

TRANSPLANTING INNOVATIVE HUMAN RESOURCE MANAGEMENT IN CHINA: FOREIGN CAPITALS AS AGENT OF BUSINESS INNOVATION

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Abstract

The subject of this paper is to examine how effective the High Performance Work Practices are in China. Following its operational definition by Osterman (1994), I collected the primary data from 102 firms owned by Non-Chinese Capitals in midland China. I find that in-house education and training lead to establishing of flexible organization, and this, in turn, contributes to achieve better firm level financial objectives. I also find that a sharing of corporate mission between employer and employees enhances employees' motivation and/or job satisfaction. However, their motivation level is negatively correlated with the firms' financial performance, in contrast to the common behavioral hypothesis. It is noteworthy that making of human resource in-house reaps better behavioral or organizational outcomes. Chinese domestic firms might find it useful to learn from this innovative human resource management the affiliates of multinational firms implement in China.

Work Practices As Key for High Performance

Osterman (1994) surveyed management practices which American manufacturing firms had implemented. It finds that about 35% of establishments use teams, job rotation, quality circles, and Total Quality Management, namely, "innovative work practices," for their core work force in early 1990's. This high usage of innovative work practices may explain the recovery of the American economy in the 1990's. Ichniowski & others (1996), and Ichniowski & Shaw (1999) relate the practices with corporate level performance, and call them as "high performance work practice" (HPWP, hereafter).

Using the cross-national studies of automotive manufacturers in the world, MacDuffie (1995) analyzes whether the production efficiency and the product quality are dependent upon both the "flexible manufacturing policies" and the bundle of human resource management practices. It finds that the world-class automotive manufacturers gain their competitiveness from a set of human resource management practices, such as extensive training, team-based work systems, and contingent compensations, and the usage of a lean production system.

Cappeli & Neumark (2001) proposes a careful research plan to examine the causal

relationships between HPWP and corporate performance. It is noteworthy that Japanese large-size firms usually implement elements of HPWP and that the IMV Project team named the positive impact of the practices on corporate level performance as the “Japan effect.” It may not, therefore, be appropriate for Japanese managers to call such common management practices as “innovative.” Yet, the practices appear to comprise a basis for operational innovation (Hamel 2007), and late comers in industry might copy and catch up the predecessors. Therefore, it would be useful for employers in Asia to find how HPWP yields better performance at the level of human resource or the organization. I intend to share the findings of an empirical study I did in the midland China.

Hypotheses and the Data

The findings of Pfeffer (1998), Osterman (1994), MacDuffie (1995), and Rosenzweig and Nohria (1994) suggest the following hypothetical positive relationships among innovative HRM, behavioral performance, and organizational characteristics and performance.

Hypothesis 1: Good human resource management would contribute to build a flexible organization.

Hypothesis 2: Good human resource management, together with the flexible organization, would have positive impacts on human resource outcomes.

Hypothesis 3: Good human resource management, together with the flexible organization, would have positive impacts on organizational outcomes.

Figure 1 depicts the relationships among operational variables.

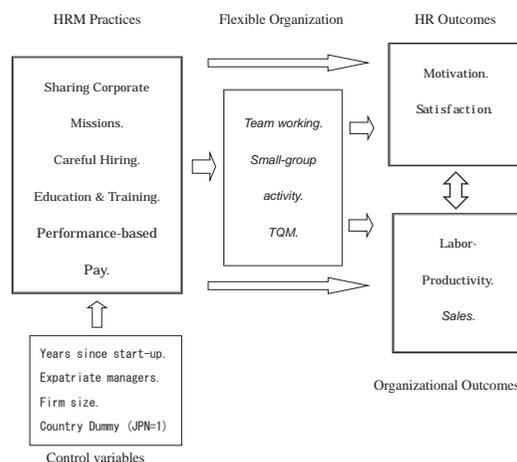


Figure 1 Relationships among Variables

Chinese employers tend to hire job applicants who have some work experience, leaving those with no work experience unemployed in external labor markets. This may be partly because the employers use bureaucratic or mechanistic organizations, and also because they tend to choose cost effective business strategies. Employers tend to buy already made human resources from external labor markets rather than developing them within their internal labor market. It may be, then, enlightening for some employers to learn that innovative human resource management, including in-house human resource development, yields better corporate performance.

Who would introduce the innovative human resource management to China? The transplants of foreign capitals, of which parent firms have some experience in HPWP outside mainland China, may serve as innovators when they implement new human resource management to their affiliates in China. Later, Chinese domestic firms may learn about the usefulness of HPWP from the transplants. This diffusion of innovative human resource management would strengthen the competitiveness of the firms in China. Moreover, the findings in China about the effectiveness of HPWP may also interest firms in some other Asian countries. This study, thus, examines the effectiveness of HPWP in relation to human resource or financial outcomes among the affiliates of foreign capitals located in midland China. The 102 firms owned by foreign capitals in Zhèngzhōu-city, Henan Province participated in the questionnaire survey in August-September 2006ⁱ.

Osterman (1994) lists the constructs of innovative human resource management or HPWPⁱⁱ, and I use them in this study of foreign owned corporations located in China. The human resource management variables include careful hiring, education & training, performance based pay with relatively high pay level. On top of these, sharing of corporate mission between the employer and the employees is included as O'Reilly & Pfeffer (2000) and Schein (2004) assert. I used 1 through 5 Likert scale, 5 being the best, to measure the above mentioned management practices that are applied to more than half of core employees.

The factor of careful hiring (Cronbach's coefficient $\alpha = .615$) includes written tests, interviews, and health examinations. Education and training factor ($\alpha = .782$) includes the training periods of newly hired and that of all the other employees, the share of core employees who took OJT, Off-JT, and orientations for overseas assignees, the percentage of core employees under programmed job rotations, and the share of multi-skilled core employees relative to all employees. The factor of performance-based pay ($\alpha = .616$) includes the usage of pay systems linked to team, corporate, or individual level performance, and the extent of skill based payments, while the other pay components are linkages to prevailing market rates, and allowances for housing, medical care and the like. The factor of shared corporate mission ($\alpha = .606$) includes three items; the extent to which employees identify themselves with their corporate

mission, the sharing of corporate financial information, and the delegation of decision making authority regarding work they perform.

The intervening variable of flexible organization ($\alpha=.744$) is composed of following four; the stock of multi-skilled core employees, participation of core employees in autonomous small group activities, core employees under team working, and those under total quality management scheme (TQM). The control variables are years of operation in the host country, number of expatriate managers from the home country, firm size, and the Japanese dummy (value 1 for the affiliates of Japanese ownership, or 0 for non-Japanese).

The dependent variable of human resource outcomes are composed of two factors, motivation and satisfaction: Commitment levels, cooperation among employees, and employees' morale comprise the motivation factor. The satisfaction factor includes job and organizational satisfaction. I measured the organizational outcomes by two proxies, one subjective evaluation scores by managers concerning growth rate of labor productivity, that of sales and profits, another the achievement levels of targets concerning above mentioned threeⁱⁱⁱ. Factor scores after principal component analyses with pro-max rotations were used in multiple regression analyses. Figure 1 depicts the relationships among operational variables. The coefficients of the explanatory variable are expected to assume positive values.

Regression Results

The Equation 1 of Table 1 shows the beta coefficients of the control variables. Length of operation in China (Years since start-up) is positive and statistically significant at 1%. The Equation 2 shows that the human resource variable of education and training is positive and statistically significant at 1 % when it comes to

Table 1. Regression Coefficients of Flexible Organization

	Equation 1	Equation 2
Control Variables		
Years since start-up	.308**	.120
Number of Expats	.243†	
Firm size	.148	
Japan Dummy	.198	
Independent Variables		
Sharing of mission		-.047
Careful hiring		.112
Education & Training		.678**
Performance payments		.011
Adjusted R ²	.189	.495

Dependent Variable; Flexible organization,

** $p < .01$, † $p < .10$

establishing a flexible organization. The structured multiple regression result support the hypothesis 1, though it is education and training alone that is statistically significant while all the other independent variables are not.

Table 2 shows that the more sharing of corporate missions with employees, the higher the motivation or satisfaction. All the other human resource variables, estimated by structured multiple regressions, are not statistically significant, supporting in part the hypothesis 2. Table 3 shows that performance-based pay yields better organizational outcomes that are measured by the levels of targets achieved. Further, the performance is higher when the flexible organization variable is included, which supports the hypothesis 3.

How about the relationships between the human resource and the organizational outcomes? The correlation coefficients between the satisfaction factor scores and financial outcomes turn out to be negative (-.216*) and statistically significant at 5%, while the motivation variable and the organizational outcomes do not show a statistically significant relationship.

It is interesting to note that the different components of human resource management explain human resource and financial outcomes. This may be because

Table 2. Regression Coefficients of Human Resource Outcomes

	i. Motivation		ii. Job Satisfaction	
	Equation 1	Equation 2	Equation 1	Equation 2
Sharing of mission	.619**	.617**	.545**	.545**
Careful hiring	-.056	-.024	-.062	-.065
Performance-based pay	.125	.135	.197	.198
Flexible organization		-.126		-.012
Adjusted R ²	.339	.334	.296	.274

Dependent Variable; i. Motivation, ii. Job Satisfaction. ** p < .01

Table 3. Structured Regression Coefficients of Organizational Performance

	Equation 1	Equation 2
Sharing of mission	-.129	-.124
Careful hiring	-.083	-.168
Performance-based pay	.386**	.354**
Education & Training	-.046	
Flexible organization		.228**
Adjusted R ²	.118	.164

Dependent Variable; organizational performance,
** p < .01

firms are in the process of strengthening HPWP and innovative human resource management is not forged into one bundle of HRM system yet. Moreover, Chinese workers are hard working to fulfill their targets be they motivated or not. Management control might still be there to achieve the financial targets. There seem to be needs to advance human resource management among transplants.

Discussions

This small scale study of foreign owned firms in midland China shows that some components of innovative human resource management enhance human resource or financial outcomes. The finding conforms with the earlier work of Becker & Gerhart (1996) or, to some extent, the summary by Jiang et als.(2011).

Sharing of corporate missions with employees or implementing in-house training and education may help build human resource architecture that are specific to the transplants as Becker (1993) and Williamson (1975) postulate. The additional costs incidental to the in-house human resource development are likely to be met with better performance of core employees. Compilation of similar studies of HPWP in China would persuade Chinese employers to give a more serious look on the business model of making specific human resource within their firm. Foreign-owned firms located in China may serve as catalysts that innovate human resource development.

- i Song Dang, a Research Assistant distributed the structured questionnaires to the top managers who attended the annual general assembly of Foreign Capitals Association, Zhèngzhōu-city. The answers were addressed to the Association office. There were 2,876 foreign firms in the city as of 2005. Major investors are from Japan, the USA, EU, and SE Asia (see Appendix 1).
- ii Youndt et als.(1996) also summarizes best human resource practices. But, Osterman (1994) is convenient to operationalize survey questions to measure HPWP.
- iii Respondents' subjective evaluations on the organizational performance comprised the dependent variables to avoid difficulties in securing financial performance data from Chinese managers. A five-point Likert scale measured all the variables, 5 being "the highest."

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Appendix 1. Companies by Ownership

Type	Hong Kong	Taiwan	Japan	US	EU	SE Asia	Korea	Africa	Others	Total
100% Owned	3	6	3	5	5	3	1		2	28
Joint Venture										
Primary Investor	10		3	3	4	2	2	1	3	25
Secondary Investor	21	2	9	4	3	2	1			45
Tertiary Investor	1					2				3
Total	35	8	15	12	13	9	4	1	5	101

Appendix 2. Firms by Number of Employees

	%
500 & over	18.6
300-499	17.8
100-299	29.1
Less than 100	34.4
Total	100.0 (96 firms)

Appendix 3. Manufacturing Firms
by Industry Classification

Food	16
Machinery	9
Electric	8
Electronic, Precision equipment	6
Textile	6
Chemical	7
Medical, Pharmaceutical	6
Metal	4
Paper	3
Other Production	29
Total	94

Appendix 4. Distribution of Firms
by Years of Operation in China

Years	%
1~4	31.7
5~9	27.2
10~14	29.3
15~	9.8

(Total number of firms; 92)

Appendix 5. Major Reasons for FDI in China

Local markets	48
Labor cost saving	14
Follow the Parent firm	13
Export to the mother country	8
Export to the third country	5
Others	4
Total	92

Appendix 6. Competition Strategies by Investors' Nationality

	Cost	Quality	Total
Japanese affiliates	3(20.0)	12(80)	15(100)
Non-Japanese affiliates	35(42.2)	48(57.8)	83(100)
Total	38(38.8)	60(61.2)	98(100)

% in parentheses.

Exact test statistic; .088 (d.f.=1, N=98)

革新的な人材マネジメントの中国企業への移転：外資による経営革新

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全社的な経営戦略を実現するために企業の機能分野が首尾一貫して連動していなければならないという主張は、高い業績を達成する人材のマネジメント（High performance work practices, 略してHPWP）とよばれている。このHPWPが在来型の人事・労務管理をしていた企業に導入され定着していくならば、それは人材マネジメント（HRM）における革新と呼ぶに値する。そこで本稿では、多国籍企業が中国本土に直接投資をする際、HPWPを持ち込むことで革新の担い手となり、より良い経営成果を上げるはずだという仮説をテストした。中国中央部に位置する河南省鄭州市外資局が誘致した外資企業100社から収集した第1次資料の多変量解析結果から、次のことを明らかにした。

HPWPの構成要素はシステムとして統合されているとは言い難い。採用～訓練～報酬の人事機能が、独立した管理活動として実践されているようだ。ただし、企業内で人材育成に投資している企業では、柔軟で新しい組織づくりに成功している。更に、柔軟な組織を備えた企業は、企業の財務達成目標をより良く実現している。HPWPの要素がより良い組織成果を上げているわけである。また、人材面の成果としては、企業のミッションが共有されていれば、働き手のモチベーションあるいは満足度が高く、仮説を支持する結果を得た。しかしながら、モチベーションと組織成果には統計的に有意な関係は見られない。さらに、働き手の満足度と組織成果は負で統計的に有意の相関を示した。企業は高い成果を上げているものの、働き手は不満足ということで、HRMの先行研究の発見とは相いれない結果となった。

このように、先行研究と相いれない発見を一部含んではいるが、人材に投資をすることが経営成果の向上をもたらすという外資企業による発見は、外部労働市場への依存度の高い中国地場企業に、新たな人材戦略を示唆しているといえよう。