

# HIGH PERFORMANCE HUMAN RESOURCE SYSTEM, JOB SATISFACTION AND ORGANIZATIONAL CITIZENSHIP BEHAVIOR: A MEDIATING MODEL IN VIETNAMESE CONTEXT

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## Abstract:

Empirical research on strategic human resource management indicated the positive linkage between a bundle of human resource (HR) practices and performance. However, mediating mechanisms linking human resource system and important outcomes at different levels is still open for debate. The recent years has witnessed increasingly the emphasis on the importance of organizational citizenship behavior, which is employees' behavior and actions beyond the basic requirements of the jobs. These actions are able to facilitate the employee and organizational performance. This study aims to open the so-called "black-box" by investigating the relationship between a bundle of human resource practices called high performance human resource (HPHR) system and organizational citizenship behavior in Vietnam context. This study contributes understanding mediating mechanism in HR-employee behavior relationship at the individual level. In this study, we used a system of HPHR practices including selective staffing, extensive training, internal mobility, employment security, clear job description, results-oriented appraisal, inventive reward, and participation to assess human resource practices implemented in Vietnamese firms and influence of these practices on organizational citizenship behavior. This study developed and tested a model that job satisfaction mediated the relationship between HPHR system and organizational citizenship behavior. We hypothesized that HPHR system had a positive impact on organizational citizenship behavior through job satisfaction with full mediating effect. 179 usable data collected from line managers of Vietnamese firms in Hanoi, QuangNinh and Hochiminh was used to test the research model. We discussed theoretical and practical implications of research findings and also suggested future research directions.

*Key words: high performance human resource, organizational citizenship behavior, job satisfaction, mediating model, Vietnam.*

## 1. INTRODUCTION

Human resource management (HRM) literature have highly appreciated the use of HRM practices to furnish employees' attitude and behavior to achieve business performance. The resource-based theory exposed that organization needed to adopt HRM practices which can be easily inimitable and encourage employees to create added value to organizations in order to compete in the market (Wright & McMahan, 1992). HRM studies indicated several HRM systems which are beneficial for employees and

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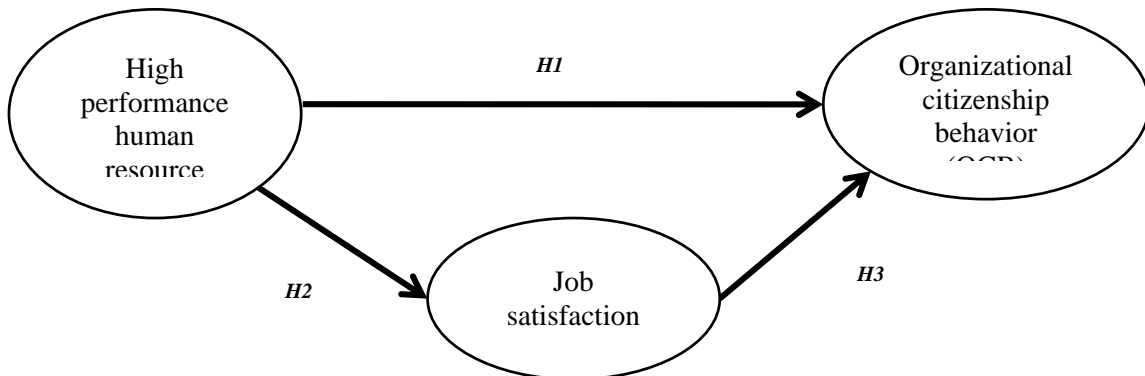
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organizations such as high performance human resource (HPHR) system (Huselid, 1995), high commitment human resource system and high involvement human resource system (Guthrie, 2001). Especially, HPHR system is one of the interesting topics discussed with the aim of improving organizational performance. A HPHR system, known as “a system of human resource practices designed to enhance employees’ skills, commitment, and productivity in such a way that employees become a source of sustainable competitive advantage” (Datta, Guthrie, & Wright, 2005, p. 136) has a positive relationship with numerous indicators of organizational performance (Combs, Liu, Hall, & Ketchen, 2006). A growing body of work from various disciplines characterized HPHR system as a modern form of HRM system to enhance organizational performance outcomes. Besides, many human resource scholars have great attempt to explore the relationship of HPHR system with employees’ attitudinal and behavioral outcome. Recently, HR scholars have increasingly paid attention to the linkage between HPHR system and employee behaviors - organizational citizenship behavior (OCB) in specific, which is positively related to organizational effectiveness. The recent study of the OCB role in the relationship between HRM system and organizational effectiveness indicated that OCB constitutes the mechanism through which HPHR system positively impacts on organizational performance (L.-Y. Sun, Aryee, & Law, 2007). Further, many HRM research indicated that HPHR system practices have the impact on employee attitude and behaviors, and thereby, leading to organizational performance (Delery, 1998; Wright, McMahan, & McWilliams, 1994). Specifically, HRM scholars have turned their attention to study the effect of HRM systems on individual employee attitudes and behaviors (Allen, Shore, & Griffeth, 2003; Kuvaas, 2008; Wright, Gardner, & Moynihan, 2003; Zacharatos, Barling, & Iverson, 2005), such as job satisfaction and affective commitment (Allen et al., 2003; Takeuchi, Chen, & Lepak, 2009; Wu & Chaturvedi, 2009), trust in management and organizational commitment (Whitener, 2001). Though, there exists a debate on mediating process and mechanisms involved in HRM effects, which is called “black box” problem (Paauwe, 2009; Ramsay, Scholarios, & Harley, 2000). The recent studies have paid more attention to explore organizational commitment and job satisfaction as mediators in the positive linkage between HRM systems and individual behaviors; however, their findings have been varied (Allen et al., 2003; Kehoe & Wright, 2013; Kuvaas, 2008; Snape & Redman, 2010a). Therefore, it is suggested that it is necessary for future research to examine the impact mechanism of HRM practices on individual behaviors (Alfes, Shantz, Truss, & Soane, 2013).

The purpose of this study is to explore the mediating mechanism through which HPHR system influence on OCB. More specifically, based on social exchange theory (Blau, 1964), this study proposes an individual framework, in which job satisfaction mediates the positive HPHR system - OCB relationship. This study focuses on Vietnam context with the aim of extending the generalizability and application of Western theories to the Asian context. Being one of Asia's fastest-developing countries, Vietnam has a high average annual growth, and Vietnam organizations strive to utilize HPHR system in reinforcing employee in-role performance. However, there are a few studies on the impact of HPHR system on Vietnamese organizational performance. In addition, the SHRM literature highlights that most studies examining the relationship between HPHR system and OCB have been conducted in the western countries. Hence, to fill this research gap and to answer the question whether HPHR system stimulate employee extra-role behaviors remains the same results in different contexts, it is vital to study the mechanism linking between HPHR system, job satisfaction, and OCB in emerging economic context like Vietnam.

Based on data collected from line managers of Vietnamese firms in Hanoi, QuangNinh, and Hochiminh, this study aims to conceptualize effect mechanism of HPHR system on OCB through job satisfaction as presented in Figure 1

**Figure 1: Research framework**



## 2. THEORETICAL BACKGROUND

### 2.1. High performance human resource system

HRM literature witnessed a large number of researches have focused on exploring the impact of individual HRM practices on employee behaviors at the individual level (Boselie, Dietz, & Boon, 2005; Wright & Boswell, 2002). However, some recently HRM scholars argued that HRM practices need to be treated as a set or bundle of individual HRM practices rather than single practices to assess their influence on employee outcomes (Gould-Williams & Mohamed, 2010; Snape & Redman, 2010a). Some recent studies examined multiple HR practices as a system; specifically, HRM system was mentioned as an HPHR system (Huselid, 1995) or as an HRM practice configuration (Delery & Doty, 1996; Lepak & Snell, 1999). Wright and Boswell (2002) argued that single HRM practices can create an effect of substitution, complement, or even conflict with other HRM practices. A coherent “system” or “bundle” (Delery & Doty, 1996; MacDuffie, 1995) of HRM practices which can bring to higher effectiveness, as in the synergistic relationship, any HRM practice can support and enhance the effectiveness of one another; thus, the effect of entire HRM system is greater than the sum of single effects from each HRM practice alone (B. E. Becker, Huselid, Pickus, & Spratt, 1997; Ichniowski, Shaw, & Prenzushi, 1997). This recommends that employee perceptions of HRM systems rather than single HRM practices may be appropriate for identifying employee behaviors and attitudes (D. Guest, Conway, & Dewe, 2004; D. E. Guest, 2004; Paauwe, 2009). Hence, there is a need to study the impact of the entire system of HRM practices on employee behaviors.

HPHR practices are considered as “coherent practices that enhance the skills of the workforce, participation in decision making, and motivation to put forth discretionary effort” (Appelbaum, 2000, p. 26) and “result in ... superior intermediate indicators of firm performance and sustainable competitive advantage” (Way, 2002, p. 765). Although HPHR system is a subject in many HRM research, there exists little consensus among HR scholars about the specific HRM practices to be comprised in the configuration of HPHR system (B. Becker & Gerhart, 1996; Collins & Smith, 2006; Datta et al., 2005; Delaney & Huselid, 1996). The specific HRM practices comprised in HPHR systems have been numerous across research; however, a commonality of HRM practices in high performance approach focuses on developing workforce skills and ability, increasing

employee motivation for discretionary effort, and providing employees with opportunity to fully utilize their knowledge, skills and other attributes in their jobs (Appelbaum, 2000; Combs et al., 2006; D. E. Guest, 1997) to perform behaviors consistent with organizational goals. HPHR system are thus determined by the combination of single HRM practices which collectively influence on organizational performance. Particularly, based on dimensions of HPHR systems adopted by Sun et al., (2007) our study included HRM practices which develop ability such as selective staffing, extensive training; enhance motivation such as results-oriented appraisal, incentive reward, employment security; and create opportunities such as internal mobility, encouragement of participation, clear job description (L.-Y. Sun et al., 2007).

## ***2.2. The linkage between High performance human resource system and organizational citizenship behavior***

The linkage between an organization and its employees can be conceptualized as “involving economic and social exchange” (Snape & Redman, 2010a, p. 1224). Economic exchange involves exclusively in a specific contract relationship, which only requires particular performance of contractual obligations, does not expect performance beyond the detailed contractual terms. In contrast, social exchange is based on imperfectly specific terms and norms of reciprocity (Blau, 1964). Social exchange theory shows that discretionary benefits offered to the exchange partner are paid back in a discretionary way in the longer term (Blau, 1964; Rhoades & Eisenberger, 2002). Social exchange perspective gives a conceptual framework to explain how employee perceptions of HRM system are related to employee behavior. If employees receive socio-emotional and economic benefits from their organizations, they will return discretionary role behaviors to their organizations. These discretionary role behaviors are considered as forms of organizational citizenship behavior. Organizational citizenship behavior (OCB) often known as an extra-role behavior is defined as “individual behavior that is discretionary, not directly or explicitly recognized by the formal reward system, and that in aggregate promotes the effective functioning of the organization” (Organ, 1988, p. 4). OCBs go beyond the basic requirements of the job and thereby, they are not easily enforced by the threat of sanctions (Smith, Organ, & Near, 1983).

HRM practices may be viewed as an input into the social exchange process (Snape & Redman, 2010a). HRM systems can develop environment which can encourage or even discourage OCB (Morrison, 1996). When employees receive long-term investment from organizations through HRM practices, they feel obligated to reciprocate with discretionary role behaviors that are typically conceptualized in terms of OCB (Gong, Chang, & Cheung, 2010; Shaw, Dineen, Fang, & Vellella, 2009; L.-Y. Sun et al., 2007). As Hannah and Iverson (2004, p. 339) asserted: "HRM practices are viewed by employees as a “personalized” commitment to them by the organization which is then reciprocated back to the organization by employees through positive attitudes and behavior."

In a similar vein, Leana and Van Buren (1999) indicated that human resource management practices foster the development of high-quality exchange relationship leading employees to assume the role of good organizational agents. Indeed, they stressed that “if individuals believe that their efforts are an integral part of a collective, they are more likely to spend time doing things the organization and/or its members find useful (e.g., engaging in extra-role behavior or working cooperatively) and less time doing things benefiting the individual but not the organization (e.g., social loafing, self-promotion, or unwillingness to cooperate)” (Leana & Van Buren, 1999, p. 548). Further,

in employee – organization relationship, the mutual investment reflected in HPHR system will motivate employees to perform better on their core task and also demonstrate more citizen behaviors to their organizations (Tsui, Pearce, Porter, & Tripoli, 1997).

HPHR system, namely selective staffing, extensive training, internal mobility, employee security, clear job description, result-oriented appraisal, incentive reward and participation, provides employees with multiple social resources such as appreciation, recognition, prestige, fairness, growth and empowerment, which fosters social exchange relationship with employees. Thanks to HPHR system, employees are likely to perceive investment from their organizations and reciprocate by expand their job roles and engaging more in OCB (Morrison, 1996). In line with this argument, the findings of (L.-Y. Sun et al., 2007) from cross-level analysis reported that HPHR practices were positively related to service-oriented OCB. Moreover, based on a collective social exchange approach, a study conducted at the middle management group level in China firms found that HPHR system had a positive relationship with collective OCB through collective affective commitment (Gong et al., 2010). Hence, we predict that employees with positive perceptions of their HPHR system will demonstrate more OCB and hypothesize as follows:

Hypothesis 1: There is a positive relationship between HPHR system and OCB

### ***2.3. The relationship between High performance human resource system and job satisfaction***

As mentioned above, the conceptualization of HPHR system assumed that such systems contain a set of HRM practices which have an impact on employee motivation and attitudes (Huselid, 1995). HPHR system can encourage employee participation in decision making, motivate employees as well as enhance knowledge, skill and ability of employee to perform better their job duties for organizational performance (Lepak, Liao, Chung, & Harden, 2006). Employees will feel satisfaction when their organization offer them opportunity to participate in decision making process, deliver training programs to improve their knowledge, skill and ability to perform their job performance and provide clear communication between hierarchies (D. E. Guest, 1999, 2004; Guzzo & Noonan, 1994). Hence, HPHR system play an important role in increasing employee job satisfaction (Harley, 2002; Macky & Boxall, 2007).

There is also increasing body of work providing evidence that job satisfaction is associated with HPRH systems (Appelbaum, 2000; D. E. Guest, 1999; Harley, 2002; Macky & Boxall, 2007). Particularly, D. E. Guest (1999) indicated that employees who assessed experiencing higher numbers of HRM practices reported higher level of job satisfaction. Similarly, in a study on the high performance work practices – employee attitudes linkage, Macky and Boxall (2007) also asserted that high performance work practices were generally related to improvement of employee attitudes, especially would have more satisfied employees (Appelbaum, 2000; D. E. Guest, 1999). Similarly, Takeuchi et al. (2009) conceptualized and tested HPHR practices as a system to explore the influence of overall HRM system on individual employee attitudes, and also acknowledged the positive relationship between HPHR system and job satisfaction. Consequently, we claim that the use of HPHR system makes employees feel more satisfied because this system allows them have more voice in organizational goal setting, empower them more job autonomy, and also provide them more training and development opportunities. Employees are more likely satisfied with their jobs simply because they respond to a HPHR system implemented within their organization.

Hypothesis 2: There is a positive effect of HPHRS on job satisfaction

#### ***2.4. Job satisfaction and organizational citizenship behavior relationship***

Job satisfaction is known as one of key job attitudes (George & Jones, 1997; Jehn, Northcraft, & Neale, 1999; MacKenzie, Podsakoff, & Ahearne, 1998). The OCB literature recognized the positive relationship between job attitudes and OCB. The initial research on main antecedents of OCB focused on employee characteristics, one of which is a general affective “moral” factor (Bateman & Organ, 1983; O’Reilly & Chatman, 1986; Smith et al., 1983). The affective “moral” factor viewed as underlying perceptions of fairness and leader supportiveness, job satisfaction and organizational commitment (Organ & Ryan, 1995) had significant relationship with OCB and was considered as important determinants of OCB (Podsakoff, MacKenzie, Paine, & Bachrach, 2000). In the critical review of theoretical and empirical OCB literature, Podsakoff et al. (2000) identified job attitudes such as employee satisfaction and organizational commitment, perception of fairness as one of antecedents of OCB, which are more strongly associated with OCB than the others. Along with Organ and his colleagues (Bateman & Organ, 1983; Moorman, 1991; Moorman, Niehoff, & Organ, 1993; Organ, 1988, 1990; Smith et al., 1983), job satisfaction and organizational commitment have positive influence on citizenship behaviors. Specifically, Bateman and Organ (1983) and (Organ & Konovsky, 1989) described the positive relationship between job satisfaction and OCBs in their research on managers and academics. Further, Williams and Anderson (1991) conducted a study of professional managers, which reported a positive associations between job satisfaction and OCBs. Similarly, the positive link between job satisfaction and extra-role behaviors was also explored in the study of sale employees (MacKenzie et al., 1998). Employees satisfied with their job will respond in kind by showing willingness to engage more in extra-role behaviors. The conceptual basis for predicting job satisfaction – OCBs relationship draws upon social exchange theory (Blau, 1964), which indicates that in given certain conditions, employees will seek to reciprocate those who benefit them. As employees’ satisfaction origins from organizational efforts such use of HPHR system to enhance employees’ competencies, create development opportunities, and such efforts are inferred as non-manipulative and volitional intent, employees will seek to pay back those organizational efforts with more OCBs. A positive relationship between job satisfaction and OCBs thus is expected

Hypothesis 3: There is a positive influence of job satisfaction on OCB

#### ***2.5. Job satisfaction as mediator in high performance human resource system – organizational citizenship behavior relationship***

Although the empirical research asserted the positive link between high performance HR practices and OCB (Alfes et al., 2013; Gong et al., 2010; Snape & Redman, 2010a; L.-Y. Sun et al., 2007), this link likely relies on some intervening attitudinal explanation that was not directly influenced by immediate rewards such as extensive training, performance-based incentives from the organization, such as HPHR system, to increase extra-role behavior (Kehoe & Wright, 2013). Further, D. E. Guest (1997) proposed a theoretical model on HR practices – performance relationship and suggested that employee perceptions of HR practices result in attitudinal outcomes, which consecutively produce behavioral outcomes such as OCB. Particularly, the HPHR system–OCB relationship can be better explained indirectly through the influence of HPHR system on job satisfaction. Following HRM theorist, behavioral and attitudinal outcomes of employees are shaped by “the communicative nature of everyday HR practices” (Guzzo & Noonan, 1994, p. 453). In addition, Rousseau and Greller (1994, p.

385) also noted that “a person’s experience in an organization . . . is shaped by personnel actions such as recruiting, appraising performance, training, and benefits administration”. The communicative feature of HPHR can lead to the development of psychological relationship between employees and their organizations through building trust and producing norms of reciprocity (Arthur, 1994; Pfeffer, 1994). Previous studies mentioned to HPHR system as a mutual investment approach, which was developed based on a reciprocal relationship and social exchange perspectives (Tsui et al., 1997). From social exchange theory, HPHR system provides employees opportunities to take part in decision making process, motivates employees by delivering recognition, as well as improve employees’ skills, knowledge, and ability to perform their job roles (Lepak et al., 2006), which make employees feel more satisfied. Employees are thus willing to reciprocate in a positive manner by working harder and becoming more committed to the organization, and thereby engaging more in OCBs (Appelbaum, 2000; Settoon, Bennett, & Liden, 1996). Through mutual reinforced HPHR system, the organization provides their employees substantial inducements, which extend beyond monetary rewards, results to more job satisfaction. Consequently, employees with high job satisfaction are willing to contribute in order to achieve organizational goals as well as are more motivated than others to exert considerable efforts in extra role performance to further organizational effectiveness, even if they do not expect to be directly compensated for this behavior on the basis of formal HPWS. We thus expect that job satisfaction play the mediating role in the HPHR system-OCB relationship.

Hypothesis 4: Job satisfaction mediates the relationship of HPHR system and OCB

### **3. METHODOLOGY**

#### ***3.1. Sample and procedures***

In this study, the 179 usable data were collected by the convenience sampling method. The questionnaires were sent to the target respondents who are line managers in three cities in Vietnam including Hanoi, Hochiminh and Quang Ninh. The information of participants in this research was assured to be confidential and anonymous. The questionnaire was designed, translated into Vietnamese, and pretested. The draft questionnaires were developed in English, and then independently translated into Vietnamese by two Vietnamese bilingual academics who are in charge of conventional translation and back-translation. Then, the questionnaires were reviewed by two HR managers of Vietnamese companies to test the accuracy of the professional terms and perspicuity. Then the mass survey was conducted to collect the data from the target populations. The main content of the questionnaire comprises 60 questions focusing on surveying the respondents’ assessment on HPHR, job satisfaction, and OCB. Concerning these quantitative questions, respondents are required to rate their agreement with each statement based on a 7-point Likert scale, varying from 1-strongly disagree to 7-Strongly agree. In the general information part, company size in term of the number of employees, industry, type of ownership, tenure, education background, working department, gender and range of age of respondents are also contained by choosing among proposed alternatives. If the respondents cannot find the suitable answer, they can fill in the provided blank in the survey.

After collecting and cleaning the data, SPSS 22.0 software is used to analyze the data with following steps: testing reliability of scale and validity of questionnaire through Cronbach's alpha coefficient, analyzing correlation, and regression. Finally, empirical implications and future research suggestions basing on the research findings are also presented.

### **3.2. Measures**

The questionnaire consists of 60 measurement scales, in which HPHR (27 items), job satisfaction (11 items), and OCB (22 items). After testing the reliability of scales, all of the scales achieved an alpha reliability of high value more than 0.90 (HPHR:  $\alpha=0.936$ , OC:  $\alpha=0.902$ , and OCB:  $\alpha=0.935$ ). This result is a consequence of a well-designed, clear questionnaire, well-grouped, and good samples. And the measures gain the extreme reliability (Hair, Black, Babin, Anderson, & Tatham, 1998; Nunnally & Bernstein, 1994).

#### ***High performance work system***

A 27 item HPHR scale adapted from L.-Y. Sun et al. (2007) was used to measure high performance work system. The eight HPHR subscales, including selective staffing, extensive training, internal mobility, employment security, clear job description, result-oriented appraisal, incentive reward, and participation were measured. Respondents were required to choose option with seven-point Likert-type scale ranging from 1 – “strongly disagree” to 7 – “strongly agree” for evaluating statement on high performance work system practices. However, the “Cronbach's Alpha if item deleted” of MBO3A (Promotion in this organization is based on seniority (reverse-coded)) is 0.939 and the corrected item-total correlation is also so low. So this items was eliminated. Finally, there were 26 items used to measure HPHR.

#### ***Organizational citizenship behavior***

Following Organ (1988, 1990) and Podsakoff et al. (2000), a set of 22 items with a response scale ranged from 1 – “strong disagree” to 7 – “strongly agree” is used to measure employees' OCB (e.g. "Attends functions that are not required, but help the company image"). In the measurement scales, there were some reversed items used such as "I consume a lot of time complaining about trivial matters". OCB are divided into five dimensions, including civic virtue, sportsmanship, altruism, courtesy, and conscientiousness (Organ, 1988, 1990; Podsakoff et al., 2000). There are two scales were eliminated from this group basing on the reliability testing. They are "Is the classic “squeaky wheel” that always needs greasing" and "Tries to avoid creating problems for coworkers". And there are 20 remaining items.

#### ***Job satisfaction***

Job satisfaction was measured by 11 items with 7-point scale with endpoints "strongly disagree" and "strongly agree" developed and assessed by (Brayfield & Rothe, 1951). For example, the respondents rate their agreement toward these statement "Most days I am enthusiastic about my work", or "I consider my job rather unpleasant" (reversed item). After eliminating the item JS8 - "Each day of work seems like it will never end" - with the corrected item-total correlation is also so low at 0.220, the Cronbach's alpha for Job satisfaction is 0.902. The results indicated that the measures in this study achieved the adequate reliability and validity.



## 4. EMPIRICAL RESULTS

### 4.1. Respondent profile

The descriptive results of demographic variables are summarized in Table 1.

**Table 1: Sample Demographic profiles (N=179)**

<i>Factors</i>	<i>Samples N=179</i>	<i>Percentage (%)</i>	<i>Factors</i>	<i>Samples N=179</i>	<i>Percentage (%)</i>
<b>Type is your company</b>			<b>Education background</b>		
Private Company	18	10.1	College	11	6.1
Limited Company	76	42.5	Bachelor	122	68.2
Joint Stock Company	64	35.8	Master	44	24.6
Public Company	14	7.8	Other	2	1.1
Other	7	3.9	<b>Department</b>		
<b>Company size</b>			Management	44	24.6
Below 10	4	2.2	Sale and Mar	30	16.8
Oct-50	42	23.5	HR	30	16.8
50-100	37	20.7	Finance	17	9.5
100-200	32	17.9	Supply Chain	8	4.5
200-300	12	6.7	R&D	6	3.4
Above 300	52	29.1	IT	4	2.2
<b>Field</b>			Operation	17	9.5
Agriculture, Aquaculture and Fishery	14	7.8	Others	23	12.8
Industry and construction	55	30.7	<b>Gender</b>		
Commerce and service	88	49.2	Male	112	62.6
Other	22	12.3	Female	67	37.4
<b>Position</b>			<b>Range of age</b>		
Tenure	2	1.1	Below 25	9	5
3-Jan	16	8.9	26-35	74	41.3
7-Mar	53	29.6	36-45	80	44.7
10-Jul	48	26.8	Above 45	16	8.9
Above 10	60	33.5			

Most of the respondents are working for limited companies and joint stock companies, particularly 42.5% of the limited company and 35.8% of Joint Stock Company. The size of the company is very diverse with 23.5% having from 10 to 50 staffs, 17.9% of from 100 to 200 staffs. Especially, there are 52 companies having more than 300 employees, accounting for 29.1%. Concerning the field, the percentage of agriculture, aquaculture and fishery section, industry and construction section, commerce and service section are 7.8%, 30.7%, 49.2%, respectively. Most of the respondents have more than 3 years working experience (89.9%). These figures are quite consistent with the range of age of respondents with more than 90% of them are more than 26 years old. Concerning the educational background, higher education is dominated with 92.9% of respondents having a bachelor or master degree. This indicated a favorable picture of

well-educated respondents. They have enough working time to have a good insight of company. Besides, 62.6% of respondents is male and 37.4% is female. People who answered the questionnaire are working for different departments. This result indicated that the sample is reliable and able to represent the target population.

#### **4.2. Test of hypothesis**

Before doing regression analysis, the Pearson correlation coefficient ( $r$ ) is examined with the intention of evaluating the correlations among variables. The analysis results in a correlation matrix among variables are shown in Table 2. The absolute size of the number indicates the magnitude of the correlation of two variable and the sign reveals the direction of relationship (Christensen, Johnson, & Turner, 2011). With all Sig. values at the 0.01 level, the results show that there is the positive correlation among research variables. In detail, HPHR has the strong positive correlation with JOBSATIS at Pearson Correlation coefficient of 0.694. Similarly, the HPHR and OCB have a strong positive correlation at Pearson correlation coefficient of 0.644. JOBSATIS and OCB also possess the same trend with the moderate value of Pearson Correlation coefficient at 0.539. The above outcome demonstrated the appropriateness to apply regression analysis to this set of data.

**Table 2: Means, standard deviations, reliabilities and correlations of the study variables**

<b>Variables</b>	<b>M</b>	<b>SD</b>	<b>1</b>	<b>2</b>	<b>3</b>
1 HPHR	4.9987	0.9987	0.936		
2 JOBSATIS	5.2341	1.0735	0.694**	0.902	
3 OCB	5.3863	0.9732	0.539**	0.644**	0.935

Note: \*\* $p < 0.01$

Besides, the mean values of three factors felt in the range from 5.0 to 5.4 out of 7.0. It means that most of the respondents agree with these statements in the questionnaire. Specifically, HPHR has a mean of 4.4987 (SD=0.9987), mean of JOBSATIS is 5.2341 (SD=1.0735), and OCB has a mean of 5.3863 (SD=0.9732). This provides the initial outcome that would be supportive for the proposed hypotheses. To demonstrate the research hypotheses, the further analyses are very essential.

#### **Linear regression analysis**

To test the three first hypotheses, linear regression analysis will be employed. This is also the most widely statistical analysis using to explore the relationship between quantitative variables (Christensen et al., 2011, p. 418). In this statistical analysis, two quantitative variables will be analyzed to indicate the correlation. With the support of SPSS, the degree of influence of independent variable on dependent variable is also indicated.

#### **Mediation analysis**

To examine the mediating role of JOBSATIS in the relationship between HPHR and OCB, the four-step regression analysis was used (Baron & Kenny, 1986; James &

Brett, 1984; Judd & Kenny, 1981) to identify whether JOBSATIS enhances the effect of HPHR on OCB in this research context or not. According to this method, there are three conditions need to achieve. Firstly, the causal and effect relationship between independent variable (HPHR) and dependent variable (OCB) is tested. Secondly, the correlation relationship between independent variable (HPHR) and mediating variable (JOBSATIS) must be significant. Thirdly, the relationship between mediating variable (JOBSATIS) and dependent variable (OCB) also must be demonstrated. Finally, the multiple regression between independent variable (HPHR), mediating variable (JOBSATIS) and dependent variable (OCB) is investigated to identify the role of mediating variable. In case the influence of independent variable (HPHR) on dependent variable (OCB) is reduced but still significant. The result fits with partial mediation model. On the other hand, the relationship between independent variable (HPHR) on dependent variable (OCB) is not significant anymore. The result fits with full mediation model. Hierarchical multiple regression was used to test the hypotheses. The results are shown in table 3 below.

**Table 3: Hierarchical multiple regression results for testing mediation**

<b>Variables and statistic</b>	<b>1 - OCB</b>		<b>2 - JOBSATIS</b>	
	<i>Model 1</i> <i>Beta</i>	<i>Model 2</i> <i>Beta</i>	<i>Model 3</i> <i>Beta</i>	<i>Model 4</i> <i>Beta</i>
HPHR	0.5253**		0.1729	0.7463**
JOBSATIS		0.6441**	0.4723**	
F	45.2741**	125.429**	38.1368**	132.310**
R-square	0.2906	0.4149	0.4312	0.4821
SE	0.0781	0.0521	0.0890	0.0649
			0.0892	

Note: \*\*p < 0.01

As shown in table 3, in the model 1, the value of R-square is 0.2906 which means that 29.06% of variance in OCB is explained by HPHR. Upon the result, the Hypothesis 1 is supported. Model 1 suggests that HPHR play an important role in strengthening OCB with  $b=0.5253$  and  $p < 0.01$ . This finding is also supported by studies conducted by Morrison (1996) and L.-Y. Sun et al. (2007).

Similarly, the model 2 and model 4 showed the results of regression analysis between JOBSATIS and OCB, HPHR and JOBSATIS. In model 4, with R-square = 0.4821,  $b=0.7462$ , and  $p < 0.01$ . It means that 48.21% of the differences of observed level of JOBSATIS can be explained by differences of HPHR. The hypothesis 2 is supported. In model 2, with R-square = 0.4149,  $b=0.6441$ , and  $p < 0.01$ , the positive relationship between JOBSATIS and OCB was also demonstrated. In other word, the hypothesis 3 is also supported.

The hypothesis 1, 2, 3 were supported and thereby satisfying three first requirements for mediation examination. The final condition is that the multiple regression analysis between the independent variable (HPHR), mediating variable (JOBSATIS) and the dependent variable (OCB) is tested to identify the role of mediating variable. As shown in Table 3, results in model 3 reveals that when both independent variables - HPHR and mediating variables – JOBSATIS are simultaneously entered into

the model, HPHR were not significantly related to OCB at Sig. = 0.01. Meanwhile, JOBSATIS was significantly related to OCB at  $b = 0.4723$  and  $p < 0.01$ . These results indicate that JOBSATIS fully mediates the linkage between HPHR and OCB. Besides, the Sobel's test (Sobel, 1982) is also used to test the indirect effect between independent variable – HPHR, and dependent variable – OCB through mediating variable - JOBSATIS. Results in Sobel's test showed the value of  $z$  is 4.049 (this value is more than 1.96,  $p < 0.01$ ). This result reveals that the mediating effect of JOBSATIS on the HPHR – OCB relationship is significant ( $p < 0.01$ ). Therefore, the hypothesis 4 is supported. The results of testing hypotheses are summarized below:

**Table 4: Hypothesis testing results**

	Hypothesis	Route Coefficient	Result
H1	HPHR → OCB	0.5253**	Supported
H2	HPHR → JOBSATIS	0.7463**	Supported
H3	JOBSATIS → OCB	0.6441**	Supported
H4	Mediating impact of JOBSATIS in the impact of HPHR on OCB	0.4723** (0.1729)	Supported

Significant at the 0.01 level

**Figure 2: The conceptual model result, \*\* $p < .01$ .**



## 5. DISCUSSION

### 5.2. Theoretical and practical implications

This primary objective of this research is to open the “black-box” by investigating the relationship between HPHR system and OCB in Vietnam context. This study is expected to contribute the understanding towards mediating mechanism in HR-employee behavior relationship at the individual level. The findings of this research clarified the relationships among these factors. The result of this study also supports for previous investigations regarding HPHR and OCB. This study demonstrated the strong positive relationship between HPHR and OCB of Vietnamese line managers. It implied that the line managers in Vietnam also experienced and perceived the HPHR that the organizations invested on them. Consequently, they perform the behaviors beyond the job requirements within an organization.

This study along with some recent research that conducted on HPWS in Asian countries like China, India (Gong et al., 2010; Jiang & Liu, 2015; Muduli, Verma, &

Datta, 2016; Snape & Redman, 2010b; L. Y. Sun, Aryee, S., & Law, K. S., 2007), provides evidence against the assumption that strategic HRM with integrated HR practices is only applicable in Western context. This finding contributes one more Asian countries context that can be employed HPHR theory in HRM. Thus the HPHR theory is completely considered as a universal theory that can be applied in multinational context especially in some emerging and developing economy like Vietnam. These areas have been becoming promising destinations for the foreign investment as well as the operation of MNCs. Moreover, the full mediating role of job satisfaction was demonstrated in the relationship between HPHR and OCB. This finding contributes to open the "black-box" of this linkage.

For practical implications, Vietnamese organizations employ the HR policies and practices should be considered the HPHR system which consists of integrated HR practices instead of individual components. This approach would enhance the employees and organizational performance strongly. Moreover, the intervening effect of attitudinal factors like job satisfaction in the process HPHR influence on employees' behaviors is very significant. The managerial policies and practices need to take careful consideration of this element. The organization should take care of the feeling of employees toward their satisfaction along with investment on HP practices.

### ***5.1. Limitation and future research directions***

Because of the time and resources constraints, the limitations is unavoidable in this research. Firstly, the limitation of sample size. This study tested the hypotheses based on the set data that collected from line managers in three large cities in Vietnam. With a set of 179 responses could not generalize to the whole population. Therefore, future research might investigate with a larger and more diverse sample with more reliable sampling methods. This will enhance the general ability and robustness of the proposed model. Secondly, a cross-sectional study was conducted by obtaining data at one point in time at the individual level, which limits our conclusion related to cause-effect relations inferred from our results. Moreover, the individual level evaluated both independent and dependent variables. Thus, the future research might be based on a longitudinal design with multilevel analysis that definitely leads to more reliable and comprehensive result. In addition, this study only focused on exploring mediating mechanism through which HPHR practices influenced OCB, ignored contextual factors which may moderate this linkage, and thereby not explore black-box fully. Therefore, a future research may explore the other factor as mediators of the causality relation and contextual factors as moderators of mediating relationship. Finally, this study has not explored the role of demographics factors as controlling role in the research framework. These types of data are just used for the describing the research samples. Future studies may focus on these factors to clarify the differences in behaviors of each group of target respondents toward the HR practices that they experienced within an organization.

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