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Enhancing Chinese SME performance through innovative HR practices

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Abstract

Purpose – The purpose of this paper is to show how understanding of human resource (HR) management practices which have been adopted in the emerging markets such as that in China is particularly interesting to academia and management practitioners. The purpose of this study is to shed some light on the implementation of innovative HR practices among 74 Chinese small and medium-sized enterprises (SMEs) and to explain how the HR practices influence their firm performance.

Design/methodology/approach – Cluster analysis is used to group Chinese SMEs according to their adoption of innovative human resource (HR) practices and examine how the practices are associated with HR outcomes and firm performance.

Findings – It is found that the membership of clusters is influenced by several factors, including ownership, age and size of firms. These characteristics have influenced the motivation, capacity and ability of firms in the sample to adopt high performance human resource practices. The extent to which firms have adopted innovative human resource practices is shown to be closely associated with human resource outcomes and firm performance.

Originality/value – The key implication is that SMEs, especially those rapidly developing domestic and collectively owned small firms, as well as those state-owned enterprises in China, may see clearly the benefits of devoting greater attention to HR practices to achieve their future growth potential.

Introduction

Theoretical discussion on the relationship between human resource (HR) management and performance have been well documented in the number of past and recent reviews (e.g. Guest, 1997; Gratton et al., 1999; Wood, 1999; Becker et al., 2001; Paauwe, 2004). The
empirical studies on assessing the impact of HRM on firm performance have also amounted in recent years (see for example, Huselid, 1995; Delaney and Huselid, 1996; Ngo et al., 1998; Bae and Lawler, 2000; Guthrie, 2001; Chang and Chen, 2002; Takeuchi et al., 2003; Stavrou and Brewster, 2005). The central argument in these HRM literature is that effective and evolving HR practices lead to better and/or changed employee behaviour which helps enhance organizational performance. Despite the considerable volume and diversity in HRM research, the focus of prior studies has been on addressing HRM issues in larger firms, “relatively little is understood regarding the HR-related needs, practices, behaviours and outcomes of smaller firms” (Hornsby and Kuratko, 2003, p. 74). The aim of this paper is to fill the gap by providing empirical evidence of HR practices and outcomes in the context of Chinese small and medium sized enterprises (SMEs).

The different HR needs and practices between small and large firms tend to be stratified by business characteristics represented by these firms (Deshpandé and Golhar, 1994). Smaller firms are arguably managed predominantly by their founders or owners with potentially centralized decision making in resource allocation (McEvoy, 1984; Deshpandé and Golhar, 1994; Watson et al., 1994; Golhar and Deshpandé, 1997; Kerr and McDougall, 1999; Heneman et al., 2000). Small firms, in particular those family-owned businesses may also be rather time and cost-conscious. They are more likely to take opportunistic behaviour in strategically choosing more or less HR practices that could best utilize their limited resources in order to achieve maximum performance outcomes (Kerr and McDougall, 1999; King et al., 2001; McCann et al., 2001; Dickson et al., 2006). Despite this line of resource-based view (RBV) of the small firms, the theory put forward by Biggeri et al. (1999) about SME operation in China suggests that SMEs, when compared with larger Chinese firms, are much more competitive and flexible to respond to rapid market change. In fact, SMEs are also the vanguard of adopting major management changes during China’s decades of economic reform (Goodall and Warner, 1997, 1999). On one hand, there might have been many restrictions faced by larger Chinese firms to quickly adapt to many changes under the economic reforms. SMEs, on the other hand, often have greater freedom in changing their employment practices, applying new technology and being able to use HR practices as a management tool in implementing changes and to achieve improved performance in the process of economic restructuring (Chow, 2004).

Chinese SMEs have been defined using various criteria, such as number employed, volume of sales or output, and value of assets (Cunningham and Rowley, 2007). The most commonly used method to define SMEs globally is the number of employees (Dixon et al., 1991; APEC, 1997; OECD, 1998; Wilkinson, 1999). However, there is no consensus in the literature on how “big” small can be. For instance, a small firm was defined by Barrett (1999) as having less than 20 employees in the service industry or less than 100 in manufacturing. Kerr and McDougall (1999) defined small firms as having 50 or fewer employees. Most studies define small firms as the ones employing less than 100 people (MacMahon, 1996; Kaman et al., 2001; Chetty and Campbell-Hunt, 2003) and medium ones as those with less than 500 employees (Hendry et al., 1995; Wong et al., 1997; Wright et al., 1999). Most recently in China, SMEs were defined using the average numbers of employees calculated according to the China’s Third National Industrial Census conducted in 1995, which are 15, 893, and 3,755 respectively (Wang and Yao, 2000).
Taking the perspectives both from inside China and globally, we therefore adopt the following scales to define SMEs in this paper:

- micro businesses are those with fewer than 25 employees;
- small firms are those with fewer than 50 employees;
- small-medium enterprise are those with fewer than 100 employees;
- medium-sized enterprise are those with fewer than 500 employees; and
- medium-large firms are those with over 500 employees.

The number of employees or firm size is one of the key factors in explaining different HR practices of large and small firms (Hornsby and Kuratko, 2003; Cunningham and Rowley, 2007), even though other factors discussed in the literature are also influential in determining the level of HR practices and SME performance. These factors are technology innovation (Kickul and Gundry, 2002; Maldifassi and Rodriguez, 2005), the nature of the industry (Chow, 1995; Luo, 1999; Datta et al., 2005), SME business owners’ abilities and skills (Lin, 1998; Orser et al., 2000), their entrepreneurial and managerial philosophy (Luk, 1996; Beoker, 1997, Kickul and Gundry, 2002). In China, different forms of firm ownership have had a considerable effect on the performance of small firms (Ahlstrom et al., 2002; Anderson et al., 2003; Tan et al., 2005). However, the importance of human resource management has been gradually recognized by small business owners as effective tools to achieve survival and success of their companies (Arthur and Hendry, 1990; Bacon et al., 1996; Lin, 1998; Kaman et al., 2001; Singh and Vohra, 2005). The ability to manage human resources in a consistent and effective manner helps small firms attract and retain high quality and competent employees who are in turn able to create added value, enable firms to better develop and maintain competitive advantage and thereby sustain superior performance in the longer term (Hornsby and Kuratko, 2003; Kotey and Slade, 2005).

If human resource management is important to small and medium sized firms' performance and sustainability, what are the specific HR practices adopted by Chinese SMEs, which have contributed to their growth? Existing literature largely focuses on the evaluation of the effect of single HR practices (e.g. Wright et al., 1999) or the analysis of a set of HR practices as they impact on large firm performance (e.g. Huselid, 1995; Bae and Lawler, 2000; Takeuchi et al., 2003). The empirical evidence about the influence of a set of HR practices on Chinese small and medium sized firm performance remains inconclusive.

The process of marketization in China for the past two decades has led to the creation of an extensive SME sector. Researchers have documented an increased number of small privately owned companies and their importance to the Chinese economy (e.g. Anderson et al., 2003; Garnaut and Song, 2004). In 2003, Chinese SMEs have created over 90 per cent of China's Gross Industry Output Value, and accounted for 60 per cent of total national employment (China Statistical Yearbook, 2004). Chinese SMEs are recognized as being at the forefront in launching new technologies and products, creating more employment opportunities, and absorbing thousands of laid-off workers from many large and ailing state-owned enterprises in recent years (Anderson et al., 2003; Tan et al., 2005).

Given the importance of Chinese SMEs and the potential influence of HR practices on their performance, there are likely to be many benefits from improved understanding of the
effectiveness of various HR practices in China. Specifically, are there a set of HR practices which have been commonly adopted by small firms since the economic reform? If so, how have these HR practices contributed to the growth and success of SMEs in China? The identification of a set of HR practices which contribute to SME performance would be significant to the field of empirical study as the existing literature on the relationship between the use of HR practices and firm performance among Chinese SMEs remains rather limited. Additionally, empirical information about the link between HR practices and small firm performance would be useful for both newly established Chinese privately owned companies and those foreign firms currently operating in or planning to enter into China. SMEs would be able to see the benefits of devoting greater attention to HR practices that can help them to achieve desired organizational outcomes.

With the above questions and goals brought to the fore, this paper attempts to identify effective HR practices that have been associated with small firm growth in China. HR practices among seventy-four Chinese small and medium sized firms were examined. The paper uses cluster analysis to explain how a set of HR practices have been utilized by Chinese SMEs, and their association to HR outcomes and firm performance. Discussion commences with an overview of the development of some innovative HR practices in Chinese enterprises since the economic reform starting in 1978. The research methodology of the study is then explained and justified in terms of the nature of the inquiry. A set of the innovative HR practices implemented by growth-oriented Chinese SMEs is documented. The paper concludes with a discussion of the research findings.

Development of innovative HR practices in Chinese enterprises

About 30 years' economic reform in China has led many changes in management practices at the enterprise level, including HR practices. A considerable deregulation of the employment system has increasingly shifted staffing allocation by state agencies to enterprise-based recruitment and selection from the labour market. The remuneration system has also been changed with more focus on motivation and compensation mechanisms aimed at improving organizational efficiency and performance than previously emphasis on social and economic egalitarianism (Zhu and Dowling, 2000; Warner, 2004; Ding et al., 2006).

Smaller firms are more flexible in adapting to these changes. It is not surprising that they have played a vanguard role in shifting away from the more traditional practice of personnel management to the adoption of some innovative HR practices (Goodall and Warner, 1997; Chow, 2004; Tan et al., 2005; Wei and Lau, 2005). The adoption of the HR practices is far from homogeneous, and the practices within Chinese enterprises are still often blended with “socialist characteristics” (Warner, 1993, 2004). In the following, we attempt to identify a group of HR practices adopted by Chinese enterprises that reflect management innovation aimed at improving organizational efficiency and productivity.

Free market selection and recruitment

The economic reform since 1978 was intended to encourage more autonomy for enterprises, particularly in the domains of resource allocation, production decision-making
and employee management (Zhu and Dowling, 1994; Zhu, 2006). Enterprises could therefore adapt to changes in labour demand and supply resulting from changes in the emerging market economy. Central to this was a greater flexibility in recruitment and selection. Prior to the reform, the central government decided the number of staff that would be recruited by enterprises. Subsequent to the reform, some autonomy was given to state-owned enterprises (SOEs) in recruiting their employees, though the government and its agencies retained some control. Collective and privately owned enterprises have been allowed greater freedom to recruit employees in accordance with their particular production needs (Warner, 1993, 2004; Chow, 2004; Zhu, 2006).

Incentive rewards

There were virtually no incentive payments prior to the economic reforms. Wages were set for white-collar staff (cadres, gangbu in Chinese) and blue-collar workers (gongren). There were no material incentives such as bonuses and performance-based wages and other payments (Zhu, 1999, 2006). The enterprise reform aimed at ending the payment of egalitarian wages, and facilitated the introduction of incentive rewards to enhance motivation and productivity (Warner, 1993). The principle of the “iron-rice-bowl” whereby all cadres and workers employed by the state would enjoy lifetime social welfare benefits has gradually been eliminated. Instead, the “provision of a social security scheme and other employment benefits” is increasingly treated as a component of employees' compensation packages by Chinese enterprises with the aim being to reward and maintain employee loyalty and commitment (Zhu and Dowling, 2000; Zhu and Warner, 2000; Ding et al., 2006). The use of performance-based pay prevails in private-owned firms, and is increasingly common, though much less so among SOEs (Bai and Bennington, 2005).

Performance evaluation and promotion

Previously, politics was the key driver in performance evaluation and decision-making for staff promotion. Laaksonnen (1988) reported that during the Cultural Revolution, Mao and his followers adopted criteria of “purity” and “activeness” in the Communist Party to determine staff promotion. These criteria continued to influence performance evaluation in many enterprises, even years after the economic reform. Some forms of evaluation of staff performance were initially introduced to a small proportion of staff in SOEs (Goodall and Warner, 1997; Bai and Bennington, 2005), and the practice gradually spread to other categories of enterprises including collective and private owned organizations. However, from an empirical perspective, the extent to which performance evaluation contributes to SME development is not clear.

Training and development

Prior centralised staffing policies contributed to persistently low levels of technical skill and management experience in the labor force. Because of the limited supply of qualified human resources in the labor market, training and professional development for staff (especially low-level) has been a key challenge for Chinese enterprises. Since the reform, efforts have been made by the central government to increase the educational attainment of managers (Zhu, 1997, 1999, 2006). Many companies send employees to in-country institutes or abroad for technical and high-level managerial training. Nevertheless, with
limited resources available for staff training and development, especially among small firms (Kerr and McDougall, 1999; Hill and Stewart, 2000), employee training and development remains a critical issue for Chinese organizations.

**Worker participation in the decision-making process**

A considerable amount of literature (e.g. Laaksonnen, 1988; Warner, 1993; Benson and Zhu, 1999) has addressed changes in the decision-making process in Chinese enterprises since the reform. Warner (1993, p. 158) reported that worker participation in management decision making has been deep-rooted in Chinese enterprises. Benson and Zhu (1999, p. 70) observed that more firms have been adopting team-based decision making and information sharing as a way of encouraging employee participation in management decision making to boost labor productivity and organizational efficiency. Culturally, collective decision making and shared responsibility are encouraged in China (Wang, 1990). But again, the extent to which encouragement of employee participation in decision making has impacted on improved performance in Chinese small firms has not been well documented.

**Industrial relations**

The economic reforms have, in many ways, redefined the industrial relations system in China. A number of empirical studies (e.g. Tsang, 1994; Zhu and Warner, 2002) have emphasized that the Chinese unions role is very different from that in the West. Historically, trade unions were attached to the Party (Laaksonnen, 1988; Zhu, 1999). Trade unions continue to be used by the Party to promote its enterprise reform agenda, rather than representing worker interests in collective bargaining over working conditions and remuneration (Chan, 1995; Zhu and Warner, 2000, 2002). Recent industrial unrest in many areas of China indicates that there is a need for a new way of managing industrial relations within Chinese enterprises (see reports by China Labor Union Base, 2006; China Labour Bulletin, 2007). Although the majority of small firms employing less than 100 workers are unlikely to have unions, Wilkinson (1999) argued that employees in small firms may need more union protection than those in larger organisations (Wilkinson, 1999). The extent to which unions affect Chinese SME performance, and whether the unions actually represents workers' interests in small Chinese firms, remains an unanswered research question.

It is noticeable that during the reform era, a number of innovative HR practices have gradually been adopted by Chinese enterprises; these practices cover the areas of strategic recruitment and selection, incentive compensation using performance-based rewards and the provision of social benefits, performance evaluation, training and development, encouragement of employee participation in decision-making and managing new forms of industrial relations via an expanded role for trade unions. However, prior studies (e.g. Benson and Zhu, 1999; Zhu and Warner, 2002; Li, 2003) tend to focus on examining these HR practices in large, joint venture or multinational companies. Little empirical research has been conducted to explore the types of HR practices adopted by Chinese SMEs and the extent to which these HR practices contribute to firm performance and therefore, to growth potential.

**Research methodology**
Given that the aim of this study is to identify what HR practices are associated with superior Chinese SME performance, a quantitative method is the most appropriate approach to measure the relationship between HR practices and SME performance. Based on several HR-performance models in the literature (e.g. Beer et al., 1984; Guest, 1997), we developed a conceptual framework (see Figure 1) and modified the independent variables to reflect innovative HR practices adopted by Chinese enterprises during the reform era discussed earlier. Performance indicators include the measurement of sales, market share and expected growth in small firms. We hypothesized that the adoption of a set of innovative HR practices leads to better HR outcomes, and better HR outcomes then help improved SME performance (Figure 1).

Sampling and data collection

The choice of sampling method for this study was influenced by the difficulties associated with sample collection among small enterprises in China. We initially sent a mail survey to over 300 small companies, however, the response rate was below 10 per cent despite follow-ups by fax and phone. Face-to-face interviews with small firm managers in various cities in China were then conducted. This approach has been adopted by other researchers collecting quantitative data in China (e.g. Warner, 1997; Li, 2003; Ahlstrom et al., 2005). Our approach involved the use of a non-probability sampling technique (Malhotra et al., 1996; Tabachnick and Fidell, 2000). The use of this sampling technique allows the firms to be sampled from either small or medium sized enterprises, and from different forms of firm ownership, industry types and geographic locations, similar to the approached adopted by Zhu (1997). A total of 80 managers of SMEs were interviewed. Because of excessive item non-responses in several of the interviews, six were excluded from the final analysis (Table I).

The variables were coded using the information collected from the interviews. The data obtained through the use of semi-structured interviews are mostly descriptive and categorizing responses can be difficult. Therefore, binary variables (0, 1) and categorical variables (0, 1, 2) were used to ensure greater comparability between respondents. All of the HR outcome (including congruency, competency and commitment) and firm performance variables were coded as binary variables because most of the responses to these questions tended to be dichotomous. Similar binary and categorical variables based on perceptions have been used in previous research on HR practices and their effect on firm performance (e.g. Delaney and Huselid, 1996; Lähteenmäki et al., 1998; Guthrie, 2001; Stavrou and Brewster, 2005).

Choice of analytical tools and validation

Our aim in this study is to classify Chinese small-medium enterprises according to their use of innovative HR practices, and assess how the adoption of these practices has influenced firm performance. Cluster analysis of the seven HR practice variables was used to identify the different groups of enterprises. Based on the recommendations of Punj and Stewart (1983) and Arabie and Hubert (1994), a hierarchical cluster analysis was initially performed using Ward's method to identify the correct number of clusters and cluster centers. The results from the hierarchical cluster analysis indicated the existence of a three-cluster
solution. A K-Means cluster analysis (using the previously generated cluster centres) was used for the clustering.

Several methods were then used to assess the validity of the cluster analysis. First, an alternative cluster algorithm – average linkage – was employed. The results from this comparison were encouraging – when repeated using the average linkage method, there was 100 per cent correspondence in cluster membership across the two approaches, which indicates convergent validity. Second, a multinomial logit model was used to identify whether cluster membership can be predicted using exogenous variables. Aldenderfer and Blashfield (1984) regard using exogenous variables as being the most robust way of validity testing for cluster analysis. As shown in Table II, the results from the multinomial logit regression demonstrate that the clusters have discriminatory power. The table has two sets of coefficients. The first set shows the importance of the independent variables in explaining membership in Cluster 1 relative to Cluster 3. The second set shows the importance of the independent variables in explaining membership of Cluster 2 instead of Cluster 3. The results show that almost all of the exogenous variables significantly predict membership in Cluster 1 (relative to Cluster 3) and that three of the exogenous variables (CGR, RLESS and DPE) significantly predict membership in Cluster 2. Thus the validity testing suggests that the results from this analysis are robust.

Results

Different focus on innovative HR practices across clusters

The results from the K-means cluster (using the cluster centers generated using Ward's Method) are graphically depicted in Figure 2 and are also shown in Table III. Each of the three clusters has distinctive features. The first cluster has a high representation of small firms that emphasize free market selection, performance-based pay and employee participation. This group of firms has not yet implemented all of the innovative HR practices (e.g. training and development and performance evaluation). However, they have refocused their HR practices away from the traditional labour management system and eliminated some egalitarian reward practices. Employees have been recruited largely from the market, instead of being allocated by relevant state agencies (Warner, 1997; Zhu and Dowling, 2000). For these reasons, this cluster has been labeled as SMEs with “Transitional HR practices”.

The second cluster consists of firms that employ almost the full range of innovative HR practices. In contrast to cluster 1, practices such as training and development, performance evaluation are widely utilized. While employee involvement in decision making is utilized widely among firms in Cluster 1 (mean=1.500), it is more widely utilized among firms in Cluster 2 (mean=1.957). There is also a moderate provision of social benefits among firms in this cluster. Because of the widespread use of various innovative HR practices among firms in this cluster, it has been called SMEs with “Innovative HR practices”.

The third cluster consists of enterprises that emphasize more traditional personal management practices. It seems that these enterprises operate in a traditional fashion that was typical under the centralized planning regime. The largest mean value is for the
provision of social security (1.720). This cluster also has the largest mean value of the three clusters for a role for trade unions (1.240). This contrasts with the other two clusters where the value for these two practices is close to zero. Given the predominant use of more traditional personal management practices, this cluster has been named SMEs with “Traditional HR practices”.

**Firm characteristics and the use of innovative HR practices**

Before investigating the link between the use of innovative HR practices and HR outcomes and firm performance, it is instructive to examine the firm specific characteristics of each of the clusters (see Table IV). This is useful as it aids in understanding why there is heterogeneity across the clusters in terms of adoption of HR practices, and identifying other SME business characteristics which might be relevant to explain differences in HR practices and firm performance.

Firms in the second cluster, with “Innovative HR practices”, are predominantly made up of joint venture companies and it has the largest proportion of medium size firms (with over 100 employees). The firms in this cluster have on average been operating for a longer period of time than the firms from the “Transitional HR practices” cluster but not for as long as the firms from the “Traditional HR practices” cluster. It is likely that the more widespread use of innovative HR practices among firms in this cluster may be due to the influence of foreign ownership.

Firms in the “Transitional HR practices” cluster, have adopted a limited set of innovative HR practices, and are more likely to be domestic private-owned or collectively-owned enterprises and relatively newly established (<5 years). The size of firms in this cluster tends to be small, with most of them having less than 50 employees. The younger age and smaller size of these firms may explain why HR practices have only been partially adopted among enterprises in this cluster. Firms in this cluster are relatively young and small, they may simply not have the capability or sufficient resources to adopt all innovative HR practices, and therefore rely on those practices that are simpler and cheaper to implement.

Finally, enterprises in the “Traditional HR practices” cluster are predominantly state-owned. Most of the firms in this cluster are of a larger size, with 80 per cent of firms having more than 50 employees. The age of firms in this cluster vary, but most are older than seven years. The firms in this cluster tend to have traditional personal management practices. It appears that ownership as well as age may be influencing the slow uptake of innovative HR practices. Results from elsewhere in the literature suggest that the adoption of innovative practices among state-owned enterprises has often been piecemeal. This is largely due to organizational inertia and continued state intervention among Chinese larger enterprises (Goodall and Warner, 1999; Benson and Zhu, 1999; Zhu and Warner, 2002; Lewis, 2003; Hassard *et al.*, 2004).

**Innovative HR practices to HR and performance outcomes**

Does the adoption of innovative HR practices and the resulting improvement in HR outcome lead to better firm performance? Both the HR outcomes and performance outcomes for each of the three clusters are listed in Table V. HR outcomes are measured using four
criteria: staff turnover, congruency, competency and commitment. The results show that the values for the four HR outcome variables are highest in the second cluster, the group of SMEs with “Innovative HR practices”. In other words, enterprises with innovative HR practices are better able to achieve lower staff turnover, higher staff commitment, staff competency and staff congruence, than enterprises in the other clusters. For the first cluster with “Transitional HR practices” the values for each of the HR outcome variables are less than for the cluster with “Innovative HR practices” but greater than the cluster with “Traditional HR practices”. Thus, it can be seen that HR outcomes are closely related to the adoption of innovative HR practices.

In the bottom half of Table V, firm performance for each of the three clusters is summarized. For each of the performance indicators – increased sales, increased market share and growth potential – the firms in the “Innovative HR practices” cluster have the highest value. Firms in the “Transitional HR practices” cluster have the second highest value for each of the performance indicators, while firms in the “Traditional HR practices” cluster have the lowest value for each performance indicator. The results clearly suggest that the adoption of innovative HR practices among the Chinese SMEs results in better HR outcomes and firm performance.

Discussions

From the cluster analysis, it is apparent that innovative HR practices among growth-oriented SMEs in China include performance-based pay, training and development, performance evaluation, encouragement of employee participation in decision making and strategic recruitment and selection. These were the practices adopted by the cluster of firms that were achieving the best HR outcomes and improved firm performance. The firms that were able to adopt all of these categories were primarily foreign-related firms, of at least a moderate size and not new starts – suggesting that ownership, size and age influence whether firms have the wherewithal and resources to implement the full range of innovative HR practices.

Two of these innovative practices – performance based pay and employee involvement in decision making – have been widely adopted by firms in the “Transitional HR practices” cluster and to a lesser extent by firms in the “Traditional HR practices” cluster. This is likely to be because these practices are arguably among the more cost-effective HR practices that are common and likely to be accepted by SMEs according to their specific business characteristics. In addition, these practices might have also been more culturally accepted by Chinese SMEs. Performance-based pay was one of the first HR practices introduced during the reform era because it was seen as an effective reward mechanism for encouraging employee performance (Warner, 1993; Luo, 1999; Li, 2003). In many businesses, especially those involved in manufacturing, as performance is outcome-based it would be straightforward and cost-effective to implement. Encouragement of employee participation in management decision making would also be relatively easy to introduce. In socialist ideology, workers are supposed to be “masters of the house” (Tsang, 1994, p. 15). They are encouraged to participate in management decisions about matters such as long-term planning, income distribution, management appraisal and even election of enterprise-level directors (Ding et al., 1997). For a typical collective society such as in China, managers
tend to consider joint decision making to be a means of expediting decisions because all parties share responsibility (Hofstede and Bond, 1988; Wang, 1990). Encouragement of employee participation in decision-making would also increase employee job satisfaction, hence induce a higher level of employee commitment. This result is similar to what was concluded from Bae and Lawler’s (2000) study in the context of Korean companies. Chinese and Korean may share similar culture which encourages a wider employee participation to generate a high level of employee royalty to organisations.

Free-market selection is another practice that is now being widely used by firms in the “Transitional HR practices” cluster, but is being used to a much smaller extent by firms in the “Traditional HR practices” cluster. One explanation for this suggested in the literature is that stronger government interference among state-owned enterprises may have restricted their ability to use free-market selection (Goodall and Warner, 1999).

The remaining two innovative HR practices – performance evaluation and training and development – have not been adopted widely by firms in either the transitional or traditional clusters. Firms in Cluster 1 with “Transitional HR practices” generally have fewer employees and have been operating for a shorter time period. For firms in this cluster, resource limitations experienced mostly by small firms as discussed earlier may have limited their ability to effectively adopt these two practices (see Kerr and McDougall, 1999; Hill and Stewart, 2000). For firms in Cluster 3 “Traditional HR Practices”, the lesser adoption of performance evaluation and training and development has potentially resulted from the “organisational inertia” that has prevented state-owned enterprises from adopting more innovative HR practices (see similar argument made by Goodall and Warner, 1999). This is contradictory to the earlier findings from studying the link of performance evaluation to firm performance in other contexts. For example, Chang and Chen (2002) found that there is a significant relationship between performance appraisal and firm financial performance in Taiwanese high-tech firms and multinational companies in Singapore. The result also contrasts with findings from a recent study by Bai and Bennington (2005) that SOEs have begun to encourage effective performance evaluation. The likely explanation of the different results may be due to different industry, large and government sponsored firms which were the focus of prior research, rather than the focus of SMEs in the current study.

**Conclusions**

While the economic reforms in China have enabled and facilitated the more widespread use of HR practices, substantial heterogeneity exists in the adoption of innovative HR practices among SMEs. We have found that there are three main clusters of Chinese SMEs that differ according to their adoption of innovative HR practices. For state-owned enterprises, government influence appears to have limited the uptake of high-performance HR practices, and the practices that are primarily used (provision of social benefits, a role for trade unions) reflect the emphases under the old egalitarian system. Most domestically or collectively owned firms tend to be of a smaller size and have been operating for a shorter period. Their choice of HR practices and behaviour typically reflect SMEs' characteristics – cost and time consciousness and resource limitations only allow them to have adopted a few of the more innovative HR practices, including free market selection, performance-based pay and employee involvement in decision making. The cluster primarily consisted of
joint venture and foreign owned firms have adopted the full range of high performance HR practices. Thus it can be seen that the adoption of innovative HR practices in China are significantly influenced by ownership, in addition to size and the age of firms.

An examination of the HR outcomes and firm performance for each of the three clusters indicates that HR and performance outcomes are consistently best for the cluster with innovative practices, second best for the cluster with transitional practices and worst for the cluster with traditional practices. While cluster analysis does not provide causal data, this evidence suggests that the more widespread adoption of innovative HR practices leads to better HR outcomes and firm performance. Thus a key implication from our research is that domestic and collective owned enterprises that wish to improve their firm performance should also focus on using the HR practices that are more commonly adopted by the innovative firms (i.e. performance evaluation, training and development, provision of social benefits), though they are potentially more costly to adopt. State-owned enterprises should also focus on more fully implementing a wider array of innovative HR practices to improve growth potential.

It is noted that those SMEs adopting the transitional HR practices (cluster 1) have had a very low means in the provision of social security scheme. In recent times, the Chinese central government has stipulated new labour laws to ensure minimum social safety net for all employees (China Labour Bulletin, 2007; Shen, 2007). This might have compliance implication for SMEs. With a wider awareness of corporate social responsibility worldwide and inside China, it would be interesting in further studies to investigate the likelihood of SMEs' compliance to Chinese labour laws and how the compliance outcomes impact on SME image and reputation, hence their social and economic performance.

![Figure 1](image1.png)

**Figure 1** The relationship between innovative HR practices and performance

![Figure 2](image2.png)

**Figure 2** Profiling clusters
<table>
<thead>
<tr>
<th>City</th>
<th>Interviews conducted</th>
<th>Cases used in analysis</th>
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<tr>
<td>Total</td>
<td>80</td>
<td>74</td>
</tr>
</tbody>
</table>

**Table I**
Sample – city distribution

<table>
<thead>
<tr>
<th>Coefficients (B)</th>
<th>t-statistics</th>
<th>p-values</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>-1.197</td>
<td>-0.426</td>
</tr>
<tr>
<td>Staff congruence – CGR</td>
<td>8.169</td>
<td>2.924</td>
</tr>
<tr>
<td>Increased sales – ICSP</td>
<td>-4.387</td>
<td>-1.981</td>
</tr>
<tr>
<td>Technology application – TECH</td>
<td>-3.431</td>
<td>-2.224</td>
</tr>
<tr>
<td>Firm size – SIZE</td>
<td>-2.679</td>
<td>-3.452</td>
</tr>
<tr>
<td>Collective owned enterprise – COE</td>
<td>9.891</td>
<td>2.990</td>
</tr>
<tr>
<td>Staff turnover – RLESS</td>
<td>1.744</td>
<td>1.088</td>
</tr>
<tr>
<td>State-owned enterprises – SOE</td>
<td>7.069</td>
<td>2.653</td>
</tr>
<tr>
<td>Domestic private owned enterprises – DPE</td>
<td>15.553</td>
<td>3.764</td>
</tr>
<tr>
<td>Town and village enterprises – TVE</td>
<td>24.555</td>
<td>9.006</td>
</tr>
</tbody>
</table>

**Table II**
Results from the multinomial Logit regression

<table>
<thead>
<tr>
<th>Descriptive statistics</th>
<th>Cluster 1 with transitional HR practices</th>
<th>Cluster 2 with innovative HR practices</th>
<th>Cluster 3 with traditional HR practices</th>
</tr>
</thead>
<tbody>
<tr>
<td>Free market selection</td>
<td>1.846</td>
<td>1.870</td>
<td>0.600</td>
</tr>
<tr>
<td>Performance-based pay</td>
<td>1.885</td>
<td>2.000</td>
<td>1.240</td>
</tr>
<tr>
<td>Provision of social benefits</td>
<td>0.385</td>
<td>1.174</td>
<td>1.720</td>
</tr>
<tr>
<td>Training and development</td>
<td>0.500</td>
<td>2.000</td>
<td>0.640</td>
</tr>
<tr>
<td>Performance evaluation</td>
<td>0.239</td>
<td>2.000</td>
<td>0.000</td>
</tr>
<tr>
<td>Employee involvement in decision making</td>
<td>1.500</td>
<td>1.957</td>
<td>1.120</td>
</tr>
<tr>
<td>Role of trade unions</td>
<td>0.000</td>
<td>0.174</td>
<td>1.240</td>
</tr>
<tr>
<td>Valid n (listwise)</td>
<td>26</td>
<td>23</td>
<td>25</td>
</tr>
</tbody>
</table>

**Table III**
Mean values of HR practices across three clusters
Table IV: Firm-specific characteristics across the three SME clusters

<table>
<thead>
<tr>
<th>Descriptive statistics</th>
<th>Cluster 1 with transitional HR practices</th>
<th>Cluster 2 with innovative HR practices</th>
<th>Cluster 3 with traditional HR practices</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enterprise ownership</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Collectively owned</td>
<td>0.192</td>
<td>0.174</td>
<td>0.080</td>
</tr>
<tr>
<td>Domestic private-owned</td>
<td>0.577</td>
<td>0.261</td>
<td>0.040</td>
</tr>
<tr>
<td>Joint-ventured</td>
<td>0.038</td>
<td>0.291</td>
<td>0.240</td>
</tr>
<tr>
<td>State-owned</td>
<td>0.192</td>
<td>0.174</td>
<td>0.040</td>
</tr>
<tr>
<td>Firm size</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Micro business ( n &lt; 25 )</td>
<td>0.462</td>
<td>0.130</td>
<td>0.040</td>
</tr>
<tr>
<td>Small business ( 25 \leq n &lt; 50 )</td>
<td>0.269</td>
<td>0.174</td>
<td>0.160</td>
</tr>
<tr>
<td>Small toward medium-sized ( 50 \leq n &lt; 100 )</td>
<td>0.231</td>
<td>0.217</td>
<td>0.360</td>
</tr>
<tr>
<td>Medium-sized firms ( 100 \leq n &lt; 500 )</td>
<td>0.028</td>
<td>0.348</td>
<td>0.240</td>
</tr>
<tr>
<td>Medium-large firms ( n &gt; 500 )</td>
<td>0.000</td>
<td>0.130</td>
<td>0.200</td>
</tr>
<tr>
<td>Years of establishment</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Newly established ( Y = 3 )</td>
<td>0.462</td>
<td>0.217</td>
<td>0.120</td>
</tr>
<tr>
<td>Operational ( 3 &lt; Y \leq 5 )</td>
<td>0.231</td>
<td>0.348</td>
<td>0.320</td>
</tr>
<tr>
<td>Growing firms ( 5 &lt; Y \leq 7 )</td>
<td>0.115</td>
<td>0.261</td>
<td>0.240</td>
</tr>
<tr>
<td>Established firms ( Y &gt; 7 )</td>
<td>0.192</td>
<td>0.174</td>
<td>0.320</td>
</tr>
<tr>
<td>Industry categories</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Business trading</td>
<td>0.269</td>
<td>0.348</td>
<td>0.240</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>0.269</td>
<td>0.217</td>
<td>0.160</td>
</tr>
<tr>
<td>IT-related business</td>
<td>0.115</td>
<td>0.217</td>
<td>0.200</td>
</tr>
<tr>
<td>Service business</td>
<td>0.231</td>
<td>0.043</td>
<td>0.200</td>
</tr>
<tr>
<td>Other businesses</td>
<td>0.115</td>
<td>0.174</td>
<td>0.200</td>
</tr>
<tr>
<td>Technology application</td>
<td>0.577</td>
<td>0.069</td>
<td>0.590</td>
</tr>
<tr>
<td>Valid ( n )</td>
<td>26</td>
<td>23</td>
<td>25</td>
</tr>
</tbody>
</table>

Table V: Different HR outcomes and performance across the three SME clusters

<table>
<thead>
<tr>
<th>Descriptive statistics</th>
<th>Cluster 1 with transitional HR practices</th>
<th>Cluster 2 with innovative HR practices</th>
<th>Cluster 3 with traditional HR practices</th>
</tr>
</thead>
<tbody>
<tr>
<td>HR outcomes</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Staff turnover</td>
<td>0.731</td>
<td>0.826</td>
<td>0.400</td>
</tr>
<tr>
<td>Staff congruence</td>
<td>0.692</td>
<td>0.826</td>
<td>0.240</td>
</tr>
<tr>
<td>Staff competence</td>
<td>0.731</td>
<td>0.826</td>
<td>0.600</td>
</tr>
<tr>
<td>Staff commitment</td>
<td>0.769</td>
<td>0.957</td>
<td>0.400</td>
</tr>
<tr>
<td>Performance indicators</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Increased sales</td>
<td>0.692</td>
<td>0.870</td>
<td>0.590</td>
</tr>
<tr>
<td>Increased market share</td>
<td>0.692</td>
<td>0.826</td>
<td>0.640</td>
</tr>
<tr>
<td>Growth potential</td>
<td>0.731</td>
<td>0.870</td>
<td>0.600</td>
</tr>
<tr>
<td>Valid ( n ) (last-wise)</td>
<td>26</td>
<td>23</td>
<td>25</td>
</tr>
</tbody>
</table>

References


**About the authors**

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