

High Commitment HR Practices and Top Performers

Impacts on Organizational Commitment

Kiwook Kwon · Johngeok Bae · John J. Lawler

Abstract:

- Both scholars and practitioners have paid much attention to the impact of retaining top-performing knowledge workers on organizational effectiveness.
- This study hypothesizes and analyzes how a bundle of high-commitment human resource practices (HCHRP) influence affective organizational commitment, a strong predictor of employee turnover, of top performers versus ordinary employees.
- This study suggests that HCHRP may enable organizations to retain not only ordinary employees but also top performers through their positive impact on employees' organizational commitment.
- Using a sample of middle level managerial and R&D workers in 11 subsidiaries of a multinational conglomerate located in East Asia, this study showed that a bundle of high commitment human resource practices was positively related to the affective organizational commitment of top performers more than that of lower performers.

Keywords: Top performers · High commitment HR practices · Organizational commitment · Social exchange · Interaction effect · Knowledge workers

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Visiting Ass. Prof. K. Kwon (✉)

Department of Business Administration, School of Labor and Employment Relations
University of Illinois at Urbana-Champaign, Champaign, USA
e-mail: kikwon@illinois.edu

Prof. J. Bae

Department of Management, School of Business, Korea University, Seoul, South Korea

Prof. J. J. Lawler

School of Labor and Employment Relations
University of Illinois at Urbana-Champaign, Champaign, USA

Introduction

People in organizations have been increasingly recognized as a key source for value creation (Batt 2002; Collins and Smith 2006; Pfeffer 1994, 1998; Wright et al. 1994). In particular, attracting and retaining top performing knowledge workers whose levels of performance are extremely high may significantly influence organizational effectiveness (Cappelli 2000; Lepak and Snell 1999; Randall 1987; Sturman et al. 2003). Scholars have argued that the retention of top performers impacts organizational effectiveness because their turnover not only imposes high replacement costs but also decreases organizational morale (Cascio 1995; Hollenback and Williams 1986; Lucas 1999; Mobley 1982; Randall 1987; Staw 1980). Given knowledge-based global competition, the importance of retaining top performers appears to be amplified due to the potential threat of valuable knowledge transfer by top performers to competing organizations (Cappelli 2000).¹

While the retention of top performers is recognized as a key organizational initiative (Cappelli 2000; Martel 2003; Michaels et al. 2001), previous studies indicate that organizations may find it difficult to achieve this goal because top performers tend to leave organizations more frequently than other levels of performers (Jackofsky 1984; Trevor et al. 1997). Moreover, recent studies suggest that retaining top performers becomes even more challenging due to the inter-organizational market competition for valuable human capital (Cappelli 2000; Gardner 2005; Rao and Drazin 2002). Gardner (2005) argues that organizations compete for valuable human capital not only to enhance their own competencies but also to *deplete* their competitors' advantage. He observed that more than 20% of organizations experience 'purposive' talent raiding from their competitors. Recognizing the impact of the retention of top performers on organizational performance, human resource management (HRM) literature has recently argued that it is necessary to understand how human resource practices influence the retention of high performing valuable employees, beyond addressing their effects on organizational commitment (OC) and overall retention (Delery and Shaw 2001; Lepak and Snell 1999).

From the theoretical perspectives and empirical evidence mentioned above, it is evident that both scholars and practitioners agree on the importance of retaining valuable human resources for organizations to enhance organizational effectiveness. However, only a few studies have explored this issue by focusing on the impact of individual HR practices, such as compensation and promotion, on top performers' retention (Salamin and Hom 2005; Trevor et al. 1997). This paper proposes and tests the hypotheses that a bundle of high commitment human resource practices (HCHRP) may enable organizations to retain not only ordinary employees but also top performers through their positive impact on OC, which is a strong predictor of employee turnover (e.g., Meyer and Allen 1997; Mathieu and Zajac 1990). In doing so, we build upon social exchange and perceived organizational support theories that suggest that people tend to reciprocate benefits gained from other social entities, such as an individual or organization, but the degree of reciprocation may vary depending on individuals' perceived benefits (Blau 1964; Eisenberger et al. 1986; Gouldner 1960; Homans 1974). This paper, takes into account the conditional aspect of social exchange theory (Gouldner 1960; Homans 1974), and argues that different work preferences (Smits et al. 1993; Trank et al. 2002) and self-efficacy

(Ackerman et al. 1995; Wood and Bandura 1989) between top performers and other levels of performers may lead top performers to perceive HCHRP more favorably. This perception results in a higher increase of OC of top performers compared to others.

This study enables us to understand how organizations can effectively manage the retention of top performers, which has been recognized as a key research question but has not yet been extensively explored. Second, it shows that HCHRP may help organizations to retain not only top performers but also other levels of performers whose cooperation is indispensable for an organization's success in a knowledge-based economy (Collins and Smith 2006; Pfeffer 1994, 1998, 2001). Third, this study provides a fresh insight for the strategic human resource management literature by suggesting that HCHRP may influence an organization's performance by reducing dysfunctional turnover and overall workforce turnover. Lastly, based on the results of this study, we discuss implications for the current debate between the 'top talent' approach (Cappelli 2000; Michaels et al. 2001) and the community based approach (O'Reilly and Pfeffer 2000; Pfeffer 2001) in human resource management.

Theoretical Background and Hypotheses

The literature in human resource management and organizational behavior has identified several key factors and mechanisms that help retain employees in organizations. First, existing studies have consistently reported that one of the strongest predictors of employee turnover is OC, which develops through favorable and fair exchanges between organizations and individual employees (Meyer and Allen 1997; Steers 1977; Wallace 1997). Second, employees' diverse work experiences related to human resource practices have been identified as one of several significant antecedents of OC (Meyer and Allen 1997). Several studies in the HRM literature also indicate that HCHRP positively influence employees' OC (Agawalar 2003; Appelbaum et al. 2000; Guest 2001; Macky and Boxall 2007; Meyer and Smith 2000; Para and Tremblay 2007; Ramsay et al. 2000) or play a significant moderating role in predicting employees' OC (Whitener 2001). Lastly, a few recent studies have reported that organizations' compensation practices or frequency of promotions also influence top performers' turnover (Allen and Griffeth 2001; Lucas 1999; Salamin and Hom 2005; Trevor et al. 1997).

Although existing studies help us understand the determinants of employee retention, few studies exist which systematically investigate the factors that influence the retention of top performers compared to the plethora of studies that explore how individual demographics, work experiences, and organizational practices influence the retention of employees in general (Griffeth et al. 2000; Mathuie and Zajac 1990; Meyer and Allen 1997). In this study, we consider both universal and contingent perspectives of social exchange theory and explore (1) the general relationship between a bundle of HCHRP and employees' affective OC and (2) the stronger relationship between a bundle of HCHRP and the affective OC of top performers relative to others. Figure 1 briefly illustrates our research framework and hypotheses.

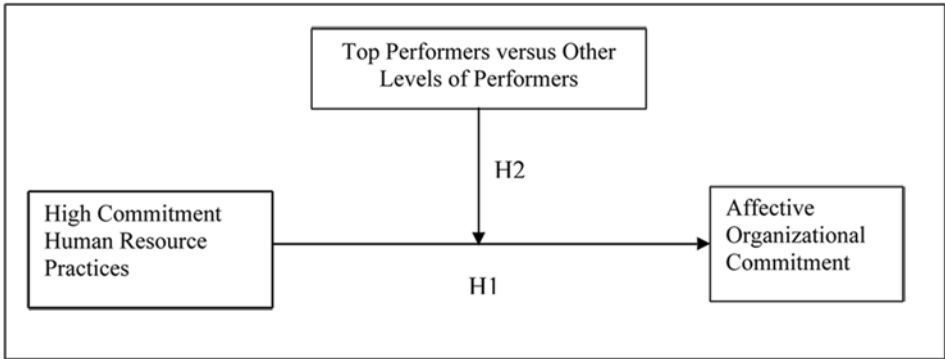


Fig. 1: Research Framework on HCHRP and Affective OC between Top Performers and Others

High Commitment Human Resource Practices and Employees' Affective OC

Researchers have conceptualized HCHRP in various ways, labeling a different combination of human resource practices as high commitment, high performance, or high involvement human resource practices. Despite the varying concepts and labels of HCHRP, researchers share the perspective that organizations need to adopt HCHRP which allow organizations to develop skillful, motivated, and committed employees, who can ultimately create superior value for organizations. In particular, the positive impact of HCHRP on employee OC and turnover has been a central premise in empirical studies in the HRM literature (Arthur 1992/1994; Batt 2002; Guest 2002; Huselid 1995). Although the components of HCHRP vary in current HRM literature, HCHRP generally constitute the following common practices: Enriched job design, team-based approach, participation in decision making, pay for performance¹, high level of pay, accurate performance appraisal, extensive training and development, and selective staffing (Appelbaum et al. 2000; Arthur 1994; Delery and Shaw 2001; Guest 1997; Huselid 1995; Pfeffer 1998; Whitener 2001; Wright et al. 2003).

OC refers to “a strong belief in and acceptance of the organization’s goals and values; a willingness to exert considerable effort on behalf of the organization; and a definite desire to maintain organizational membership” (Porter et al. 1974, p. 604). The overarching theoretical rationale of the development of OC draws upon social exchange theory and Gouldner’s (1960) ‘*norm of reciprocity*’ that “people should help those who have helped them” (p. 171). Previous research suggests that when employees perceive that organizational rewards and treatment are favorable and fair to them, they develop OC as a form of reciprocity toward organizations (Meyer and Allen 1997; Steers 1977; Wallace 1997). Work experiences and withdrawal behavior, such as turnover, have been consistently found to be a strong antecedent and consequence of OC (Angel and Perry 1981; Mathieu and Zajac 1990; Meyer and Allen 1997; Porter et al. 1974; Steers 1977).

The organizational support theory put forward by Eisenberger and colleagues (1986, 1990) provides a theoretical rationale regarding why HCHRP influence employees’ OC. Building upon social exchange theory as mentioned in the previous section, Eisenberger et al. argued that employees tend to regard an organization as a person and form a global

belief regarding how this personified organization recognizes their contribution and cares for their well-being. They proposed that, if employees perceive that their organizations are supportive, they tend to reciprocate the organizations' supportiveness with increased OC. In addition, they argued that perceived organizational support is strongly influenced by organizational practices and policies such as pay, job enrichment, and participation, which signal the degree to which organizations value and commit to their employees. A recent study by Rhoades et al. (2001) showed that factors such as organizational rewards, procedural justice, and supervisor support influence affective OC by the mediation of perceived organizational support. This perspective points out that employees can perceive HCHRP as evidence that their organizations support and care for their well-being. The adoption of HCHRP sends out positive signals and communication, which may lead employees to reciprocate with OC in exchange for the organizations' support for them.

Several studies have found a positive relationship between individual components of HCHRP and employees' OC. Appelbaum et al. (2000) provided comprehensive results in the relationships between the individual components of HCHRP and employees' OC. They found that pay for performance, employment security, fairness of pay, flexible work schedules, and promotion opportunities positively influence employees' OC. Meyer and Smith (2000) observed that HR practices such as performance appraisal, benefits, training, and career development influence perceived organizational support and procedural justice which eventually enhance employees' affective OC. Using a sample of 67 managers in an agricultural production company and controlling supervision and work environment, Ogilvie (1986) found that employees' perceptions of the accuracy of organizational decisions regarding merit and promotion influence their OC. Furthermore, a number of recent studies reported the positive impact of a bundle of HCHRP on employees' OC (Agarwala 2003; Macky and Boxall 2007; Ramsay et al. 2000). Macky and Boxall (2007) showed that a bundle of 13 HR practices positively influenced employees' OC with a national sample of employees in New Zealand. Also, by using a sample of 422 executives and managers in seven organizations, Agarwala (2003) found that a bundle of innovative HR practices constituting 14 different practices influences employees' OC. Considering existing theories and empirical evidence, we predict that a bundle of HCHRP will influence employees' affective OC².

Hypothesis 1: A bundle of high commitment human resource practices is positively related to employees' affective organizational commitment.

HCHRP and OC of Top Performers and Others

Social exchange theory and the norm of reciprocity, which provide overarching theoretical explanations on the development of OC, argue that social and economic exchange are involved in human interactions and people repay the benefits or debts received from the other party (Blau 1964; Gouldner 1960). However, social exchange theory is also concerned with how the pattern and strength of reciprocation in exchange relationships may vary depending on different individuals' needs, preferences, and situations, which influence the degree to which the individuals perceive the value given by the other party (Gouldner 1960; Homan 1974). According to Gouldner (1960), that "a norm of reciprocity is universal is not, of course, to assert that it is unconditional... The value of the

benefit and hence the debt is in proportion to and varies with – among other things – the intensity of the recipient’s need at the time the benefit was bestowed” (p. 171). Homans (1974) suggested that the one unit increase of value may be more positively perceived by people who have less. Meyer and Allen (1997) also recognized the impact of individual differences on OC. They stated that “Given that individuals differ in various ways (e.g., personality, values, needs, expectations), it seems likely that individual differences will have implication for which workplace experiences employees would find particularly rewarding or fulfilling” (p. 53). These conditional perspectives in social exchange theory and its implication for OC suggest that the value of benefits and debts bestowed by the other party may be perceived differently depending on individuals’ need and preferences, which may have a different degree of impact on individuals’ reciprocation processes.

By considering the conditional aspect of social exchange theory on the development of OC, it is critical to identify if top performers and others have meaningful individual differences in order to predict the differential impact of HCHRP on OC of top performers and other levels of performers. A few studies indicate that top performers and others may have different patterns of work preferences and self-efficacy. First, Trank et al. (2002) conducted a study with a sample of college students to explore if high achievers and lower achievers have different work preferences. Based on motivational research, they argued that high achievers tend to seek environments that provide challenge and test themselves compared to others. They found that high achievers prefer challenging and interesting work, pay for performance compensation, and opportunity for promotion and training compared to low achievers. Similarly, Smits et al. (1993) observed that high achieving students prefer jobs with challenge and autonomy. Second, top performers, relative to others, tend to have a higher level of self-efficacy. Wood and Bandura (1989) argued that the degree of individuals’ self-efficacy, defined as “belief in one’s capabilities to mobilize the motivation, cognitive resource, and course of action needed to meet given situational demands” (p. 408), is most strongly influenced by mastery experience (previous performance success). Ackerman et al. (1995) also reported that the previous performance success is the most significant predictor of the level of individuals’ self-efficacy.

The different levels of self-efficacy and work preferences between top performers and others may play a moderating role in the relationship between HCHRP and OC. For example, Schaubroeck and Merritt (1997) observed that, in the context of high job demands, people with high self-efficacy favor high levels of job control, but people with low self-efficacy prefer low levels of job control. Litt (1988) argued that control may be beneficial only for people who have high levels of self-efficacy. In addition, Godard (2001) argued that excessive team autonomy and responsibility may decrease employees’ OC due to their impact on work stress. However, Defrank and Ivancevich (1998) pointed out that whether these practices are perceived as stressful or not depends on employees’ levels of self-efficacy. These studies suggest that although participation and job autonomy practices of HCHRP may positively influence employee OC, top performers may perceive these practices more favorably than other levels of performers, resulting in higher levels of OC for top performers relative to others, because of their higher level of self-efficacy and matched work preference.

In addition, some theoretical and empirical work helps explain why top performers are more likely to prefer HCHRP to control-based traditional HR practices, making it more

likely that the OC of top performers will be affected by the motivational components of HCHRP. Research in organizational justice argues that distributive and procedural justice strongly influence employees' OC (e.g., Colquitt et al. 2001; Greenberg 2001). A few studies have demonstrated that HR practices such as compensation and performance appraisal may influence individuals' (in)justice perceptions (e.g., Folger and Greenberg 1985). Considering the theoretical perspective of organizational justice, if employees are paid less than other companies, without the benefit of performance appraisal and rewards, top performers are less likely to perceive organizations fair. Top performers are likely to perceive that their organizations are not supportive and, as a consequence, reciprocate perceived lower organizational supportiveness with reduced OC.

In sum, the aforementioned theoretical perspectives and empirical works suggest that a bundle of HCHRP will be more likely to increase the affective OC of top performers than that of others because HCHRP tend to better meet top performers' work preferences and provide them with appropriate working conditions.

Hypothesis 2: A bundle of high commitment human resource practices is positively related to the affective organizational commitment of top performers more than that of lower performers.

Methods

This study uses data which were collected by a research institute of a multinational conglomerate located in East Asia. This conglomerate consists of more than 20 subsidiaries, which are mostly for-profit organizations. The research institute in collaboration with the human resources headquarters of this conglomerate selected 11 subsidiaries. These were selected based on their contribution to the overall performance of the conglomerate. Each participating subsidiary produces different material goods such as consumer electronic appliances and industrial products, or provides services for diverse customers in such industries as insurance, security, and advertising, except for a subsidiary that conducts research and development for the entire conglomerate. Each subsidiary consists of 1,000 to 50,000 employees and operates its own business in a fairly autonomous way.

Sample and Procedures

Participants in this study were full-time managerial or professional workers whose job levels comprised the middle level of the organizational hierarchy. The survey was conducted in the middle of 2002 with the cooperation of researchers and the human resource headquarters of this conglomerate. The participants were randomly selected through the computerized database system of the human resource headquarters of this conglomerate. After sampling participants, a staff member in the HR headquarters of the conglomerate contacted a senior HR manager of each subsidiary of the organization and asked him or her to distribute questionnaires to the participants, who were working in his or her organization. Each participant received a survey questionnaire in which, on the front page, researchers guaranteed the confidentiality of the survey. Self-addressed stamped

Table 1: Demographic Characteristics of Samples

	Total	Top performers	Other levels of performers
Number of respondents	589	363	226
Tenure (Year)			
Mean	11.45	10.50	12.97
SD	5.72	6.04	4.80
Age			
(1) 30 to 34	52	31	21
(2) 35 to 39	207	131	76
(3) Over 40	330	201	129
Education			
(1) High school	21	7	14
(2) Bachelor (2 year)	13	5	8
(3) Bachelor (4 year)	314	168	146
(4) Masters	148	108	40
(5) Doctorate	93	75	18
Profession			
(0) R&D (Scientists)	214	141	73
(1) Managers	375	222	153

envelopes were provided to participants, and the survey was conducted anonymously. 638 out of total 800 targeted subjects, which were composed of 500 top performers and 300 relatively lower level performers, responded to the questionnaire resulting in a total response rate of 80%. A total of 589 cases (363 top performers and 226 relatively lower performers) out of 638 (74% of a final response rate) were used for the analysis after excluding a few invalid responses. Table 1 presents the detailed demographic characteristics of the subjects used in this study.

Measures

The survey asked employees a wide variety of questions to measure job attitudes and human resource practices. Based on the survey questions, we developed measures of independent and dependent variables which were used in testing our hypotheses.

Independent Variables

High Commitment Human Resource Practices

HCHRP were measured by employees' experiences of HR practices. The perceptual measures appear appropriate from the theoretical perspective that HR practices influence employees' OC or other individual and organizational outcomes, when the meaning of the HR practices are well communicated to employees (Bowen and Ostroff 2004;

Eaton 2003; Gaertner and Nollen 1989; Guest 2002; Guzzo and Noonan 1994; Macky and Boxall 2007). Also, employees working for large firms may have different experiences of HR practices (Macky and Boxall 2007; Ramsay et al. 2000). Meyer and Allen (1997) argued that perceptual measures would be more relevant in exploring the relationship between HR practices and employees' affective OC because "employees will react to conditions as they perceive them" (p. 88). In fact, studies exploring the relationship between HR practices and an individual employee's OC frequently measured HR practices by employees' experiences (Agawala 2003; Applebaum et al. 2000; Gould-Williams 2004; Guest 2002; Macky and Boxall 2007; Para and Tremblay 2007; Smith and Meyer 2000; Ramsay et al. 2000).

Employees reported their experiences of six different HR practices, which are frequently mentioned as HCHRP in previous research: Job design, participation in decision making, training and development practice, pay for performance, high level of pay, and performance appraisal. All individual questions used a 1–5 Likert-type response format, where 1 denoted "strongly disagree" and 5 denoted "strongly agree." Job design was measured by asking employees three questions that assessed the perceived degree to which organizations allow them to use their discretion in performing their job (Applebaum et al. 2000; Bae and Lawler 2000). The three items ($\alpha=0.70$) are as follows: "This organization provides me with job autonomy," "This organization allows me to set rules and goals of my work," and "This organization provides me with a challenging job."

Participation in decision making was measured by two items ($\alpha=0.79$), which are consistent with questions used by Delery and Doty (1996) and Wright et al. (1999). The two items were, "In this organization, I can give opinions on various business activities," and "This organization provides me with opportunities to be involved in making important decisions." Pay for performance was measured by a single item by asking employees, "This organization pays me according to my performance." Performance appraisal was measured by asking employees two items ($\alpha=0.84$) adapted from Snell and Dean (1992): "This organization conducts performance appraisal with clear performance criteria and procedures," and "This organization evaluates my performance accurately." Training and development was measured by a single item, "This organization provides training and development opportunities for me to acquire necessary skills and knowledge." Lastly, high level of pay was measured by a single item, "This organization pays me a high level of salary." Then, we aggregated scores of each practice ($\alpha=0.86$) in order to form an index for a bundle of HCHRP based on existing theoretical perspectives (e.g., Becker and Huselid 1998) and tested the impact of a bundle of HCHRP on employees' affective OC.

Top and Other Levels of Performers

The organizations' archival data of each employee's past performance appraisal was used to measure an employee's performance. However, the staff members of the HR headquarters of this conglomerate were extremely sensitive to disclose each employee's performance level and thus only provided whether each employee belonged to 'top performers group' or 'other levels of performers group.' The HR headquarters classified an employee as a top performer if either one of the two following conditions was met: First, the employees have received all 'A' ratings (A is given to the top 20% performers in each year) in

the past three years' annual performance appraisal; or second, the employees received 'Super' ratings (extraordinary high performance) in the previous one or two years' annual performance appraisal. Less than 5% of total employees belonged to the group of top performers. The HR headquarters classified an employee as a group of Others, when he or she received B, C, or D in the last one year's performance appraisal, which were given to the other 80% of employees. A dummy coding was 1 for top performers and 0 for Others. Organizations measured employees' performance by two dimensions: Task performance on the basis of MBO and employees' competencies including several sub-dimensions such as task specific and general competencies. The exemplary items for competencies were leadership, communication, teamwork and collaboration. The weights for task performance and competencies were approximately 60% and 40%, respectively, although the weights vary somewhat among organizations. The performance rating of each employee was measured by three steps: First, employee self-appraisal; second, supervisor evaluation; and third, final evaluation in the human resource department. During this evaluation process, frequent interviews between employees and their supervisors were utilized. All of these organizations used the results of performance appraisal as a key decision factor in promotion and pay raise. They used a forced distribution method to measure employees' performance.

Dependent Variables

Affective OC was measured by matching seven items from the nine item scale measure used by Tsui et al. (1997) who developed scales adapted from Angel and Perry's (1981) OC scales. The reliability of the affective OC in this study was .79. Responses were recorded on a five-point scale, where 1 denoted "strongly disagree" and 5 denoted "strongly agree." Sample items were "I find that my values and the organization's values are very similar," "I really care about the fate of this organization," and "This organization inspires the very best in the way of job performance."

Control Variables

Demographic variables such as age, organizational tenure, education, and profession were controlled because previous studies consistently indicated that these variables influence OC (Mathuie and Zajac 1990; Meyer and Allen 1997). Each personal characteristic was measured using self-report measures. Age was measured using a one-item self-report measure, which consisted of three categories (1 = 30 to 34, 2 = 35 to 39, 3 = over 40 years). Organizational tenure was measured by the year served in the current organization from one self-report item. Professions were measured by one item self-report measure (0 = scientists in R&D, 1 = managers). Education was measured by one item self-report measure (1 = high school, 2 = junior college (2 years), 3 = bachelor (4 years), 4 = master, 5 = doctorate) and we converted this final educational degree into the years of education. In addition, we controlled the degree of supervisor support, which has been identified as a strong predictor of OC (Mathuie and Zajac 1990; Meyer and Allen 1997; Tsui et al. 1997). However, previous studies did not control this variable in exploring the relationship between HR practices and employees' OC (except for Ogilvie 1986). Supervisor

support was measured by five items ($\alpha=0.89$) adapted from Tsui et al. (1997). Finally, ten organizational dummies were included in the analysis, to capture organizational differences (Tsui et al. 1997).

Analysis

We tested hypothesis 1 and 2, using a hierarchical regression method (Cohen and Cohen 1983) that was designed to assess whether a single or sets of variables explain additional variances explained by a set of control variables. We first loaded control variables in step 1, including age, tenure, profession, education, organization dummies, and supervisor support. In the following steps, we added independent variables representing HCHRP, a performance group dummy (top or other levels of performers), and an interaction variable between HCHRP and the performance group dummy. We observed the significance of coefficients of variables as well as R^2 change to assess whether the hypotheses were supported or not. In order to reduce any multicollinearity problem, the score of HCHRP was mean centered in testing hypotheses (Aiken and West 1991)

Results

Table 2 contains the means, standard deviations, and a correlation matrix of variables in this study. First, consistent with the findings of previous studies on OC (Mathuie and Zajac 1990; Steers 1977), most of the demographic variables are significantly correlated with affective OC. For example, affective OC is positively correlated with tenure, age, and profession (managerial), and affective OC is negatively correlated with education. However, as Meyer and Allen (1997) suggested, the magnitude of the correlation between HCHRP index and affective OC is much stronger than those between personal characteristics and affective OC. Second, as expected, a significant correlation exists between HCHRP index and affective OC. Third, interestingly, affective OC and performance are not significantly correlated, which is in line with previous studies (e.g., Keller 1997; Mathuie and Zajac 1990; Somers and Birnbaum 1998; Steers 1977).

HCHRP and Affective OC

Hypothesis 1 predicted that a bundle of HCHRP would positively influence employees' affective OC. The results of the two regressions, model 1 and model 2 in Table 3, support this hypothesis. Model 1 ($F=23.8$, $p<0.001$), a reduced model in our hierarchical regression analyses, shows that a relational variable – supervisor support ($p<0.001$) – and demographic variables³³ – tenure ($p<0.01$) and age ($p<0.001$) – significantly influence affective OC. Model 2, where the HCHRP index is added to model 1, indicates that a bundle of HCHRP ($p<0.001$) significantly explains additional variance ($\Delta R^2=0.118$, F for $R^2 = 139.6$, $p<0.001$). This result supports Hypothesis 1 even after variables such as demographics and supervisor support are controlled, suggesting a strong positive impact of a bundle of HCHRP on employees' affective OC.

Table 2: Means, Standard Deviation, and Correlations

	Mean	SD	1	2	3	4-1	4-2	4-3	5	6	7
1. Affective OC	3.58	0.58									
2. Performance ¹	0.62	0.47	0.00								
3. Tenure	11.44	5.73	0.30**	-0.21**							
4-1. Age ² : Dummy 1	0.09	0.28	-0.20**	-0.01	-0.31**						
4-2. Age: Dummy 2	0.35	0.47	-0.17**	0.03	-0.27**	-0.23**					
4-3. Age: Dummy 3	0.56	0.49	0.28**	-0.02	0.44**	-0.35**	-0.83**				
5. Education	17.26	2.39	-0.22**	0.25**	-0.46**	0.13**	0.05	-0.12**			
6. Profession ³	0.64	0.48	0.21**	-0.07	0.18**	-0.20**	-0.07	0.18**	-0.45**		
7. Supervisor support	3.77	0.68	0.52**	0.13**	0.14**	-0.08*	-0.02	0.06	-0.12**	0.17**	
8. HCRPs	21.19	3.32	0.66**	0.14**	0.25**	-0.09*	-0.11**	0.15**	-0.17**	0.17**	0.65**

*p<0.05; **p<0.01

¹Top performers, 1; other levels of performers, 0²Age: 1 – 30 to 34 years; 2 – 34 to 39 years; 3 – more than 39 years

Dummy 1 = 1 if Age=1, otherwise=0; Dummy 2 = 1 if Age=2, otherwise=0; Dummy 3 = 1 if Age=3, otherwise=0

³Managers, 1; Scientist, 0

Table 3: Hierarchical Regressions Results in the Relationship between HCHRP and Affective OC

	All respondents (N:589)			
	Model 1	Model 2	Model 3	Model 4
Tenure	0.12**	0.05	0.03	0.03
Age: 35–39	0.09	0.11*	0.12*	0.12*
Age: 40 and over	0.27***	0.26***	0.28***	0.28***
Education	−0.05	−0.04	−0.03	−0.03
Profession	0.06	0.05	0.05	0.04
Supervisor Support	0.46***	0.17***	0.17***	0.17***
HCHRP		0.47***	0.49***	0.41***
Top Performers			−0.07*	−0.06*
HCHRP * Top performers				0.11*
R^2	0.400	0.518	0.521	0.526
ΔR^2		0.118	0.004	0.004
F for ΔR^2		139.6***	4.5**	5.0**
<i>Overall F</i>	23.8***	36.0***	34.5***	33.2***

Note: Standardized β coefficients are reported. 10 company dummies are included in the regression models.

* $p < 0.05$, two-tailed test; ** $p < 0.01$, two-tailed test; *** $p < 0.001$, two-tailed test

HCHRP and Affective OC between Top Performers and Others

Hypothesis 2 predicted that a bundle of HCHRP would more positively influence the affective OC of top performers than that of other levels of performers. In order to test hypothesis 2, we first ran model 3, which includes all control variables, HCHRP index, and a performance group dummy. Model 3 was significant ($F = 34.5$, $p < 0.001$), indicating that both the HCHRP index ($p < 0.001$) and the performance group dummy ($p < 0.05$) significantly influence affective OC. Interestingly, model 3 points out that the coefficient of the performance group dummy is significant but negative, which means that top performers are less likely to be affectively committed to their organizations. Second, we ran model 4, where an interaction term (HCHRP index \times Performance dummy) was added to model 3. This showed that the coefficient of the interaction term is significant ($p < 0.05$) and accounts for significant portions of additional variance ($\Delta R^2 = 0.004$, F for $\Delta R^2 = 5.0$, $p < 0.05$). These results support hypothesis 2.

Discussion and Implications

The results of this paper show that a bundle of HCHRP positively influence employees' affective OC and are consistent with the findings of previous studies. Furthermore, we tested this relationship using the construct of affective OC and by controlling the effect of supervisor support on affective OC. The supportive result of hypothesis 1, therefore,

strengthens the arguments and findings of previous studies in this relationship (e.g., Agarwala 2003; Appelbaum et al. 2000; Macky and Boxall 2007; Ramsey et al. 2000). At the same time, the results of this study indicate that researchers who are interested in investigating this relationship may need to take into account the quality of the relationship between supervisor and subordinate or between coworkers (cf., Ogilvie 1986; Tsui et al. 1997).

Second, but more interestingly, the results of this study indicate that a bundle of HCHRP's have a stronger impact on top performers' affective OC than that of others. Figure 2 illustrates this relationship by showing that top performers tend to have a lower affective OC relative to others when the level of HCHRP's is low. However, as the level of HCHRP's increases, the affective OC of top performers increases more rapidly than that of others. When the practical significance was calculated based on one standard deviation increase of HCHRP's from the mean (Aiken and West 1991), the affective OC of both top performers and others increased but the magnitudes were 10.1% for top performers and

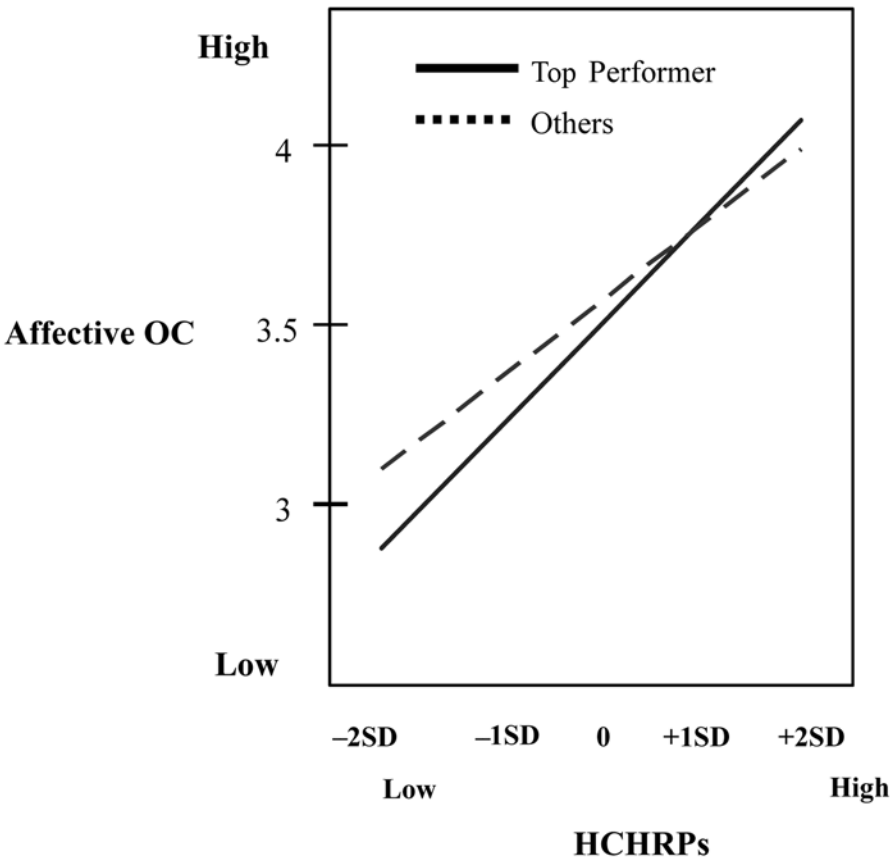


Fig. 2: The Relationship between HCHRP's and Affective OC of Top versus Other Levels of Performers

7.3% for others. This result can be explained from the conditional perspective of social exchange and perceived organizational support theories that the same exchange relationship between organizations and employees can be interpreted differently.

Theoretical Implications

We derived several theoretical implications from this study for various research fields such as HRM, OC, and turnover literature. First, this study provides interesting theoretical questions for OC and turnover literature. OC literature has tried to find a positive relationship between OC and job performance (Somers and Birnbaum 1998). This study implies that OC may be influenced by the interaction between perceived or actual practices and job performance rather than job performance being influenced by OC. The concept of a direct or moderating impact of job performance on OC is not new but is relatively unexplored in the OC literature. For example, Steers and Porter (1983) argued that performance may influence OC, and Lee and Mowday (1987) empirically observed the positive impact of job performance on OC. Furthermore, Lawler and Porter (1967) emphasized that job attitude may not influence job performance but performance can be influenced by the interaction between employees' performance and organizational treatment. The results of this study indicate that it may be fruitful for researchers to take into account this interactional perspective while exploring how OC is developed and how OC is related to job performance.

Second, this study provides promising evidence for HRM-firm performance linkage literature, which focuses on the impact of HCHRP on turnover (Batt 2002; Huselid 1995) in justifying the relationship between HRM and firm performance. In fact, the findings of previous studies have been exposed to theoretical weakness because they did not take into account the performance level of employees who leave the organization. Cascio (1995) argued that "The crucial issue in analyzing turnover, therefore, is not how many employees will leave but rather the performance and replaceability of those who leave versus those who stay" (p. 582). Also, other researchers argued that studies interested in exploring the relationships between OC, turnover, and firm performance need to consider the degree of employees' performance (Cascio 1995; Dalton et al. 1981; Randall 1987; Shaw et al. 2005; Staw 1980; Steers and Porters 1983). This study suggests that given the strong negative impact of OC on turnover (e.g., Meyer and Allen 1997; Mathieu and Zajac 1990), HCHRP are more likely to reduce turnover of top performers relative to others. Consequently, this study, though indirectly, enriches a theoretical perspective in HRM-firm performance linkage literature.

In addition, this paper sheds light on why human resource practices, particularly HCHRP, influence an organization's performance. Diverging from previous studies in HRM focusing on the impact of HCHRP on employees' OC, this study explores the impact of HCHRP on affective OC of top performers versus that of others by studying professional knowledge workers who can be a significant source of competitive advantage for the firm (Lepak and Snell 1999). The supporting results imply that HCHRP may influence firm performance by enabling organizations to increase the affective OC of top performers and, thus, retain them. In addition, the positive impact of HCHRP on the affective OC of other levels of performers implies that they may enhance the cooperation

among organizational members, which is another key factor for organizational effectiveness (O'Reilly and Pfeffer 2000; Pfeffer 1994, 1998). By considering both these positive impacts at the same time, this paper concludes that HCHRP may enhance organizational effectiveness because they not only enable an organization to take advantage of superior human capital but also increase cooperation among organizational members. Consequently, HCHRP may help organizations to create and maintain a competitive advantage through their employees.

Finally, this study provides some ideas on how to organize and manage people in an organization. At least two different approaches toward organizing and managing human resources can be identified. One is a segregation approach and the other is an integration approach. The segregation approach emphasizes the features of individual human capital and tends to classify people into several groups by their performance, competences, and/or values and uniqueness (e.g., A players, B players, and C players) (Cappelli 2000; Lepak and Snell 1999; Michaels et al. 2001). This approach generates a "market-like" employment relationship (cf., Adler 2001; Adler and Heckscher 2006; Pfeffer 2006) suggesting that organizations need to win a "war for talent" by giving special treatment to top performers because they create extraordinary value for organizations. Contrary to this perspective, the integration approach stresses the relational aspects of people and, as in high commitment HRM, has an egalitarian orientation. This approach is a "community-like" employment relationship (Adler and Heckscher 2006; Pfeffer 2006) suggesting that organizational effectiveness can be achieved through cooperation among all organizational members. The integration approach suggests that organizations need to use practices that develop employees and enhance cooperation among organizational members rather than pursuing strong incentive intensity by adopting individual performance-based incentives which may generate internal competition. (O'Reilly and Pfeffer 2000; Pfeffer 1998, 2001). The results of this study partly support the integration approach. Organizations can enhance competence and motivation of top performers by adopting HCHRP for all employees rather than by treating people differently based on their talent or performance.

Limitations

Although this paper provides promising results and future research directions about how organizations may effectively manage the affective OC and turnover of top performers, the audience should interpret our findings cautiously. First, this study may be susceptible to measurement error, because it measures several components of HCHRP with single-item measures as the survey was designed not for this study but for organizations' needs. However, since the measurement of HCHRP covers six different HRM practices, the index would not generate serious problems. Second, the cross-sectional data lacks the ability to address causal relationship between independent and dependent variables. Third, the results of this study may have a generalizability issue. This study used a sample of managers and R&D knowledge workers, which may not be generalizable across occupational groups. In addition, this study used data collected from an Asian firm. However, previous studies on HCHRP using Asian data showed that firms with HCHRP showed higher organizational performance (e.g., Bae and Lawler 2000; Lee and Miller

1999). Hence, the results of this study are an extension of those previous studies. However, cultural (e.g., performance orientation) and institutional (e.g., labor market flexibility) differences may have different implications for top performers' behaviors. Future research may need to reflect this aspect and use data collected from different contexts. Lastly, our measure for the pay for performance practice has a limitation because it does not distinguish individual-based from group-based performance compensation. Since the measurement of pay for performance contains both individual-based and team-based performance, the commitment effect of HCHRP for top performers is perhaps compounded. The results may reflect both intrinsic aspect of HCHRP and extrinsic aspect from pay for individual-based performance. Future research need to investigate the different effect of pay for individual-based versus team- or organization-based performance. We also think that more studies are required to broaden scientific knowledge on this topic. In particular, future research needs to explore the interrelated relationships between actual and perceived HCHRP, turnover, and firm performance, while examining employees' job performance at both individual and organizational levels.

Practical Implications

Many firms have increasingly paid attention to the retention of top performers, but they often either fail to establish a more systematic approach or attempt to change their HRM practices only after top performers leave the organization (Gardner 2005). In addition, our personal interviews with managers revealed a deep concern about possible disharmony when firms provide special treatment only for top performers in order to increase their retention. This study provides a few practical implications on how firms can enhance top performers' retention without creating internal competition and conflict among organization members.

This study suggests that top performers develop organizational commitment, a critical factor of employee retention, when they are treated in fair and favorable ways. A bundle of HCHRP deliver a signal to top performers that their organizations recognize their performance and care for their well-being. Thus, an effective way that organizations can increase the retention of top performers is by utilizing a high degree of a bundle of HCHRP. For example, as we mentioned before, our results show: When a bundle of HCHRP are highly used, top performers' commitment is high; however, when a bundle of HCHRP are rarely used, top performers commitment is low. That is, top performers' commitment is contingent on the extent to which a bundle of HCHRP is utilized. Furthermore, this study points out that a bundle of HCHRP have a stronger positive relationship with top performers' commitment than relatively lower performers'. This implies that a bundle of HCHRP enable firms to increase the retention of top performers without hurting the retention of relatively lower performers.

Besides the specific implications of this study on top performer retention, this study also has a broad implication on organizations' managing their workforce. It has been suggested (Cappelli 2000; Michaels et al. 2001) that to attract the highest performers, organizations should engage in a 'war for talent' and provide special monetary incentives for the best people. However, Pfeffer (2001) argued that firms should "not necessarily try to win the war for talent, even adopting this image as a management metaphor can be quite haz-

ardous” (p. 249) to an organization’s health. This is because engaging in a ‘war for talent’ creates internal competition and disharmony, deemphasizing cooperation and team work and generating a self-fulfilling prophecy for two groups (i.e., top talent vs. other people). Therefore, fair treatment does not necessarily mean providing higher monetary rewards based on individual performance. Our results suggest that HCHRP enhance OC of top performers more rapidly and can eventually help to retain them.

To further investigate the specific effects of HR practices on affective OC, we conducted an exploratory factor analysis and arrived at two common factors – inducement and involvement from six HCHRPs. While the inducement factor (eigenvalue of 3.12 and explained 51 percent of total variance) includes pay for performance, high level of pay, and training and development, the involvement factor (eigenvalue of 1.17 and explained 20% of total variance) covers job design and participation in decision making. The results of a series of hierarchical regressions using these two factors demonstrated that the interaction effect between the inducement factor of HCHRPs and the performance dummy (top versus other performers) is significant and explained additional variance ($\Delta R^2=0.004$, F for $\Delta R^2=4.57$, $p<0.05$); and the interaction effect between the involvement factor and the performance dummy is also marginally significant and explained additional variance ($\Delta R^2=0.003$, F for $\Delta R^2=3.33$, $p<0.1$).

From the results of additional analyses, we observe that both factors have significant interaction effects with top performers on affective OC. Therefore, both involvement and inducement are important. Enhancing the involvement factor through job autonomy and participation in decision making is critical to gain high affective OC of employees (Appelbaum et al. 2000; Meyer and Allen 1997; Wright et al. 2003). However, their impact on the affective OC of top performers and others may not be necessarily homogeneous. Several studies pointed out that job autonomy and participation in decision making may not be universally rewarding practices because they may increase work stress (Defrank and Ivancevich 1998; Truss 2001). However, a well-designed involvement program is critical to enhance affective OC. The involvement of human resources training and development, as a high commitment HR system suggests, generates better results. Furthermore, high involvement creates much better outcomes in terms of affective OC for top performers.

The results of additional analyses also suggest that inducement is a critical factor for enhancing affective OC, especially for top performers. Rynes et al. (2004) emphasized that the importance of monetary rewards for top performers is significantly under-evaluated by researchers and practitioners. Recent studies suggest that monetary reward, which has been regarded as a lower need or an extrinsic motivator, can be one of the highest levels of needs for top performers because monetary rewards to top performers may indicate their *worth* in organizations and *social status* (Frank 1999; Rynes et al. 2004; Trank et al. 2002). Therefore, monetary incentives can have an informational effect rather than a controlling effect (cf., Shalley and Perry-Smith 2001).

However, this does not necessarily mean that firms should have strong incentive intensity and wide pay differential. As discussed, the inducement factor in this study also includes relatively high pay and training and development beyond pay for performance. In addition, though our measurement on pay for performance contains both individual and group performances, the ratio of task performance versus competence is 6 to 4. Also,

competence includes leadership, communication, teamwork and collaboration, which are closely related to the high commitment HRM approach.

Therefore, a bundle of HCHRP – both inducement and involvement factors – generate differences in terms of affective OC of top performers and other groups of people. The results of this study suggest that current shifts toward performance-based systems (i.e., individual performance-based pay and wide pay differentials among employees) in Asia are not the only answer. They may solve some existing problems such as rigidity and complacency but at the cost of generating another set of problems such as internal competition, high turnover rate, and loss of trust and loyalty. As we mentioned above, we heard that managers were concerned about potential conflict and competition among organizational members, when they provide special monetary treatment to top performers. The results of this study suggest that a bundle of HCHRP for all employees may solve this problem by providing justice and perceived organizational support, which are critical influences on OC.

Conclusion

Much academic and practical attention has been paid to understanding how organizations can retain top performers. The purpose of this paper is to address this issue by focusing on the relationship between a bundle of HCHRP and the affective OC of top and other levels of performers. We mainly explored these relationships on the basis of the social exchange and perceived organizational support theories, which suggest that when individuals receive a favor from other parties, they return the favor to them but the degree of reciprocation may vary depending on their perceived value of benefits and debts. In particular, we concluded that the degree of the relationship between a bundle of HCHRP and affective OC may be different between top performers and others due to different work preferences, levels of self efficacy, and performance. Based on these theoretical perspectives, we predicted and established that HCHRP not only increase the affective OC of employees but are also more likely to influence the affective OC of top performers relative to that of other levels of performers. This study sheds light on how organizations can create and maintain a competitive advantage through their employees by addressing the relationship between a bundle of HCHRP and affective OC of top and other levels of performers using a sample of middle level managerial and R&D knowledge workers.

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Endnotes

- 1 There is an ongoing debate on designing compensation practices of HCHRP. Whereas some studies are more likely to emphasize that organizations need to pay for performance according to individual as well as group and organization performance for motivating employees (e.g., Agarwala 2003; Appelbaum et al. 2000; Guthrie 2001; Huselid 1995), others appear to suggest that organizations need to pay for performance based on group or organization performance rather than individual performance in order to enhance cooperation among organizational members (e.g., Collins and Smith 2006; Pfeffer 1994, 1998). We posit that HC HRM is basically based on cooperation and the norm of reciprocity. Hence a pay system should support this direction. When individual performance-based pay is adopted, this should be used in a supplementary or complementary manner not to damage the basic premise of HC HRM. Performance-based pay in this study includes both individual and group performance due to limitation in measurement.
- 2 Researchers suggest that an organizational commitment questionnaire (OCQ) may compound different meanings of OC such as affective, continuance, and normative (Meyer and Allen 1997; Meyer and Smith 2000). In particular, it has been argued that, whereas affective OC which stems from employees' identification with the values and goals of organizations may lead to beneficial outcomes, continuance commitment based on calculation on the costs of leaving may negatively influence organizations' performance (Iles et al. 1990; Meyer and Allen 1997; Randall 1987). In fact, most discussion in HRM literature implicitly refers to affective OC rather than continuance or normative commitment.
- 3 We regressed affective OC on only demographic variables, tenure, age, education, and profession. That regression model was significant ($F=19.249$, $p<0.001$; $R^2=0.14$) and tenure ($p<0.01$), profession ($p<0.05$), and age ($p<0.001$). However, as supervisor support and HCHRP were added in subsequent regression models, the significance of demographic variables such as tenure and profession disappeared. These results are consistent with arguments by Meyer and Allen (1997) that relational and work practices variables generally have a strong impact on affective OC but demographic variables have, at best, a weak impact on affective OC.

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