0.014	-0.021	-0.026	-0.038**	0.077***	0.065***	0.454***	0.482***	0.482***	0.525***	0.450***	0.429***	0.429***
11 Co-worker support	3.793	3.517	0.695	0.875	-0.003	0.014	0.025	-0.014	0.032**	0.053***	0.047***	-0.292***	0.542***	0.482***	0.460***	0.357***	0.395***	0.395***
12 Autonomy	3.354	3.223	0.933	1.087	0.048***	0.077***	0.035**	0.029*	0.051***	0.080***	0.423***	-0.281***	0.498***	0.455***	0.460***	0.501***	0.551***	0.551***
13 Training provision	3.644	3.535	1.064	1.208	-0.011	0.050**	0.014	-0.001	0.015	-0.020	0.072***	0.490***	-0.301***	0.478***	0.467***	0.528***	0.426***	0.426***
14 Organizational commitment	3.890	4.050	0.909	1.007	-0.090***	0.080***	0.083***	-0.073***	0.145***	-0.025	0.053***	0.370***	-0.287***	0.357***	0.360***	0.475***	0.453***	0.453***

Note. n=1575(University graduate), 3947(Others) ***p<0.01, **p<0.05, *p<0.10.

Correlations for university graduates appear above diagonal and others below diagonal.

Table 3. Results of hierarchical regression analyses.

Variables	Organizational commitment (University graduates and Others, n=5,522)						
	Step 1	Step 2	Step 3	Step 4	Step 5	Step 6	
Gender	-0.05 ***	-0.05 ***	-0.08 ***	-0.10 ***	-0.09 ***	-0.09 ***	
Age	0.07 ***	-0.01	0.03	0.02	-0.01	0.03 *	
Tenure	-0.02	0.03	0.01	-0.01	0.02	-0.04 *	
Turnover experience	-0.02	-0.01	-0.01	-0.02 *	-0.02	-0.02	
Marital status	0.07 ***	0.09 ***	0.09 ***	0.06 ***	0.08 ***	0.07 ***	
Indirect department	-0.01	-0.06 ***	-0.05 ***	-0.03 **	-0.05 ***	-0.04 ***	
Position	0.05 ***	0.00	0.01	0.00	-0.01	0.00	
Company 1 (dummy)	0.18 ***	0.15 ***	0.09 **	0.09 **	0.08 **	0.07 **	
Company 2 (dummy)	0.18 ***	0.11 ***	0.07 **	0.08 **	0.05	0.07 **	
Company 3 (dummy)	0.40 ***	0.23 ***	0.20 ***	0.14 **	0.10 *	0.11 **	
Company 4 (dummy)	0.18 ***	0.10 **	0.07	0.04	0.02	0.01	
Company 5 (dummy)	0.33 ***	0.25 ***	0.20 ***	0.18 ***	0.16 ***	0.16 ***	
Company 6 (dummy)	0.26 ***	0.14 ***	0.09 *	0.09 *	0.04	0.08 *	
Company 7 (dummy)	0.36 ***	0.21 ***	0.22 ***	0.21 ***	0.17 ***	0.17 ***	
<i>Extrinsic rewards</i>							
Benefit satisfaction		0.31 ***			0.07 ***	0.07 ***	
Fatigue		-0.19 ***			-0.10 ***	-0.08 ***	
<i>Social rewards</i>							
Supervisor support			0.24 ***		0.04 ***	0.04 **	
Co-worker support			0.23 ***		0.07 ***	0.07 ***	
<i>Intrinsic rewards</i>							
Autonomy				0.36 ***	0.29 ***	0.27 ***	
Training provision				0.25 ***	0.18 ***	0.19 ***	
Sample						-0.17 **	
Sample×Benefit satisfaction						0.07	
Sample×Fatigue						-0.12 ***	
Sample×Supervisor support						0.04	
Sample×Co-worker support						0.06	
Sample×Autonomy						0.09 *	
Sample×Training provision						-0.08	
R ²	0.06	0.21	0.22	0.33	0.36	0.37	
Adjusted R ²	0.06	0.21	0.22	0.33	0.36	0.37	
F	25.37 ***	91.03 ***	97.75 ***	171.50 ***	153.76 ***	119.65 ***	

Note. *Significance at the 10% level; **Significance at the 5% level; ***Significance at the 1% level.

Table 3. Results of hierarchical regression analyses (continued).

Variables	Organizational commitment (University graduate, n=1,575)							Organizational commitment (Others, n=3,947)				
	Step 1	Step 2	Step 3	Step 4	Step 5	Step 1	Step 2	Step 3	Step 4	Step 5		
Gender	-0.04	-0.04	-0.06 ***	-0.08 ***	-0.07 ***	-0.05 **	-0.06 ***	-0.08 ***	-0.10 ***	-0.10 ***		
Age	0.25 ***	0.17 ***	0.22 ***	0.16 ***	0.14 ***	0.07 ***	0.02	0.05 *	0.02	0.01		
Tenure	-0.19 ***	-0.11 **	-0.14 ***	-0.14 ***	-0.11 ***	-0.03	-0.01	-0.03	-0.02	-0.01		
Turnover experience	0.01	0.02	0.00	-0.02	-0.01	-0.01	0.00	0.00	-0.01	-0.01		
Marital status	-0.05 *	-0.01	-0.01	-0.02	0.00	0.12 ***	0.12 ***	0.12 ***	0.09 ***	0.10 ***		
Indirect department	0.04	-0.01	0.00	0.01	-0.02	0.00	-0.03 **	-0.02	-0.01	-0.02 *		
Position	0.11 ***	0.05 *	0.04	0.03	0.01	0.06 ***	0.03 *	0.03 **	0.02	0.01		
Company 1 (dummy)	-0.08	-0.06	-0.05	-0.08	-0.07	0.27 ***	0.23 ***	0.16 ***	0.17 ***	0.15 ***		
Company 2 (dummy)	-0.02	-0.04	-0.07	-0.10	-0.11	0.21 ***	0.13 ***	0.12 ***	0.10 ***	0.08 ***		
Company 3 (dummy)	-0.05	-0.13	-0.08	-0.20 *	-0.20 *	0.55 ***	0.38 ***	0.33 ***	0.27 ***	0.23 ***		
Company 4 (dummy)	-0.06	-0.11 *	-0.09	-0.13 **	-0.14 **	0.28 ***	0.18 ***	0.13 **	0.11 **	0.09		
Company 5 (dummy)	0.00	-0.09	-0.06	-0.11	-0.14	0.44 ***	0.38 ***	0.31 ***	0.30 ***	0.28 ***		
Company 6 (dummy)	0.08	-0.04	-0.02	-0.10	-0.13	0.20 ***	0.13 ***	0.08 *	0.08 **	0.06		
Company 7 (dummy)	0.10 **	0.02	0.05	0.03	0.00	0.46 ***	0.30 ***	0.31 ***	0.29 ***	0.25 ***		
<i>Extrinsic rewards</i>												
Benefit satisfaction		0.35 ***			0.13 ***		0.30 ***			0.06 ***		
Fatigue		-0.24 ***			-0.17 ***		-0.17 ***			-0.08 ***		
<i>Social rewards</i>												
Supervisor support			0.29 ***		0.06 **			0.22 ***		0.04 **		
Co-worker support			0.24 ***		0.07 ***			0.23 ***		0.08 ***		
<i>Intrinsic rewards</i>												
Autonomy				0.44 ***	0.32 ***				0.33 ***	0.27 ***		
Training provision				0.20 ***	0.12 ***				0.26 ***	0.19 ***		
R ²	0.06	0.27	0.26	0.36	0.42	0.09	0.22	0.24	0.34	0.36		
Adjusted R ²	0.05	0.26	0.25	0.35	0.41	0.09	0.21	0.24	0.34	0.36		
F	6.67 ***	35.85 ***	34.19 ***	54.91 ***	56.54 ***	27.49 ***	68.10 ***	76.84 ***	127.14 ***	110.85 ***		

Note. *Significance at the 10% level; **Significance at the 5% level; ***Significance at the 1% level.

4.2 Discussion

The objective of the present study was to investigate the antecedents of the organizational commitment (OC) of employees working in the Japanese companies in Vietnam. Our findings demonstrate that extrinsic rewards, social rewards and intrinsic rewards engendered higher levels of OC, in order of intrinsic, social and extrinsic rewards. The point that intrinsic rewards have larger influence on OC than social and extrinsic rewards is similar to the findings of previous work conducted on samples from Western organizations, which highlight intrinsic factor as the main influence on OC (Goulet & Frank, 2002; Steijn & Leisink, 2006), and different from the findings from the research in China, which highlight extrinsic and social factors as the main influence (Chiu, Luk, & Tang, 2002; Miao, et al., 2013; Newman & Sheikh, 2012).

A considerable reason why Vietnamese employees show more similar result to those in the West than to those in China in comparative magnitude of three rewards may be that Vietnamese have more individualistic culture which is originated from isolated structure of villages they are brought up. In addition, rapid economic development in recent years may also have engendered such more individualistic culture than it was before in Vietnam. For reference, this result is also similar to the result of most recent research in a neighboring country Thailand (Kokubun, 2017a). The common characteristics of Vietnam and Thailand are not only of their geographical positions but also of the existence of individualistic villages where people are brought up with scarce interaction. Perhaps, individualistic features may be more or less common in this Indochina region, although off course further research will be necessary before we reach to say something more clearly.

However, at the same time, we may easily notice from more precise observations that Vietnam still has faces of a developing and collectivistic country. In line with Hypotheses 1 and 2, extrinsic rewards were found to influence OC to a high degree of significance. This contradicts findings from some of previous studies in the West, which suggest the extrinsic benefits have limited impact on the commitment of employees (Goulet & Frank, 2002; Steijn & Leisink, 2006), but is supportive of findings from works on Asian organizations (Chiu, Luk, & Tang, 2002; Miao, et al., 2013; Newman & Sheikh, 2012). This finding might be attributed to the fact that our work was done in the context of a transitional economy in which there is a lower standard of living than in the West and individuals are therefore more responsive to financial rewards. In addition, relatively substantial fringe benefits packages provided to employees working for Japanese companies may be a major incentive in the light of increase in the cost of living witnessed in recent years.

In line with Hypotheses 3 and 4, supervisor and co-worker support were found to have a significant influence on OC. These findings provide further evidence of the importance of social rewards in a collectivistic society such as Vietnam. This result may be at the same time preferable observation for Japanese companies which intend to transplant activities in Vietnam as they are also known collectivistic and members are requested to build strong relationships with their supervisors and co-workers in a workplace characterized by respect for seniority and high levels of reciprocity between individuals.

Autonomy was found to influence OC, providing support for Hypotheses 5. This is in line with findings from previous empirical work on organization in the West (Steijn & Leisink, 2006) and China (Chen & Aryee, 2007; Miao, et al., 2013), and suggests that Vietnamese employees tend to be more committed if they are provided with discretion on the work. Being provided with autonomy should provide a signal to employees that they are trusted and valued by their organization, and in turn engender higher levels of OC.

However, at the same time, it must be taken note that this result also could be consistent with the Vietnamese characteristics that they are highly flexible, adaptable and creative but can also be random, careless and disregard the law (Toan, 2016). The Vietnamese attitudes and behaviors originated from that culture sometimes cause selfishness, balkanization, factions, and the 'local village spirit' at the workplace (Tran, 1996). As Japanese expatriate managers notice these blemishes of Vietnamese, they dominate information, decision-making, status and financial resources, without providing full discretion to Vietnamese staffs and accordingly, many Japanese companies have continued huge reliance on expatriate managers. At the same time, the reason of such circumstance is often said to be that Japanese managers have a negative image toward skills or abilities of local employees, which prohibits them from recruiting highly qualified local employees (Nihon Keizai Dantai Rengokai, 2006). In this sense, the most significant problems for Japanese companies might be not only the inability of Vietnamese employees to work cooperatively but also the inability of Japanese managers to completely trust local employees (Colignon, Usui, & Kerbo, 2007).

Likewise, the finding that the provision of training enhances OC, providing support for Hypothesis 6, is in line with most other findings from empirical works in Asia. However, it contradicts the findings of some previous works conducted on samples in the West, which find that training does little to enhance OC. This difference may

be perhaps attributed to generally low income level of Vietnam, where people cannot spend for skill improvement fully except they are members of stable and big companies which spend for them. In such a circumstance, a company's training provision will be certainly perceived as a reward and in turn cause increase of OC.

However, the significant interaction results as per Hypotheses 9 and 12 suggest that the relationships of OC with fatigue and autonomy are greater among university graduates compared with others. On the other hand, insignificant interaction results as per Hypotheses 8, 10, 11 and 13 suggest that there is no significant difference between university graduates and others on the relationships of OC with benefit satisfaction, supervisor/co-worker support and training provision.

5. Implications for theory and practice

The present study contributes to the literature in four main ways. First, in line with previous works, it shows that national culture is an important factor to determine antecedents of organizational commitment (OC) (Glazer, Daniel, & Short, 2004). Specifically, it highlights differences between the factors that enhance the OC of employees working in Vietnam and employees working in the West. Compared to employees from less hierarchical, more individualistic cultures in the West, employees working in Vietnam, which are of more collectivistic cultures, typically respond more positively to the existence of social rewards, namely high-quality relationships with others in the workplace.

Second, however, it became also apparent that the East is not an area of single culture. OC of Vietnamese employees in this research is more associated with intrinsic rewards than extrinsic and social rewards, whereas that of Chinese employees in previous research is more correlated with extrinsic and social rewards than intrinsic rewards. This difference would be because of cultural difference of Vietnam with China and other Asian countries. Some previous research shows that Vietnam has dual faces of collectivistic and individualistic society due to its isolated village structure where people are born and brought up without interrelation with people in different villages (Nguyen & Aoyama, 2013). Anyway, for managers of MNCs who are inclined to rely on monetary rewards and social activities only for motivating employees and do not fully consider of the employees' participative way of working and skill-utilization opportunity, this result will be much important to be referred to change their way of management in Vietnam to better direction.

Third, whereas provision of training has been shown to be less important in the West in some previous research, the results of this study demonstrate that in Vietnam it is important, as were similarly shown in other developing countries (Newman, et al., 2011; Owoyemi, Oyelere, & Elegbede, 2011). The reason why the results obtained in Vietnam is different from the one in the West might be because employees in Vietnam are still technically immature in general and do not cause mismatch between the training a company provides and the skill an employee wants to obtain. As most employees in Vietnam do not possess enough remedy to enhance their own skill, many kinds of training offered by a company may be perceived as enough reward for them to reciprocate to the company. The fact that most results obtained in other studies conducted in setting of transitional economies find positive and significant relations between training and OC supports this assertion. Although not a few companies tend to reduce expenditure for training due to high turnover rate and recent economic downturn in Vietnam, it will be important to maintain the quantity or quality of training for keeping OC of employees in good condition.

Forth, some differences between university graduates and others became clear. Namely, fatigue control and autonomous work provision are more important for engendering OC of university graduates than of others. However, other rewards, i.e., benefit satisfaction, support from the boss/co-workers and training, show no significant difference between university graduates and others on the degree of association with OC. The two opposing results, higher association between fatigue and OC in university graduates than others and no difference on association between benefit satisfaction and OC between these two parties, may be interpreted that university graduates are more individualistic and demanding additional benefits, not only of good payment and position in the company but also of other treatments such as health-care control and work-life balance than others, whereas others may be as eager as university graduates for earning money to survive but may less demanding furthermore because of their less individualistic nature. This result might become supportive information to companies which afford to consider taking care of skilled employees' welfares from more various viewpoints. Likewise, the higher association between autonomy and OC for university graduates than others may indicate that the former requires more autonomous works where they can have more confidence on their skills utilizing talent and ideas appropriately. This result may have to do with the current sellers' market for talented workforces in this country; i.e., as the volume of labor force with enough skills is totally scarce, the ones who

have are in an advantageous position to select workplaces more freely and accordingly may typically respond to such reward.

It is often said that skilled and talented workers dislike working for Japanese companies as the expatriates dominate important jobs and positions and the local staffs face difficulties to utilize talents and abilities they obtained at universities. So, this result could be interpreted that companies may be able to attract more skilled and talented university graduates by reconsidering delegation and empowerment schemes and way of localization. In line with this, a company may also reconstruct training schemes to become more attractive for university graduates as equal association between training provision and OC for university graduates and others despite stronger individualism of the former implies more significant mismatch between the training a company provides and the skill they want to obtain. Other results, i.e. support from supervisors/co-workers are related with OC to the same degree for university graduates and others, may be interpreted that in Vietnam university graduates who cultivate more westernized view than others and others who have more isolated village spirit than university graduates share collectivistic/individualistic culture to the same degree.

6. Study limitations and suggestions for future research

There are three significant limitations on this research. The first one is of sample bias: i.e., most participants of this research are from Red River Delta of Vietnam. However, it is often pointed out that Vietnamese are different in characters by regions. For example, empirical study found that managers in Red River Delta appeared to exhibit a more Western orientation toward individualism while those in South East area held a more traditional Asian collectivist bent (Ralston, et al., 1999). So, further study is recommended to collect more samples in South East. The limited origin of the companies to Japan may off course possibly be a reason of bias and the result should be tested with more variety of companies in future.

The second limitation of this research is about reliability. This study used self-report data from single respondents, which may have resulted in common method bias. Future research might consider the inclusion of supervisor-rated scales to reduce the bias and remedy the weakness of the present study design.

The last is ambiguity of terminology. The researcher called Vietnamese 'collectivistic' in some parts and 'individualistic' in others. This might be very contradicting and possibly makes readers feel it difficult to understand about the nature of OC-rewards relationship in Vietnam. Although researcher considers such ambiguity is a characteristic of this country but future research may more successfully expand the discussion by reorganizing these words more appropriately.

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Appendix. Demographic information.

	Educational background								Total
	Lower Secondary School	Upper Secondary School	Specialized College	College/Vocational	University	Graduate School	In the middle of school years	Others	
University graduates	0	0	0	0	1,548	27	0	0	1,575
	0.0%	0.0%	0.0%	0.0%	98.3%	1.7%	0.0%	0.0%	100.0%
Others	181	2,066	389	1,219	0	0	54	38	3,947
	4.6%	52.3%	9.9%	30.9%	0.0%	0.0%	1.4%	1.0%	100.0%
Total	181	2,066	389	1,219	1,548	27	54	38	5,522
	3.3%	37.4%	7.0%	22.1%	28.0%	0.5%	1.0%	0.7%	100.0%

	Gender			Total	Age					Total
	Male	Female	Below 20 years old		20-29	30-39	40-49	50 years old and above		
University graduates	1,057	518	1,575	0	1,055	489	28	3	1,575	
	67.1%	32.9%	100.0%	0.0%	67.0%	31.0%	1.8%	0.2%	100.0%	
Others	2,011	1,936	3,947	33	3,067	777	65	5	3,947	
	51.0%	49.0%	100.0%	0.8%	77.7%	19.7%	1.6%	0.1%	100.0%	
Total	3,068	2,454	5,522	33	4,122	1,266	93	8	5,522	
	55.6%	44.4%	100.0%	0.6%	74.6%	22.9%	1.7%	0.1%	100.0%	

	Tenure					Total	Turnover experience		Total
	Below 1 year	2 year	2-5 years	6-9 years	10 years and above		Have experience	Have no experience	
University graduates	152	347	667	294	115	1,575	1,145	430	1,575
	9.7%	22.0%	42.3%	18.7%	7.3%	100.0%	72.7%	27.3%	100.0%
Others	222	466	1,833	997	429	3,947	1,869	2,078	3,947
	5.6%	11.8%	46.4%	25.3%	10.9%	100.0%	47.4%	52.6%	100.0%
Total	374	813	2,500	1,291	544	5,522	3,014	2,508	5,522
	6.8%	14.7%	45.3%	23.4%	9.9%	100.0%	54.6%	45.4%	100.0%

	Marital status			Total	Department		Total	Position		Total
	Single	Married	Others		Direct department	Indirect department		Managerial position	Non-managerial position	
University graduates	711	853	11	1,575	1,081	494	1,575	167	1,408	1,575
	45.1%	54.2%	0.7%	100.0%	68.6%	31.4%	100.0%	10.6%	89.4%	100.0%
Others	1,495	2,422	30	3,947	3,295	652	3,947	79	3,868	3,947
	37.9%	61.4%	0.8%	100.0%	83.5%	16.5%	100.0%	2.0%	98.0%	100.0%
Total	2,206	3,275	41	5,522	4,376	1,146	5,522	246	5,276	5,522
	39.9%	59.3%	0.7%	100.0%	79.2%	20.8%	100.0%	4.5%	95.5%	100.0%

	Industry					Total	Area		Total
	Automobile	Automobile parts	Electrical	Electrical parts	Others		Red River Delta	South East	
University graduates	1,054	40	355	79	47	1,575	1,496	79	1,575
	66.9%	2.5%	22.5%	5.0%	3.0%	100.0%	95.0%	5.0%	100.0%
Others	1,551	421	1,096	504	375	3,947	3,443	504	3,947
	39.3%	10.7%	27.8%	12.8%	9.5%	100.0%	87.2%	12.8%	100.0%
Total	2,605	461	1,451	583	422	5,522	4,939	583	5,522
	47.2%	8.3%	26.3%	10.6%	7.6%	100.0%	89.4%	10.6%	100.0%

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