RESEARCH ARTICLE

LIU Shanshi, Irene Hau-siu Chow, CHAO Gang

In search of the best human resource practices in chain stores in China

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Abstract This paper is based on a recent survey of human resources (HR) practices from 83 chain stores in China. It differentiated managerial staff and operating employees according to different types of HR configurations. It also identified high and low adoption based on bundling of HR practices using cluster analysis. The impact of HR practices alignment on enhancing firm performance was evaluated using high adoption cluster. The findings advance our knowledge in the High Performance Work Systems literature and offer important insights for executives in formulating effective HR management strategies.

Keywords high performance work systems, human resource practices, chain stores

Since the 1980s, the manufacturing industry in the U.S.A. has been importing new manufacturing techniques to adapt to new competitions. Because the human resources (HR) management system in companies lagged far behind the new production system, the technical changes (technological change) failed to achieve the expected output. Consequently, how to reform the HR management system based on scientific management became one of the hottest HR management topics. Huselid (1995) put forward the "comprehensive" method of HR management research. The method assumed the presence of high performance work system (HPWS) and the existence of the HR best practices. The "ideal

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LIU Shanshi (⊠), CHAO Gang

School of Business Management, South China University of Technology, Guangzhou 510640, China

E-mail: bmssliu@scut.edu.cn

Irene Hau-siu Chow

Department of Management, The Chinese University of Hong Kong, Hong Kong, China

model" maximized performance in companies. Then, more and more scholars in other countries began to research the construct of "ideal model," which made most research on international HR management focus on "HPWS" or "best practices."

Many studies in the U.S. and other countries show that HPWS is usually associated with increase in firm performance. However, there are few studies about the relationship between HPWS and firm performance in China. Our study analyzed a recent survey of HR practices from 83 chain stores in south China in order to test the relationship between HPWS and firm performance in the China context. Meanwhile, we help companies understand the value of effective HR management in key business areas by providing the reference of theory and practice of HR management.

1 Literature review

There are two new emerging trends in current international HR management study. The first one is the use of a system approach. Recent studies have been transferred from the relationship between individual HR practices and employee performance to a broader and more comprehensive relationship between HR management practices and firm performance and to the macro strategies that connect HR and business strategy. Future research on strategic HR management will mainly focus on the degree of match between a wide range of HR practices and corporate business strategies (Delery, 1998). Meanwhile, organizations also seek the external match between HR functions and organizational strategies as well as the internal match between individual HR practices.

The second trend is the study of HR management control systems. The study shows that organizations form the control style of employee management for the type of commitment (Pil and MacDuffie, 1996). In the control of organizations, the emphasis of HR is administration, training is seen as a cost to be minimized; communication is realized from top to bottom; payment is based on the invariable policy; employee participation rate is very low; HR practices are procedural and passive. Conversely, high commitment organizations fully exploit the role of cross-functional teams and employee participation. Bae and Lawler's (2000) noted that through rigorous selection of employees, extensive training, empowerment, performance-based pay system and broad job design, organizations can enhance employee's commitment and stimulate the effectiveness of HR. Other factors that can stimulate HR initiative are the design of information sharing and communication channels, lifelong learning, a wide range of incentives, formal conflict resolution procedures, training and retraining. This trend implies the transfer from controlling employees to achieving employee's commitment.

Over the last 20 years, scholars did much research on the innovation of HR, such as high-participation approach, cross-training, flexible work assignments and self-management team (Gerard and Varma, 1998). The research shows that whether an organization adopts HPWS or not will have a significant impact on employee attitudes, behavior and firm performance (Guthrie, 2001; Huselid, 1995).

The term "HPWS" used by Huselid (1995) is known by many different names in the existing literature, such as high-involvement systems (Lawler, Mohrman and Ledford, 1995), flexible work systems, and high commitment management (Van Buren and Werner, 1996).

Huselid, Jackson and Schuler (1997) defined HPWS as "an internally consistent set of policies and practices that ensure that a firm's human capital contributes to the achievement of business objectives." Edwards and Wright (2001) found that theoretical assumptions that included HPWS where the manner in which organizations treated employees changed their working attitudes and enhanced their job satisfaction and commitment. This attitude would continue to affect behavior, which in turn would promote firm performance.

More and more evidence suggests that HR management and firm performance in HPWS have a relationship with return on financial investment (Appelbaum et al., 2000; Kravetz, 1988). Ichniowski et al. (1997) and Berg (1999) researched HPWS on steel production, and found that an innovative system was associated with significantly high productivity. In the manufacturing industry, Appelbaum, et al. (2000) found that HPWS was associated with high market prices of stock and productivity. Similar results were found in the services department that utilized HPWS (Varma et al., 1999). Huselid (1995) found that HPWS had statistically significant impact on employee turnover, productivity, and corporate performance in publicly held organizations. Levering and Moskowitz (1993) investigated 100 best companies in the U.S.A. and Lawler et al. (1995) surveyed Fortune 1000 companies over three time periods, both of them found significantly high financial success in the companies that utilized HPWS. When these practices are implemented as a system, their effects are most significant. This will make complementary HR a joint practice consistent system, and directly connect with the creation of value.

Although much research has shown that HR affect company performance, existing literature cannot confirm the existence of HPWS. Cappelli and Neumark (2001) examined the relationships among HR practices, pay, and labor efficiency (operationalized as output per dollar spent on labor). The core of the problem is what HR practices HPWS constitutes.

What best practices are included in the HPWS? There are great differences in this field. Different studies use different measurements of HR practices. The commonly recognized areas in HR practices include hiring and recruitment policy,

providing the level of training, the extent to which compensation is contingent on performance, and employee involvement and participation.

Organizations can utilize a variety of HR management practices to improve productivity. Recently, the increasingly accepted view is the synergistic effects that follow from the interactions between complementary practices, which can be internal (within the HR management system) and external (with firm competitive strategy). Based on existing literature, the effects of different HR practices are additive. Based on this principle, Huselid (1997) and Delery (1998) put forward a set of HPWS measurement systems.

MacDuffie (1995) and Ichniowski et al. (1997) suggest that it is necessary to bundle together the appropriate combinations of HRM practices to realize the synergistic effects that follow from the interactions between complementary practices. They point that selective recruiting and staffing procedures as well as training enhance workforce skills, while higher base pay and benefits attract better-qualified workers. Performance-based pay, job security, and information sharing are expected to enhance employee motivation. Recognizing the contribution that employees make, soliciting employee input and encouraging employees to participate in decision, are expected to enhance employee empowerment.

2 Methodology

In the last two decades, the growth of China's GDP was over 6%. In 1999, the proportion of China's service industry GDP increased from 21.4% ten years ago to 32.9%. Chinese consumer purchasing habits are also changing. They preferred chain stores. Since 2000, sales growth of the chain store industry increased more than 30% annually.

This study used interviews and questionnaires with staff in different position: CEO, supervisors of production line and HR managers. First of all, we interviewed senior managers from 28 chain stores, who were asked to answer general questions about HR practice by a team composed of three interviewers. Finally, information was validated by cross-validation to ensure its accuracy.

We design a questionnaire on the basis of interview and secondary data of China's retail chain industry. Then the questionnaires were sent along with those for the payment to the Guangdong chain industry by the Guangdong chain industry associations. The targets of the questionnaire were HR managers, financial managers and general managers. Finally, 83 responses were returned and the response rate was about 78%. This study was defined as a special part of a business (retail chain industry) to avoid the levity of individual businesses. The advantages of research on an industry are that it can control the impact on upstream and downstream industries and different environment.

Referring to studies of best HR practices, we designed a survey instrument to measure the importance of different HR practices. The respondents were asked to rate the importance of these practices, using a six-point scale of 1 (not at all) to 6 (very important). These HR practices can be further classified into the following six areas: (1) staff allocation, (2) training and development (T&D), (3) performance assessment, (4) payment and benefit, (5) information sharing and labor-management participation, and (6) provision of job security. Each of these areas includes 3 to 5 practices (see Fig. 1).

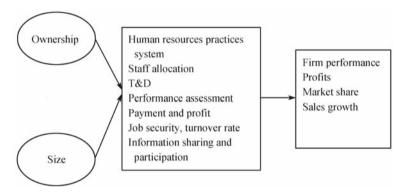


Fig. 1 Research framework

Individual HR activities have been integrated into a comprehensive HR index, which reflects HR practices of the companies surveyed. HPWS index is measured by the standard scores in the same yardstick on the basis of HR management practices (recruiting, training, assessment performance, job description, and job security).

High performance work system (HPWS) is based on the indicators of HR management practices (recruitment, formal training, performance evaluation, pay system, job security and working structure) detected in the same yardstick to measure overall standard. The index design is consistent with Youndt et al. (1996) and MacDuffie's (1995) HR practices. We considered these two series of activities (managers and production staff) as additional index.

Firm performance is usually measured by employee turnover rate, financial profit and market share. We did not collect the financial data of all the companies, because some companies are unwilling to publish them. Instead we adopted the subjective evaluation methods and asked targets to assess profitability, market share and sales growth in the past two years, compare them with the industry average, and evaluate them from one (very bad) to five (very good).

We distinguish the size of companies in accordance with the number of employees, and differentiate ownership types.

3 Results

The majority of these firms are collective enterprises (62.7%). The size of the firms is from 110 employees to 10000 employees and with 1495 employees as medium size. The ratio of managers and production staff is 38.8%. There are ten employees in the HR department. The turnover rate of managers and workers in the past two years were 10.75% and 20.21%, respectively.

Human resources (HR) practices of managers and workers may be very different (Fey, et al., 2000). Table 1 displays the mean scores and standard derivations of these HR practices. The staff recruitment and performance assessment of managers and workers have a higher average score. Managers have higher score than workers in recruiting, performance assessment and information sharing. However, T-test shows that managers have a lower score than workers in training and turnover rate. There is no significant difference between the two groups in payment and job security. Goodall and Warner's (1997) findings showed very few differences in manager's and worker's payment. It is a trend of HPWS that the payment transfers from symbolic egalitarianism to performance-based payment.

 Table 1
 The differences between HR practices of managers and workers

| | Mana | agers | Wor | kers | |
|--|------|-------|------|------|----------|
| | Mean | S.D. | Mean | S.D. | T-test |
| HR index | 4.33 | 0.50 | 4.04 | 0.58 | 4.21*** |
| Staff allocation | 3.38 | 0.87 | 3.7 | 0.78 | -3.72*** |
| T&D | 4.44 | 0.58 | 4.02 | 0.80 | 5.17*** |
| Performance assessment | 3.86 | 0.84 | 3.73 | 1.0 | 1.51 |
| Payment and benefit | 3.90 | 0.68 | 3.42 | 0.76 | 6.05*** |
| Information sharing and labor-management participation | 3.92 | 2.48 | 3.51 | 1.10 | 1.42 |
| Job security | 0.11 | 0.95 | 0.20 | 0.14 | -2.8** |

Notes: *p < 0.05; **p < 0.01; ***p < 0.001.

Cluster analysis can distinguish different types of HR practices patterns and ultimately identify high performance and low performance companies. We used K-Means cluster analysis to divide HR into two groups that had significant differences, and got 60 high-level companies and 23 low-level companies on the basis of general HR index (the total scores of six areas). Once significant differences between the categories were found, we would test the differences of different levels of HR practices.

Table 2 shows the differences between high-performance and low-performance companies. In the two groups of companies, significant differences exist in most

| | High-scor $N =$ | | Low-score group $N = 23$ | | |
|--|-----------------|------|--------------------------|------|----------|
| | Mean | S.D. | Mean | S.D. | T-test |
| HR index | 21.81 | 1.59 | 15.79 | 3.39 | 11.01*** |
| Staff allocation | 4.37 | 0.44 | 4.16 | 0.26 | 2.18* |
| T&D | 4.22 | 0.65 | 2.82 | 1.03 | 7.06*** |
| Performance assessment | 4.48 | 0.55 | 3.60 | 0.83 | 5.52*** |
| Payment and benefit | 4.53 | 0.52 | 3.6 | 0.55 | 6.82*** |
| Information sharing and labor-management participation | 4.21 | 0.49 | 3.23 | 1.0 | 5.24*** |
| Job security | 4.12 | 2.71 | 3.28 | 1.07 | 1.28 |
| Firm performance | 11.28 | 1.47 | 11.76 | 1.35 | -1.21 |

Table 2 Comparison of high and low HR practices

Notes: "Firm performance" is composed of profitability, market share and sales growth. *p < .05; ***p < .001.

of the HR practices except for job security. Significant differences also exist in their utilities of HR. The HR practices that high-performance firms utilize are different from that of low-performance firms. Companies that utilize HPWS invest more resources in recruiting and selection, more effective training, more performance management and performance-related payment. Differences in HR activities reflect the differences in investment of human capital. There is no significant difference in job security of the two groups. Companies must fulfill their legal obligations when they deal with the surplus staff. It is difficult for them to dismiss a large number of surplus employees. Employees enjoy high job security.

When the six dimensions were factor analyzed, they merged into two factors, which were 42.9% and 18.36%, respectively. The first factor is the ability of improving HR practices, including training, performance assessment, payment and information sharing. They are the main HR activities that companies use to put forward and enhance expected behavior. The second factor is employment (staff allocation and job security). The results show a consistent HR strategy in a certain context.

Table 3 reports the relationship between HR practices and outcome variables. Three outcome variables are of high relevance. The size of companies measured by the number of employees, type of ownership and market share are significantly related. Larger companies and state-owned companies have larger market share. There is no significant relationship between all HR practices and market share. Sales growth is related to performance assessment, but not to other HR practices. Performance assessment and profits and sales are significantly related. There is no significant correlation between turnover rate and other variables. Job security, payment, training, staff allocation and HR indexes are

 Table 3
 Correlation among Variables

| | Profit margin | Market | Sales growth | Sales Number of Ownership growth employee | Ownership | Staff allocation | T&D | T&D Performance Payment assessment and benefit | 1 | Information sharing and labor-management participation | Job security | Turnover |
|-------------------------|------------------|----------|-----------------|--|-----------|---------------------|---------|--|----------|--|-----------------|----------|
| Market share | 0.389** | | | | | | | | | | | |
| | 0.655*** | 0.478*** | | I | I | | | | | | | 1 |
| Number of employee | 0.117 | 0.318* | 0.159 | I | I | | | | | | | |
| Ownership | -0.149 | 0.226+ | -0.044 | -0.053 | | | | | | | | |
| Staffallocation | -0.201 | 0.086 | 0.029 | 0.046 | 0.318* | | | | | 1 | | |
| T&D | 0.185 | -0.001 | 0.139 | -0.134 | -0.052 | -0.293* | | | | | | 1 |
| Performance assessment | 0.271* | 0.040 | 0.253* | 0.079 | 0.005 | 0.050 | 0.092 | 1 | I | | | I |
| Payment and benefit | -0.065 | -0.082 | -0.037 | -0.304* | -0.024 | 0.044 | 0.201 | 0.143 | 1 | | | 1 |
| Information sharing and | -0.22+ | -0.089 | 0.002 | -0.195 | 0.095 | 0.138 | 0.328** | 0.207 | 0.211 | | I | 1 |
| labor management | | | | | | | | | | | | |
| participation | | | | | | | | | | | | |
| Job security | 0.000 | -0.090 | -0.052 | -0.267+ | 0.085 | -0.063 | -0.061 | -0.115 | 0.120 | 0.030 | 1 | I |
| Turnover rate | -0.058 | -0.242 | -0.225 | -0.028 | 0.163 | -0.138 | 0.094 | -0.072 | -0.239 | 980.0- | 0.024 | |
| HR index | -0.008 | -0.094 | 0.017 | -0.352* | 0.123 | 0.091 | 0.236 + | 0.146 | 0.483*** | 0.368** | 0.848*** -0.067 | -0.067 |
| | | | | | | | | | | | | |

Notes: *p < 0.05; **p < 0.01; ***p < 0.001.

not related to all performance indexes, which is contradictory to recent studies. These studies show that enhancing strategic human capital investment, such as competitive payment, effective training and rigorous selection, will lead to high performance (Delaney and Huselid, 1996).

4 Discussion and conclusion

The purpose of this paper is to extend the emerging empirical studies at firm level on the impact of HR on performance in the China context. Although many studies on HPWS have made positive conclusions, the results of the chain store industry in China are not as positive as that in the west. The study includes growing empirical evidences in the Asian context. The results partly support the positive relevance between HPWS and firm performance (subjective profitability), which are consistent with recent studies.

The study supports the positive relevance between HR practices (internal consistency) and firm performance. The results show a significant relationship between HR practices and profit margin. An important message from the results is to increase profits on the basis of putting employees first. There is a significant correlation between HR practices and firm performance, but a weak correlation with operation strategy. This explains why there is no significant impact on some performance indexes (market share and sales growth). Another reason is due to the characteristic of the China chain store industry. The rapid growth of the industry has led to a lack of employees with good training and skills. High turnover rates and low-skilled labor are the two key issues of HPWS. The report also shows that turnover rates of managers and workers are 10% and 20%, respectively, and that high turnover rate is a big problem in the industry. In the interviews, respondents frequently mentioned the difficulty of attracting and retaining high-quality employees. Because of high turnover rate, it is difficult to accumulate specialized knowledge required by the work. Organizations must pay more attention to attracting and retaining employees, since employee loyalty promotes productivity and firm performance (Batt, 2002).

The study provides weak evidence to support that HR practices could improve firm performance. A possible reason is that current HR management in China's chain store industry remains in the early stages. HR management plays a low-value activity role, such as payment records and distribution of bonuses. Most chain companies adopt low-cost strategies, and hire low-skilled, low-education and low training employees. HR functions play a traditional "personnel" role, rather than a strategic partner. They are "slow" in adopting high performance work practices. Since HR management development is such a major investment, and because associated costs and likely profits are so uncertain, the implementation of

these practices is a high-risk, making it hard for a company to adopt innovative HR practices. Some companies are keen on exploring this area through imitating models from successful companies.

In western literature, employee participation plays an important role in the success of HPWS. Organizations that have high employee participation are involved in high quality and high productivity, and have a series of HR practices that fit each other. These practices improve employees' skills, and employee participation in decision-making improves their motivation. But it is different in the China context. There is a conflict between practices of high participation and some cultural factors. So it is important to consider the effective implementation of HPWS in Chinese society, including the distance between difference levels, reluctance to share rights with subordinates and to empower them in decision-making, and the conflict with others in the workplace, for a harmonious working relationship. In addition, HPWS needs more autonomy, greater diversity of work, or more effective use of knowledge and skills, thereby improving employees' motivation and reducing dysfunctional turnover rate (Jones and Wright, 1992). However, the present situation of China's chain companies may not be the case. Their main concern is to achieve cost-effective purposes on the basis controlling the HR management rather than creating an employee commitment system. Therefore, HR practices based on commitment have not been widely used. This may give some challenges to the use of HPWS, because these systems may not be suitable for the Chinese culture and institutional environment. This has raised questions about the viability and effectiveness of HPWS in the Asian context in the current spreading stage of HPWS. Therefore, it is necessary to do some further research in this field.

Since China has joined the WTO and more and more multinational corporations are expected to enter the Chinese market, the retail chain industry is experiencing a revolutionary change. The changes in an increasingly competitive environment make a new requirement of HR practices. It is more and more important for companies to recruit and retain better trained employees. Local companies can adapt to the situation by imitating HR practices of successful companies.

The contribution of HR management to firm performance is to promote the fitness of the organization, for example, strategies that respond to changes in the external environment. The internal fit of these practices and the external company strategies are very important. Individual HR practices are not so important, because their effectiveness depends largely on organizational background. Employees in an organization are the potential sources of sustainable competitive advantages. Through HR practices and by a certain way, the value of employees in organizations can be fully activated. Moreover, high-performance companies are better than other companies not only in HR but also in other fields, which reflects the relationship between HR and firm performance.

Our research and findings are obtained from the surveyed companies in the retail chain industry in China. As long as the data are collected from one channel, the generalization of methods and standards will present a potential problem. Meanwhile, the methods used to measure firm performance are subjective evaluation. Future research should be considered using both subjective and objective measurement for firm performance. Because of the limitations and characteristics of the research mentioned here, the generalization of results should be carefully explained.

Finally, results supporting the conclusions of previous studies show that HR systems improve firm performance to a certain extent. This study raises the understanding of very controversial issues in this area, especially in the China context. The conclusion enriches HR management research through focusing on high performance work practices in China's retail chain industry. The findings of the study give operators important references and new views on how to manage HR. Although these conclusions were limited because of the limitation of the data, this study established the research foundation of HR strategies and organizational performance in the China context. The findings of the study provide an important perspective for managers on making effective HR management strategies.

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