



STRATEGIC HUMAN RESOURCE MANAGEMENT, FIRM PERFORMANCE, AND EMPLOYEE RELATIONS CLIMATE IN CHINA

**HANG-YUE NGO, CHUNG-MING LAU,
AND SHARON FOLEY**

We examined strategic human resource management (SHRM) and human resource practices in the People's Republic of China to assess the impact of these practices on firm performance and the employee relations climate. We also tested whether firm ownership moderates the above relationships. Empirical results from a sample of Chinese firms from various industries and regions showed that the levels of adoption of SHRM and HR practices were lower in state-owned enterprises (SOEs) than in foreign-invested enterprises (FIEs) and privately owned enterprises (POEs). Both SHRM and HR practices were found to have direct and positive effects on financial performance, operational performance, and the employee relations climate. However, the moderating effect of ownership type was significant for financial performance only. © 2008 Wiley Periodicals, Inc.

Strategic human resource management (SHRM) is defined as “the pattern of planned human resource deployments and activities intended to enable an organization to achieve its goals” (Wright & McMahan, 1992, p. 298). It has been argued that when a firm’s human resource practices are consistent with each other (i.e., internal fit), and with the firm’s strategic goals (i.e., external fit), organizational efficiency and performance will be enhanced (Huselid, 1995; Wright & McMahan, 1992). While SHRM is related to HR’s alignment with the firm’s strategy, HR prac-

tices are the exact mechanisms aimed at the acquisition, development, and motivation of human capital. In other words, SHRM focuses on “what” a firm does with human resources, and HR practices refer to “how” these resources are managed.

In the West, the conceptual and empirical link between SHRM and firm performance has been well established in the literature (Huselid, Jackson, & Schuler, 1997; Wright & Gardner, 2003). Researchers have shown that the use of strategic HR practices is positively related to both financial and operational performance (Delaney &

Correspondence to: Hang-Yue Ngo, Department of Management, Chinese University of Hong Kong, Shatin, NT, Hong Kong, Phone: (852) 2609-7797, E-mail: hyngo@baf.mssmail.cuhk.edu.hk.

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Huselid, 1996). Evidence also has been provided of the synergistic effect of bundles of HR practices on firm outcomes (Huselid, 1995; MacDuffie, 1995).

Although the applicability of SHRM and high-performance HR practices in Asia and how they diverge or converge from the West have been examined, no conclusive results have been reached (Bae, Chen, Wan, Lawler, & Walumbwa, 2003; Von Glinow, Drost, & Teagarden, 2002). Recently, several studies conducted in China have found a positive relationship between SHRM and firm performance (Bjorkman & Fan, 2002; Law, Tse, & Zhou, 2003).

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The present study attempts to extend the above line of research by developing and testing a conceptual model of the HR–performance relationship in the context of the People's Republic of China. It differs from previous research work in the following ways. First of all, we investigate whether SHRM and HR practices are related to different firm outcomes, including financial performance, operational performance, and employee relations climate. Employee relations climate is viewed as an important aspect of organizational effectiveness (Schuster, 1982, 1998) that has been under-researched.

Second, we test the moderating effects of firm ownership on the relationships between SHRM and HR practices with firm outcomes. Firms of different ownership types, including state-owned enterprises (SOEs), foreign-invested enterprises (FIEs), and privately owned enterprises (POEs) face different institutional constraints (Ahlstrom & Bruton, 2001; Ding, Akhtar, & Ge, 2006) and they search for different HR models in order to operate effectively in the Chinese transitional economy. Hence, the impact of SHRM and HR practices on performance is likely to vary among these firms.

Third, we surveyed both the CEO and one other top manager for their evaluations of the effectiveness of the HR function in

their firm. In the existing literature, single-respondent measures of HR practices and firm performance are often used even though these measures may contain significant amounts of measurement error (Gerhart, Wright, McMahan, & Snell, 2000). In this study, we collected information from multiple respondents and thus avoided the issue of common method bias.

Literature Review

SHRM and HR Practices

According to the resource-based view (RBV), internal firm resources that are rare, valuable, inimitable, and nonsubstitutable can provide sources of sustainable competitive advantages (Barney, 1991). Human resource practices that meet these criteria are such a source (Wright & McMahan, 1992) and thus enhance organizational performance. The RBV has been instrumental in developing the notion of SHRM, or the exploration of HR's role in supporting business strategy (Wright, Dunford, & Snell, 2001).

Devanna, Fombrum, Tichy, and Warren (1982) highlighted SHRM as a key process in strategy implementation. Specifically, several types of HR activities, such as performance appraisal, compensation, and development programs, were considered as critical for strategy implementation if they could elicit desired employee behaviors and enable managers to achieve long-term strategic goals (Schuler & Jackson, 1999). Huselid (1995) conceptualized SHRM as the emphasis each firm places on aligning its HR functions and competitive strategy. Arguably, such an alignment (or external fit) is conducive to firm performance (Bae & Lawler, 2000; Becker & Huselid, 1998).

As suggested by Lado and Wilson (1994), a firm's HR practices also are a source of competitive advantage. "HR practices" generally refers to a set of internally consistent practices adopted by firms to enhance the knowledge, skills, ability, and motivation of employees. As these practices support and develop the human resources and competencies, they add value to the firm (Wright, Smart, & McMahan, 1995). These practices, widely adopted

and utilized by large firms in Western countries, are known as the “mainstream” (Lepak, Bartol, & Erhardt, 2005) or “best” HR practices (Wright & Gardner, 2003) in the literature. These practices often are viewed as bundles, rather than as isolated practices (MacDuffie, 1995; Wright & McMahan, 1992). Internal consistency is needed among them—for example, extensive training should be complemented by compensation, performance appraisal, and promotion practices that reduce staff turnover in order to be effective (Baron & Kreps, 1999). Considerable research evidence exists supporting the relationship between internally consistent HR practices and organizational effectiveness (Becker & Huselid, 1998; Bowen & Ostroff, 2004; Huselid, 1995).

HRM in China

Before the economic reform, state-owned enterprises had dominated the Chinese economy. The operation and management of the SOEs were strongly influenced by traditional culture and communist ideology. The Chinese culture has been marked by collectivism and Confucianism, with an emphasis on respect for hierarchy, in-group harmony, reciprocity, and loyalty (Chen, 1995). These culture values, together with tight bureaucratic control from the government, shaped the pre-reform HRM system in the SOEs, which was characterized by lifelong job security, seniority-based promotion and wage increases, and extensive welfare programs (Warner, 1996; Yu & Egri, 2005). The so-called “iron rice bowl” employment system that emphasized egalitarianism and workforce stability, however, has been criticized as incompatible with the new economic environment.

Nationwide reforms in HRM have been launched since the 1990s, with the primary objective of enhancing efficiency and productivity in SOEs. Major changes included the introduction of fixed-term employment contracts and performance-based rewards, a shift in welfare provision responsibility, and a new labor law regulating employment relations (Warner, 1996). Additionally, employment policies and practices have been decentralized to the enterprise level, and managers

in SOEs have been granted greater autonomy in hiring and firing workers (Chow, Fung, & Ngo, 1999). In effect, the “iron rice bowl” employment system has been abolished. Despite these changes, HR decisions in many SOEs still are affected by social and political considerations, particularly the pace of social security reform and the possibility of massive unemployment (Wong, Wong, Ngo, & Lui, 2005; Zhu, 2005). Government interference in enterprise management still persists in SOEs, and organizational inertia has served as a deterrent to the change in HR systems (Ding & Akhtar, 2001). As noted by Goodall and Warner (1999), some traditional practices (e.g., provision of social welfare and personnel administration) coexist with market-oriented practices (e.g., employment contracts and performance-related rewards) in these enterprises.

As a consequence of the open-door policy, the number of foreign-invested enterprises has increased substantially in China over the past two decades. Western “mainstream practices” in HRM such as formal performance appraisal, performance-based compensation, and extensive training have been widely adopted in these firms (Ding et al., 2006; Warner, 1997). Subject to less administrative interference from the central and local governments, these firms have more discretion in designing their own HR systems (Chow et al., 1999).

The number of privately owned enterprises has also experienced rapid growth. One characteristic of these firms is their ability to respond quickly to environmental changes. As pointed out by Warner (1996), POEs have greater leeway in their employment practices than SOEs, and they can hire and fire workers

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in a relatively unconstrained way. Because of their short history, their HR practices tend to be informal and nonsystematic as compared with other firms (Zhu, 2005). However, to improve their market competitiveness and to attract and retain talent, these firms have started to invest more in HR and to develop their HR systems (Zhu, 2005).

HRM and Firm Performance in China

Using a large-scale survey of HR managers across China, Law et al. (2003) found that the strategic role of HR is important to firm performance in joint ventures (JVs).

Bjorkman and Fan (2002) focused on JVs and wholly owned foreign subsidiaries in China and found support for the positive impact of high-performance HR practices and the extent of HRM-strategy integration on firm performance. They further noted that HRM-strategy integration was a stronger predictor of performance than HR practices. Nevertheless, Mitsuhashi, Park, Wright, and Chua (2000) reported the poor performance of HR departments of multinational corporations (MNCs). The HR managers in these firms attributed the unsatisfactory performance to the inability of HR departments to act strategically. Zhu, Cooper, De Cieri, and Dowling (2005) also noted that HR managers across all ownership types are beginning to participate in strategic decision making, but how far they can strategically integrate the HR function remains to be seen.

Regarding the effects of HR practices on organizational outcomes, Deng, Menguc, and Benson (2003) reported that in their sample of SOEs, a bundle of HR practices had a substantial impact on export performance. Yu and Egri (2005) found that several HR practices were related to job satisfaction and affective organizational commitment of employees working in a JV and an SOE. Bjorkman and

Fan (2002) reported that HR practices that focus on individual performance and employment motivation were strong predictors of firm performance in FIEs. Takeuchi, Wakabayashi, and Chen (2003) also found support for the positive relationship between a firm's HR practices and financial performance in a sample of Japanese subsidiaries.

Furthermore, Wang, Tsui, Zhang, and Ma (2003) argued that organization-specific employment relationships with different levels of inducements and expected contributions are critical for firm performance. Among POEs, firm performance is highest when utilizing the "underinvestment" approach (i.e., low inducements and high expected contributions), whereas among SOEs, firm performance is highest when they use the "organization-focused" approach (i.e., high inducements and high expected contributions). Tsui and Wu (2005) further suggested that certain HR practices such as training and development lead to an employment relationship that contributes to firm performance.

In summary, theoretical and empirical evidence supports that both SHRM and HR practices have positive effects on firm outcomes. However, the utilization of SHRM and HR practices seems to vary among different types of firm ownership in China. As illustrated in our conceptual model in Figure 1, we expect direct effects of SHRM and HR practices on financial and operational performance and on the employee relations climate, and a moderating effect of ownership type on these relationships.

Hypotheses

Differences in SHRM and HR Practices Across Ownership

According to Law et al. (2003), ownership types not only encompass the influences of variables external and internal to the firm, but they also represent interacting systems of factors that are relevant to the way management practices operate. Previous studies have demonstrated the salient role of firm ownership on the adoption of HR practices in the Chinese context (Braun & Warner,

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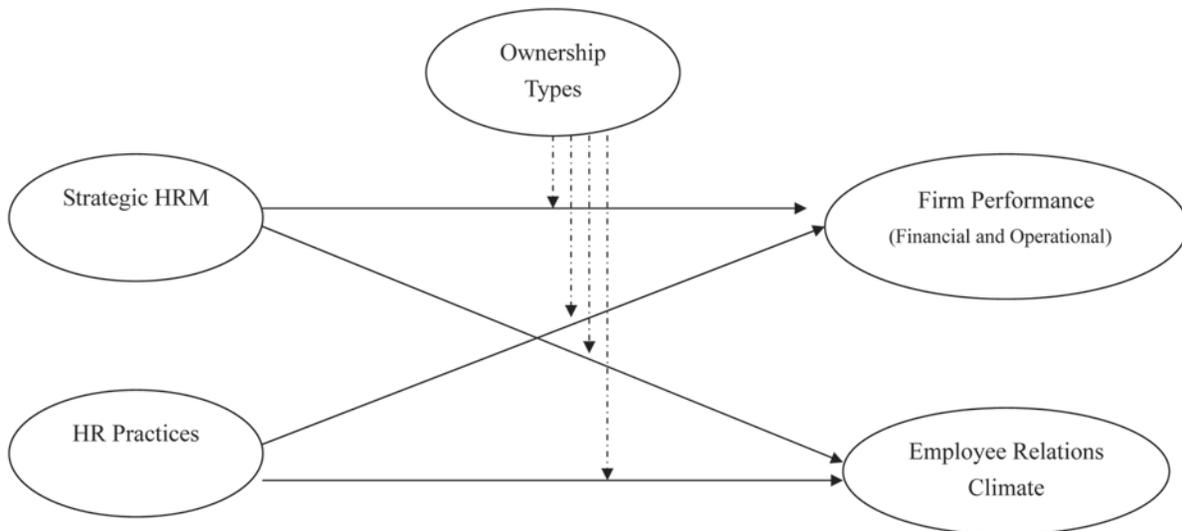


FIGURE 1. Conceptual Model

2002; Ding & Akhtar, 2001). For example, multinational firms tend to transfer their management system from their home country to the local subsidiaries (Lau & Ngo, 2001).

As FIEs face fewer institutional constraints, they enjoy greater autonomy and flexibility in employment (Chow et al., 1999), and hence adopt a more market-oriented approach in managing human resources than local firms (Warner, Goodall, & Ding, 1999). In these firms, HRM is considered to be strategically important and Western-based high-performance HR practices often are introduced (Braun & Warner, 2002). Their expatriate managers also are inclined to implement SHRM, given that SHRM is a concept developed within a Western context. Ding and Akhtar (2001) found that JVs place greater emphasis on strategic business planning and HR practices aimed at developing human capital. Cooke (2004) noted that FIEs tend to develop sophisticated HR systems, many elements of which are Western practices transferred and adapted to suit the Chinese environment.

In the past, under the “iron rice bowl” employment system, the workforce was not used as a strategic tool to achieve a competitive advantage in SOEs (Benson & Zhu, 1999). Owing to economic reform, SOEs took on more marketized HRM functions

such as recruitment, training, and performance evaluation (Ding & Akhtar, 2001; Zhu & Warner, 2004). However, these firms have to overcome many institutional constraints, especially those from the government and trade unions, before they can successfully introduce new HR practices or change their HR systems. Owing to their limited exposure, personnel directors in SOEs are much less market-oriented, and they implement fewer mainstream HR practices than personnel directors in FIEs (Warner et al., 1999). Similarly, the entrepreneurs and CEOs in POEs have a limited sense of the strategic importance of HRM to organizational competitiveness (Cooke, 2004). Being free from social and political obligations, POEs have some autonomy to adopt marketized HR practices resembling those of FIEs (Ding, Ge, & Warner, 2001). As pointed out by Zhu (2005), the HR practices in these firms tend to be informal and nonsystematic. POEs also lack a comprehensive HR strategy and a well-structured HR system (Cooke, 2004). In view of the above, we put forward the following hypothesis:

H1: Ownership types influence the adoption of SHRM and HR practices of firms. Specifically, FIEs employ more SHRM and HR practices than SOEs and POEs.

Main Effects of SHRM and HR Practices

The positive relationships between SHRM and HR practices with firm performance have been demonstrated in the West, and more recently in China. These relationships are not

Firms that are able to attract, recruit, and retain talent via HRM gain a competitive edge in the dynamic market. When the HR practices are internally consistent and well integrated with business strategy, they help to develop a human resources pool that adds value to the firm, and in turn enhances firm performance.

only found in FIEs and JVs, but also in SOEs (Bjorkman & Fan, 2002; Law et al., 2003). Both local and foreign firms are aware that the proper utilization of human resources can improve organizational effectiveness (Zhu et al., 2005). Firms that are able to attract, recruit, and retain talent via HRM gain a competitive edge in the dynamic market. When the HR practices are internally consistent and well integrated with business strategy, they help to develop a human resources pool that adds value to the firm, and in turn enhances firm performance (Bae & Lawler, 2000; Wright et al., 1995). We thus hypothesize that firms using more SHRM and HR practices achieve higher financial and operational performance.

H2a: SHRM and HR practices are positively related to firm performance.

Apart from financial and operational performance, a good employee relations climate is another important outcome that deserves close scrutiny. SHRM and HR practices, when properly implemented, should create a social

atmosphere in which employees have a good feeling about the organization (Bowen & Ostroff, 2004). For example, effective management of human resources should result in the presence of a feeling of participation, open communication, sharing information, and trusting relationships in the organization (Collins & Smith, 2006). This kind of shared perception and feeling among organizational members often is referred to as the

organization's climate (Riordan, Vandenberg, & Richardson, 2005).

The employee relations climate, therefore, reflects a high involvement, employee-centered culture that creates the conditions for employees to make a value-added contribution to improving organizational performance (Riordan et al., 2005; Schuster, 1998). This kind of climate can be used as a proxy to evaluate how strategically and effectively an organization manages its human resources. The relationship between HR practices and employee relations climate has been demonstrated in previous studies (Collins & Smith, 2006; Schuster, 1998). Accordingly, we develop the following hypothesis:

H2b: SHRM and HR practices are positively related to the employee relations climate.

Interaction Effects of Ownership with SHRM and HR practices

There is substantial variation in the way human resources are managed among different ownership types, industries, and regions in China (Ding et al., 2006; Zhu & Warner, 2004). The impact of HRM also is likely to differ among firms. Law et al. (2003) found that ownership types moderated the HR-performance relationship in that the relationship was positive and significant for JVs, but not for SOEs. It is plausible that some types of firms may use their HR practices more effectively than others, given their internal and external contingencies. For example, the political interference and bureaucratic structure in SOEs imply that they have a low level of flexibility in managing people. The institutional constraints posed on these firms are likely to reduce the positive effects of some best management practices.

Furthermore, HR managers in SOEs have less active and strategic roles than those in FIEs (Ding & Akhtar, 2001; Zhu & Warner, 2004); thus, implementing HR policies and practices may have less of an effect on performance in these firms. Law et al. (2003) concluded from their research that for SOEs, the more powerful the HR departments (and thus the more political the organization), the

lower the firm performance, unless increased HR power was accompanied by a change in ownership. In contrast, expatriate managers in FIEs are able to think strategically about HRM (China Staff, 2005) and have full autonomy to design an HR system for their firms that suits the internal and external environment. It follows that FIEs may better capitalize on SHRM and Western-developed HR practices than local Chinese firms.

Equally plausible might be the argument that compared to FIEs, managers in SOEs and POEs will see greater improvements in organizational performance because they have a larger performance gap to fill. In particular, SOEs still lag behind FIEs in both management processes and firm performance (Chen & Lau, 2000). Since human resources were not properly managed in many SOEs prior to enterprise reform, performance could change drastically once SHRM and mainstream HR practices are employed. Thus, SOEs and POEs may reap more benefits from adopting SHRM and HR practices than FIEs. We propose a general hypothesis regarding the moderating role of ownership types.

H3: Ownership types moderate the relationships of SHRM and HR practices with firm performance and employee relations climate.

Research Methods

Data Collection

The data for this study were collected through a survey of 600 Chinese enterprises. These firms were located in four different regions in China (i.e., Beijing, Shanghai, Guangdong, and Sichuan) and represented various industries and ownership types. The survey was part of a larger study conducted in collaboration with the National Bureau of Statistics of China (NBS) in 2003. The firms in the sample were randomly selected from those registered with the local government.

Two informants from each firm were invited to participate in the survey through face-to-face interviews. The first respondent, the CEO, provided strategy-related information about the firm. The second respondent, either

the HR director or financial director, provided information about HR practices and objective firm-level data. Since the study was administered by the NBS, these respondents were very cooperative in providing information. We cross-validated the information provided by the two respondents and found high consistency and reliability of our data.

Of the sample, 150 (25%) are from each of the four regions. Regarding ownership types, 161 (26.8%) are SOEs, 120 (20%) are FIEs, 228 (38%) are POEs, and the remaining 91 (15.2%) belong to other types of ownership. The majority of these enterprises (80%) are in the manufacturing sector.

Measures

Dependent Variables

This study has three outcome variables. First, financial performance was measured by asking the CEOs and the HR/Finance directors to evaluate the firm's performance compared to the following industry averages over the past year: sales growth, market share, net profit, return on investment (ROI), profit from sales, capital liquidity, and return on assets (ROA). Similarly, operational performance was measured by asking the two informants to evaluate the firm's performance as compared with the industry average in productivity, production efficiency, new product development, research and development expenses, and marketing expenses. Each of the respondents was asked to assess whether their performance in respective areas was much lower than the industry average (1) or much higher than the industry average (5) on a five-point Likert scale.

Since the correlations of ratings provided by the CEO and the HR/Finance director of each firm were very high, the average of these ratings was calculated to capture the financial and operational performance of the firm. The last variable was employee relations climate, which was measured by a six-item scale selected from the "Human Resources Index" developed by Schuster (1982). The items pertain

Ownership types moderate the relationships of SHRM and HR practices with firm performance and employee relations climate.

to work atmosphere and human relations (please refer to Appendix A for the items). They encompass several aspects of an organization's climate: interpersonal relationships, worker participation, communication, and task performance. The CEOs were asked to evaluate whether these items accurately describe the situation in their organizations on a five-point Likert scale. In this study, the alpha coefficient of this scale was 0.88.

Significant differences in SHRM and HR practices were found among various types of ownership. In particular, both SHRM and HR practices were used the least in SOEs. As compared to other ownership types, FIEs adopted more SHRM, and both FIEs and POEs adopted more HR practices.

Independent Variables

SHRM was measured by a seven-item scale modified from the "Strategic Human Resource Management Index." This scale was originally developed by Devanna et al. (1982) and has been used by Huselid (1995) and in HRM research conducted in China (Zhao, 2001). The CEOs were asked to describe the extent to which their firms have aligned the firm's HRM policies with the firm's strategy on a five-point Likert scale (the items are shown in Appendix A). This scale had an alpha coefficient of 0.91.

HR practices were measured by a 15-item instrument adopted from Ngo, Turban, Lau, and Lui (1998). The HR/Finance directors were asked to describe the extent to which these practices were used in their organizations on a five-point Likert scale. The list of items contains various aspects of HRM such as selection, recruitment, training, performance appraisal, and compensation (see Appendix A for the items). A principal component factor analysis with varimax rotation was conducted on these items, and only a single factor was identified. Thus, all items were employed to form the scale with an alpha coefficient of 0.91.

Ownership types were measured by three dummy variables—state-owned enterprises, foreign-invested enterprises, and privately owned enterprises—with all other types of firms as the reference group.

Control Variables

We included several control variables that potentially could affect firm performance in the Chinese context. First, industry was measured by two dummy variables: heavy manufacturing and light manufacturing. Firms in other industries such as services were treated as the reference group. Second, three dummy variables were created to capture the effect of geographic location—namely, Beijing, Shanghai, and Guangdong. Firms located in Sichuan were considered the reference group. Finally, firm size was measured by the natural logarithm of total current assets of the firm.

Analysis

To show the differences in SHRM and HR practices among firms of various ownership types, ANOVA was employed. A multiple comparison post hoc test with least significant difference (LSD) was used to determine which ownership types were significantly different from the others. To evaluate the effects of various independent variables on the outcomes, hierarchical regression analysis was then conducted. We first entered the control variables, followed by the ownership types, SHRM, and HR practices to test for their main effects. Finally, the interaction terms of SHRM and HR practices with ownership types were entered to test for the moderating hypothesis.

Results

Table I displays the means, standard deviations, and correlations of the study variables. It is worth noting that SOEs had a significant and negative correlation with SHRM, HR practices, and financial and operational performance, while FIEs had a significant and positive correlation with all these variables. POEs had a significant positive correlation with HR practices and operational performance only. As expected, SHRM and HR practices were positively correlated with each other, and both had a positive and significant correlation with the three outcome variables.

Table II gives the results of the analysis of variance (ANOVA). As predicted, significant

T A B L E I Descriptive Statistics and Correlations Among Study Variables

Variables	M	SD	1	2	3	4	5	6	7	8	9	10	11	12	13
1. Heavy Manufacturing	0.37	0.48													
2. Light Manufacturing	0.43	0.50	-0.66**												
3. Beijing	0.25	0.43	0.09*	-0.08*											
4. Shanghai	0.25	0.43	-0.15**	0.15**	-0.33**										
5. Guangdong	0.25	0.43	-0.01	0.02	-0.33**	-0.33**									
6. Firm Size	9.15	1.66	0.07	-0.03	-0.09*	0.02	0.07								
7. State-owned (SOE)	0.27	0.44	0.01	-0.10*	0.16**	-0.05	-0.01	-0.02							
8. Foreign-invested (FIE)	0.20	0.40	-0.04	0.02	0.00	0.00	0.00	0.12**	-0.30**						
9. Privately Owned (POE)	0.20	0.40	0.01	0.06	0.00	0.00	0.00	-0.34**	-0.30**	-0.25**					
10. SHRM	3.26	0.78	-0.05	0.01	-0.04	-0.11**	0.08*	0.20**	-0.14**	0.10*	0.03				
11. HR Practices	3.22	0.64	-0.03	-0.01	-0.09*	-0.01	0.06	0.18**	-0.21**	0.11**	0.11**	0.48**			
12. Financial Performance	2.98	0.76	-0.05	0.03	-0.15**	0.06	0.07	0.23**	-0.26**	0.14**	0.07	0.36**	0.46**		
13. Operational Performance	3.01	0.73	0.05	0.11*	-0.14**	0.01	0.11**	0.23**	-0.24**	0.11*	0.08*	0.42**	0.46**	0.71**	
14. Employee Relations Climate	3.56	0.70	0.00	-0.05	-0.01	-0.12**	0.07	0.10*	-0.08	-0.01	0.07	0.63**	0.40**	0.29**	0.36**

* $p < 0.05$, ** $p < 0.01$.

differences in SHRM and HR practices were found among various types of ownership. In particular, both SHRM and HR practices were used the least in SOEs. As compared to other ownership types, FIEs adopted more SHRM, and both FIEs and POEs adopted more HR practices. In view of these results, Hypothesis 1 was supported.

Tables III and IV report the results of hierarchical regression analyses on financial performance, operational performance, and employee relations climate, respectively. In Table III, financial performance is the dependent variable for the first four models. Model 1 shows the effects of control variables. Among them, firm size had a significant positive effect and Beijing had a negative effect on financial performance. In Model 2, the three ownership dummy variables were added to the equation. The model improved significantly, as indicated by the change in *R*-square. The effect of SOEs was negative, and the effects of FIEs and POEs were positive.

Turning to Model 3, in which SHRM and HR practices were included, both variables had significant and positive impacts on financial performance. This result provides support for Hypothesis 2a. Finally, in Model 4, the six interaction terms of SHRM and HR practices with ownership types were entered. This model improved slightly over Model 3, as shown by a significant change in *R*-square. Hypothesis 3 has thus gained support. The interactions of FIEs with HR practices and of POEs with HR practices were significant, and both had a negative effect on financial performance. To show the exact effect of owner-

ship, we plotted the relationships in Figure 2. Although HR practices are still positively related to financial performance, its impact is not as strong in FIEs and POEs as in other ownership types.

In the second set of models in Table III, the dependent variable is operational performance. As shown in Model 5, all control variables except Shanghai and Guangdong exerted significant effects on operational performance. When ownership types were entered into the equation as in Model 6, the effect of SOEs was negative and the effect of POEs was positive. Yet there was no effect for FIEs. In Model 7, when SHRM and HR practices were included, we found both of them had significant and positive effects on this outcome variable. Again, this result lends support to Hypothesis 2a. Model 8 incorporates the six interaction terms to test for the moderating effect of ownership. Neither of these interaction terms nor the change in Model *R*-square was significant. Thus, for the analysis of operational performance, Hypothesis 3 was not supported by the data.

In Table IV, employee relations climate becomes the focus of the analysis. Model 1 reveals that only two of the control variables, Shanghai and firm size, were significant. In Model 2, among the three ownership types, only POEs had a marginal positive effect on the employee relations climate. Turning to the effects of SHRM and HR practices as shown in Model 3, both variables had significant and positive effects on the outcome variable. Consistent with the earlier analyses, Hypothesis 2b has gained support. Finally in

TABLE II ANOVA Results of SHRM and HR Practices Across Ownership Types

Variables	SOEs	FIEs	POEs	Others	Univariate <i>F</i>
SHRM	3.07 ^{abc} (0.80)	3.42 ^a (0.82)	3.30 ^b (0.83)	3.28 ^c (0.69)	4.96**
HR practices	3.00 ^{abc} (0.63)	3.36 ^a (0.59)	3.36 ^b (0.67)	3.22 ^c (0.62)	10.93**

Mean values are reported with standard deviations in parentheses.

Means with the same superscript letter are significantly different at the 0.05 level by post hoc LSD test.

** $p < 0.01$.

TABLE III Descriptive Statistics and Correlations Among Study Variables

Variables	Financial Performance			Operational Performance				
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8
Heavy Manufacturing	-0.06	-0.10 ⁺	-0.04	-0.03	0.20**	0.17**	0.24**	0.23**
Light Manufacturing	-0.02	-0.06	-0.02	-0.00	0.24**	0.20**	0.25**	0.24**
Beijing	-0.12*	-0.07	-0.05	-0.05	-0.12**	-0.08+	-0.05	-0.05
Shanghai	0.01	0.02	0.06	0.06	-0.03	-0.02	0.03	0.03
Guangdong	0.02	0.03	0.02	0.02	0.04	0.05	0.05	0.05
Firm Size	0.22**	0.26**	0.15**	0.15**	0.21**	0.24**	0.12**	0.12**
State-Owned (SOE)		-0.20**	-0.14**	0.01		-0.15**	-0.09*	0.03
Foreign Invested (FIE)		0.07 ⁺	0.03	0.57*		0.07	0.02	0.10
Privately Owned (POE)		0.12**	0.05	0.82**		0.13*	0.04	0.04
SHRM			0.16**	0.19*			0.24**	0.20*
HR Practices			0.31**	0.45**			0.30**	0.35**
SOE * SHRM				-0.03				0.04
SOE * HR Practices				-0.10				-0.16
FIE * SHRM				-0.10				0.18
FIE * HR Practices				-0.47 ⁺				-0.26
POE * SHRM				-0.02				0.11
POE * HR Practices				-0.79**				-0.11
Adjusted R-square	0.06**	0.13**	0.28**	0.30**	0.09**	0.14**	0.33**	0.33**
F-value	7.57	10.96	21.63	15.31	10.93	11.71	27.13	17.51
Change in R-square		0.07**	0.15**	0.02**		0.05**	0.19**	0.00
F-value		16.52	59.50	2.92		12.02	81.62	0.26

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

TABLE IV Hierarchical Regression Analysis with Employee Relations Climate as Dependent Variable

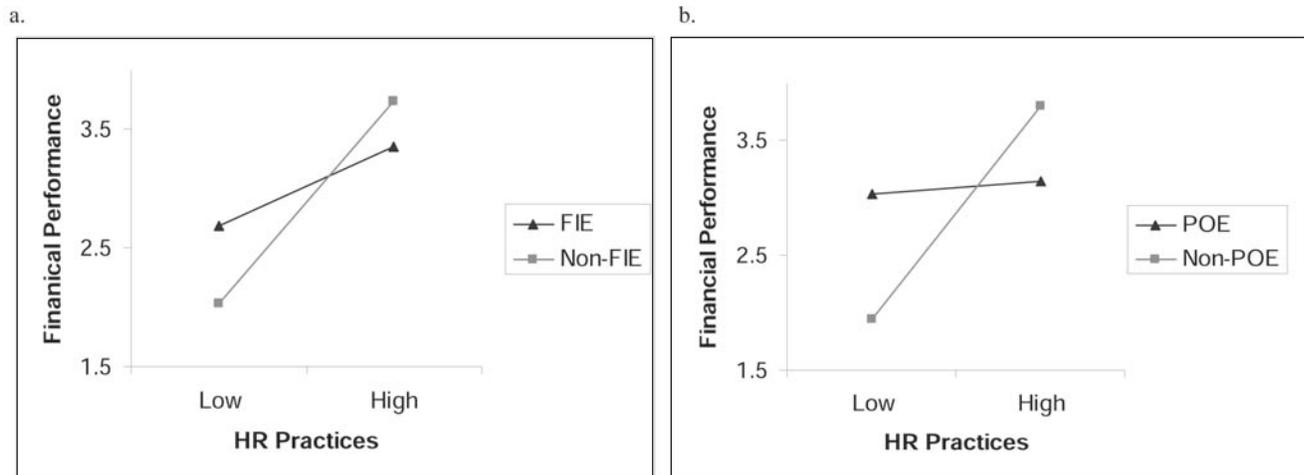
Variables	Model 1	Model 2	Model 3	Model 4
Heavy Manufacturing	-0.08	-0.10 ⁺	-0.01	-0.02
Light Manufacturing	-0.08	-0.10 ⁺	-0.05	-0.05
Beijing	-0.06	-0.04	-0.01	-0.00
Shanghai	-0.15**	-0.14**	-0.05	-0.05
Guangdong	-0.01	-0.00	-0.01	0.00
Firm Size	0.11 ⁺	0.14**	-0.02	-0.03
State-Owned (SOE)		-0.07	-0.00	-0.02
Foreign Invested (FIE)		-0.03	-0.08*	-0.50*
Privately Owned (POE)		0.09 ⁺	0.01	-0.20
SHRM			0.57**	0.62**
HR Practices			0.14**	0.04
SOE * SHRM				-0.14
SOE * HR Practices				0.15
FIE * SHRM				-0.08
FIE * HR Practices				0.51*
POE * SHRM				-0.17
POE * HR Practices				0.38 ⁺
Adjusted <i>R</i> -square	0.02**	0.03**	0.41**	0.42**
<i>F</i> -value	3.34	3.34	39.29	25.91
Change in <i>R</i> -square		0.02*	0.38**	0.01
<i>F</i> -value		3.27	191.29	1.23

⁺ $p < 0.1$, * $p < 0.05$, ** $p < 0.01$.

Model 4, which includes all the interaction terms, the interaction of FIE with HR practices and of POE with HR practices were found to be significant at the 0.05 and 0.1 level, respectively. Both had positive effects on the employee relations climate. However, as the change in *R*-square was insignificant for that model, Hypothesis 3 was not supported as far as the employee relations climate is concerned.

Discussion

We tested a conceptual model of SHRM in China based on the notion of human resources as an important source of competitive advantage for firms. In doing so, the institutional environment and recent trends in HRM in the country have been taken into consideration. The ANOVA results indicated that SHRM and HR practices are not em-



FIE: Foreign-invested firm.
POE: Privately owned firm.

FIGURE 2. The Moderating Effect of Firm Ownership on HR Practices and Financial Performance

ployed uniformly among different types of ownership. Support was found for Hypothesis 1 that SOEs used less SHRM and HR practices than FIEs and POEs. This finding is consistent with previous studies in China (e.g., Warner et al., 1999; Zhu, 2005). Additionally, Hypothesis 2 gained empirical support. Regression analyses confirmed the positive main effects of SHRM and HR practices on all the outcome variables. Like Western firms, firms in China are able to reap the benefits of SHRM and HR practices in terms of higher financial and operational performance, and better employee relations climate.

Hypothesis 3 states that ownership has a moderating effect on the relationships between SHRM and HR practices with firm outcomes. In our study, only two interaction terms were statistically significant. Thus, Hypothesis 3 was only partially supported. We found that for FIEs and POEs, the effect of HR practices on financial performance was not as high as that of other ownership types. Perhaps these firms incur a cost in transferring and implementing Western HR practices that initially results in lower economic returns. Examples of such cost include the high pay in recruiting talent—particularly senior expatriate managers (Warner et al., 1999)—and the provision of extensive training and development programs to retain local employees. Moreover, Sels et al. (2006)

argued that there are some cost-increasing effects of high-performance work practices such as work intensification, stress, and job strain, and these negative effects on employees have financial implications for organizations. They noted that the use of best HR practices increases absenteeism and staff turnover, and hence raises the labor cost.

Another possible reason is that SOEs can gain more benefits by designing better HRM systems, as they are further behind FIEs and POEs in this regard. Mainstream HR practices are able to boost the incentives and motivation of their employees, which in turn leads to higher financial performance in SOEs.

Furthermore, we found no significant interaction effects of ownership types with SHRM, with respect to the other two outcome variables (i.e., operating performance and employee relations climate). Zhu et al. (2005) concluded that a more level playing field has appeared recently in China for ownership types, and this may in part help explain the results. Those reformed SOEs that already have adopted SHRM may be as good as the FIEs in taking advantage of SHRM's contributions to operational and employee outcomes.

Managerial Implications

Our study shows that HR practices have several implications for Chinese firms. Al-

though mainstream HR practices have a positive impact on firm outcomes, their effect on financial performance is relatively weaker for FIEs and POEs than for other firms. Managers of FIEs and POEs should be aware that the increased use of these HR practices may not bring about a significant improvement in financial performance as seen in SOEs. As shown in the ANOVA result, FIEs and POEs have already employed more mainstream HR practices and have invested in human resources. Unlike SOEs, these firms may not reap large benefits in the short run. Since human resource practices are a long-term investment, they still can enjoy the benefits of a well-developed HR system in the long run. CEOs and HR practitioners need to “stay the course” and continue to introduce new HR practices rather than slowing down the pace of change.

Furthermore, we found no significant interaction effects of ownership types with SHRM, with respect to the other two outcome variables (i.e., operating performance and employee relations climate).

Furthermore, we found that firms with higher levels of SHRM receive greater benefit in terms of organizational performance, regardless of ownership type. In view of this result, CEOs and HR managers of all types of firms in China should feel confident in implementing SHRM and seeing improved organizational performance. They should devote time and energy to strategically develop and monitor HRM processes within their firms. This

advice is especially true for local firms since MNCs do not have the expected edge in utilizing SHRM.

It is well known that SOEs face greater institutional constraints than other firms in the transitional economy of China. In the past, HRM functions in these firms were more administrative and less strategic in nature, and their performance lagged behind other firms. Our results showed that Western-based HR practices and SHRM should be employed in SOEs, since they may lead to significant gains in performance. To achieve competitive advantage via human resources, more changes in the HR system of SOEs are needed.

Finally, our study indicates that the outcomes brought by SHRM and mainstream HR practices to the firms are not restricted to financial and operational performance. A positive employee relations climate also can be developed, which is critical for Chinese firms that emphasize workers' involvement and cooperation. As pointed out by Bowen and Ostroff (2004), sustainable competitive advantages are often embedded in intangible resources such as organizational climate. Thus, HR managers should pay more attention to managing the employee relations climate in their firms.

Limitations and Future Research

Some limitations of our article should be noted. First, common method bias is always an issue in survey research, as the data are provided by the same respondent. In this study, this bias was mitigated to a certain extent by collecting information from two respondents (i.e., the CEO and HR/Finance director) on key variables (i.e., SHRM, HRM practices, and firm outcomes). Additional data collected from different informants could triangulate these results. Second, HRM may have a different meaning in the context of foreign versus local firms. HRM may be more narrowly defined in local Chinese firms than in Western models (Warner et al., 1999), which might lead to biases in comparing across firms. Third, the cross-sectional nature of the data may have biased the conclusions on the direction of causality. High-performing firms may invest more in HR and introduce more new HR practices. Conducting future research using a longitudinal design seems desirable in order to disentangle these causal relationships (Wright & Gardner, 2003).

In this study, we found that ownership does not have strong moderating effects on firm outcomes. Future studies are needed on the intervening variables between SHRM and HR practices and firm performance (Bjorkman & Fan, 2002; Wright & Gardner, 2003). For example, the employment relationship type (Tsui & Wu, 2005) and organizational culture (Lau & Ngo, 2004) may be mediating

variables. The strength of the HR system as suggested by Bowen and Ostroff (2004) is also a plausible mediator in the Chinese context.

Moreover, as Chinese firms are undergoing various stages of reform, simple grouping according to “ownership types” may not accurately reflect the influences of ownership. Other organizational variables related to ownership could influence firm processes and outcomes. Future studies should identify these key characteristics and examine their impact, instead of simply using ownership types as proxies (Wong et al., 2005).

Conclusion

We examined the HR–firm performance relationship in China in order to understand the impact of SHRM and HR practices in a transitional economy. We found that foreign

firms may not be better than local firms as far as these effects are concerned. POEs increasingly have adopted a market-oriented approach to managing human resources. We also added to the literature by incorporating an expanded view of firm performance in our model, one that includes the employee relations climate as a salient outcome. Given our current results, managers in China should rest assured that SHRM and mainstream HR practices have positive effects on firm performance.

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HANG-YUE NGO is a professor in the Department of Management at the Chinese University of Hong Kong. He obtained his MA and PhD in sociology from the University of Chicago. His research interests include gender and employment, human resource management, and organizational behavior in the Chinese context. He has published over 50 research articles in academic journals such as the *Journal of Applied Psychology*, the *Journal of International Business Studies*, the *Journal of Management*, *Group and Organization Management*, *Human Relations*, the *International Journal of Human Resource Management*, and the *Journal of Occupational and Organizational Psychology*.

CHUNG-MING LAU is a professor in the Department of Management at the Chinese University of Hong Kong and the founding president of the Asia Academy of Management. He obtained his PhD in management from Texas A&M University. His teaching and research interests include strategic change, organization culture, and management of Chinese organizations. He has published in the *Academy of Management Journal*, the *Journal of Applied Psychology*, the *Journal of International Business Studies*, the *Journal of Management Studies*, the *International Journal of Human Resource Management*, *Management International Review*, the *Asia Pacific Journal of Management*, and other major journals.

SHARON FOLEY is a visiting program professor in the School of Economics and Management at Tsinghua University in Beijing. She obtained her PhD in management from the University of Connecticut. She has taught MBA students in the United States, London, Hong Kong, and Beijing. Her research interests include gender, diversity, and fairness in the workplace. She has published in academic journals such as the *Journal of Management*, *Group and Organization Management*, the *Journal of Organizational Behavior*, the *International Journal of Human Resource Management*, and the *Journal of Occupational and Organizational Psychology*.

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APPENDIX A Items Used in Various Scales

Strategic Human Resources Management Scale (alpha = 0.91)

1. Match the characteristics of managers to the strategic plan of the firm.
2. Identify managerial characteristics necessary to run the firm in the long term.
3. Modify the compensation system to encourage managers to achieve long-term strategic objectives.
4. Design staffing patterns to help implement business or corporate strategies.
5. Evaluate key personnel based on their potential for carrying out strategic goals.
6. Conduct job analysis based on what the job may entail in the future.
7. Conduct staff development programs designed to support strategic changes.

Human Resources Practices Scale (alpha = 0.91)

1. Our staff selection process is rigorous.
2. Our performance appraisals emphasize outcomes.
3. Our compensation package is designed to be more competitive than other firms in the industry.
4. We provide a considerable amount of training.
5. We try to keep employee turnover to a minimum.
6. In determining compensation, we emphasize the individual's contributions more than job title.
7. Our remuneration package is designed to reward long-term employees.
8. Employee behavior is a key component to performance appraisal.
9. We primarily hire applicants that currently possess the necessary knowledge and skills.
10. On-the-job training is more important than formal education or experience with other organizations.
11. We emphasize external pay comparability in determining compensation.
12. Our remuneration package is intended to promote employee retention.
13. We intend to keep large salary differences between high and low performers in the same position.
14. Employees transfer to new functional areas and/or new units are used as a development activity in our firm.
15. We have a sufficient training budget.

Employee Relations Climate Scale (alpha = 0.88)

1. Workers can fully utilize their knowledge and skills in the organization.
2. Workers have a sense of belonging and commitment to the organization.
3. Workers are able to discuss operational issues in an open, frank, and constructive manner.
4. Workers maintain rapport relationship with each other and are willing to share information.
5. Workers at all levels establish a high standard for themselves and expect a high effectiveness at work.
6. Workers can freely discuss job-related issues with their supervisor.