

**THE IMPACT OF HUMAN CAPITAL  
MANAGEMENT PRACTICES ON EMPLOYEE  
MOTIVATION AND WORK EFFICIENCY  
AMONG EMPLOYEES IN HI-TECH  
ENTERPRISES IN CHINA**

**DONG JIA YUAN**

**SCHOOL OF BUSINESS AND ECONOMICS  
UNIVERSITI MALAYSIA SABAH  
2007**



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**Dissertation Submitted in Partial Fulfillment  
of the Requirements for the Degree of Master  
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**SCHOOL OF BUSINESS AND ECONOMICS  
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## BORANG PENGESAHAN STATUS TESIS @

**JUDUL: KESAN PENGURUSAN SUMBER MANUSIA YANG DIPRAKTIKKAN TERHADAP MOTIVASI DAN KECEKAPAN PEKERJA DIKALANGAN PARA PEKERJA DALAM INDUSTRI BERTEKNOLOGI TINGGI DI CHINA**

**IJAZAH: Sarjana Pengurusan Modal Manusia (MHCM)**

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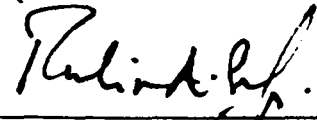
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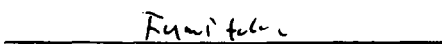
  
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## **DECLARATION**

The materials in this dissertation are original except for quotations, excerpts, summaries and references which have been duly acknowledged.

DONG JIA YUAN

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## ABSTRACT

Employee motivation and work efficiency is very important with an organization. The objective of this research is to examine whether human capital management practices (compensation, supervisor, training, and employee relations) have a positive impact on employee motivation, whether employee motivation and work efficiency have a significantly relationship, whether employee motivation plays a role in intervening the relationship between human capital management practices and work efficiency, and whether age and job experience play moderate roles in the relationship between human capital management practices and employee motivation and the relationship between employee motivation and work efficiency. The literature review provides detail development of how these variables influence employee motivation and work efficiency. The respondents were based on randomly selected. The questionnaires were constructed out of extensive literature review. The hypotheses were tested using SPSS program of simple regression, multiple regression and hierarchical regression. The research discovered that human capital management practices (compensation, supervisor, training, and employee relations) have a positive impact on employee motivation, there is a significantly between employee motivation and work efficiency, employee motivation plays an intervening role between human capital management practices and work efficiency, and age and job experience do not play moderate roles in the relationship between human capital management practices and employee motivation and the relationship between employee motivation and work efficiency.



## **ABSTRAK**

### **KESAN PENGURUSAN SUMBER MANUSIA YANG DIPRAKTIKKAN TERHADAP MOTIVASI DAN KECEKAPAN PEKERJA DIKALANGAN PARA PEKERJA DALAM INDUSTRI BERTEKNOLOGI TINGGI DI CHINA**

*Motivasi dan kecekapan pekerja adalah sangat penting dalam suatu organisasi. Objektif kajian ini adalah untuk mengkaji kesan amalan pengurusan sumber manusia (pampasan, penyelia, latihan dan hubungan antara pekerja) kepada motivasi pekerja, hubungan motivasi dan kecekapan kerja, sama ada motivasi pekerja memainkan peranan yang selang dalam hubungan antara amalan pengurusan modal manusia dan kecekapan kerja, dan sama ada umur dan pengamalan memainkan peranan yang sederhana dalam hubungan antara amalan pengurusan modal manusia dan motivasi pekerja dan hubungan antara motivasi pekerja dan kecekapan kerja. Ulasan karya membekalkan perincian perkembangan tentang bagaimana pembolehubah ini mempengaruhi motivasi dan kecekapan kerja. Respoden-respoden adalah dipilih secara rawak. Hypothesis telah diuji dengan menggunakan perisian SPSS dan analisis regresi mudah, regresi berganda dan regresi hierarki telah digunakan. Kajian ini menemui bahawa amalan pengurusan modal manusia (pampasan, penyelia, latihan dan hubungan antara pekerja) memberi kesan yang positif kepada motivasi pekerja, hubungan antara motivasi pekerja dan kecekapan kerja adalah signifikan, motivasi pekerja memainkan peranan yang selang antara amalan pengurusan modal manusia dan kecekapan kerja, dan umur serta pengamalan kerja tidak memainkan hubungan yang sederhana dalam hubungan antara amalan pengurusan modal manusia dan motivasi pekerja dan hubungan antara motivasi pekerja dan kecekapan kerja.*

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# CHAPTER 1

## INTRODUCTION

### 1.1 Overview

Along with the society development and technology never give up advancement and following the process of economic integration of the world and arrival of the era of knowledge-driven economy, the management environment that enterprises face is complicated and changeable, the market competition is fiercer and fiercer, human resources has become primary resource that enterprise manage (Ma Yan Bin, 2002).

The core competitive advantage of companies do not come from physical capital any more, in contrast, they come from human beings who create virtual capital such as knowledge and skills. That is the reason that almost all companies start to concern about their own human capital.

In China, following Mr. Deng Xiao Ping's the reformation and opening policy, Chinese economy has a very fast speed development. In 1984, not long after PCD was founded, 11 computer scientists in Beijing, China also had a vision – to create a company that would bring the advantages of information technology to the Chinese people. This company was the first hi-tech company in China.

The development of hi-tech enterprises was so speed in last century in China and in everyday there were many hi-tech enterprises born. However, following we entered into the new century, the development and economic conditions of hi-tech enterprises were not like them who were in hi-tech enterprises expected. Many enterprises had to close down. The reasons, one came from the external environment, the other came from the internal environment. These enterprises did not think that human capital was



the most important to them. The benefits of enterprises were always first.

Nowadays, Chinese hi-tech enterprises have already greater development. However, following China joined WTO; many problems came out, especially human capital management. The Chinese scholar Wu Jing Lian said that human capital management was one of the biggest problems that Chinese hi-tech enterprises must be faced. The employee motivation and work efficiency were not high in many enterprises. Return a root; they will be influenced by human capital management practices.

In this paper, it will focus on the factors of human capital management practices, and find the association between these factors and employee motivation and work efficiency. This paper hopes this study will provide valuable information to the study of employee motivation and work efficiency and finally help resolve these two problems in Chinese hi-tech enterprises.

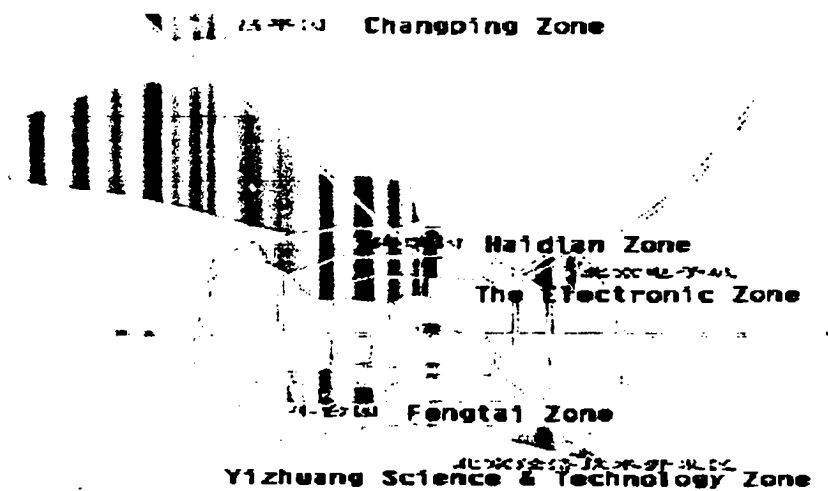
## **1.2 Background of Research Objectives**

In this paper, it will focus on small and medium hi-tech enterprises which are in Zhongguancun Science Park in Beijing in China. Because of their flexibility and creativity, small and medium enterprises develop quickly in China, especially the hi-tech enterprises. Small and medium enterprises now are one of the main types of organizations who contribute to national economy. Most of these small and medium enterprises are private-owned, while large enterprises are national-owned. So during the development, small and medium enterprises meet more problems, such as employee motivation and work efficiency, than large enterprises.

In Beijing the Small and medium hi-tech enterprises located mainly in Zhongguancun Science Park. Picture 1.1 shows that the sketch map of Zhongguancun

Science Park. Zhongguancun Science Park is the first state-level high-tech development zone which was approved by the State Council in May 1988. Authorized by Beijing Municipal government, the Administrative Committee of Zhongguancun Science Park is the leading institute and will execute the comprehensive leading and administration power of municipality level over the Science Park. Zhongguancun Science Park is nationally the largest concentration area of intellectual resources, human resources and information resources. It consists of five zones: Haidian Zone, Changping Zone, Fengtai Zone, Yizhuang Zone and the Electronics City. Zhongguancun is an area with a high concentration of intellectual resources, in which there are first-grade technological talents and scientific achievements.

**Picture 1.1 the Sketch Map of Zhongguancun Science Park**  
**Source: The web page of Zhongguancun Science Park**  
**(<http://www.zgc.gov.cn>)**



Being as the first state-level hi-tech industry development zone, Zhongguancun has remained an over 30% economic growth rate in the past ten years. In 2003, there are 16299 small and medium hi-tech enterprises in Zhongguancun. The gross income of these enterprises is 285250 million Chinese Yuan, which is one of the main sources of financial revenue of Beijing. In 2006, income from technology, industry and trade of Zhongguancun Science Park amounted to more than RMB600billion, with RMB21billion

tax paid. At the annual work conference, authority from Zhongguancun Administrative Committee said that in 2006, about 10 high-tech enterprises were set up in the Park each day and the total number of high-tech enterprises amounted to 18000. Besides this, the small and medium enterprises of Zhongguancun have provided many employment opportunities for Beijing labor market. In 2003, it involved about 326,000 employees totally. Generally to say, enterprises in Zhongguancun sustain the hi-tech industry in China (China News, 2006).

But according to the Beijing Government Human Resource Management Report (2003), it showed that employee motivation and work efficiency were two of main problems which restricted the small and medium hi-tech enterprises development. There are 62.6% employees who feel that work is a thing that have to do. The employees lack of work enthusiasm and commitment. There are 55.7% employers who think that their employees' work efficiency does not make them satisfaction. We can conclude that small and medium business in Zhongguancun should consider how to solve these problems of employee motivation and work efficiency. They are harm to not only enterprises' development, but also employees' career development. So employee motivation and work efficiency of enterprises in Zhongguancun should be paid more attention to and the research on the impact of human capital management practices is significant and useful.

### **1.3 Problem Statement**

Human Capital Management (HRM) is a planned approach to managing people effectively for performance. It aims to establish a more open, flexible and caring management style so that staff will be motivated, developed and managed in a way that they can and will give of their best to support departments' mission.





Human capital management activities are carried out by all those in a leadership role in an organization. Every manager or team leader is necessarily involved in concerns about the way in which people are employed as well as about what they need to be doing, and how well. Over the last 50 years or so, the term 'Personnel Management' has been used to describe that function of management that deals with the recruitment, employment, training, redevelopment, safety and departure of employees (Gerald, 2002). In the contemporary situation, the prime role of HR practitioners is that of developing the organization's staff resources so as to enable people to make a flexible, multi-skilled contribution to the overall aims of the organization, be it a business or in the public sector.

Human capital management has an importance on employee motivation and work efficiency. In the contemporary human capital management, people-first values are very important. At the same time, the contemporary human capital management is on the value-based hiring. As the managers, they must comprehend the employees' motivation and direct their work that can bring high work efficiency. To achieve success and growth and viability, a firm would need employees that could be productive and would be committed to helping the organization succeed. The ability to find and keep good employees, to interact with employees, and to create a climate for their performance could have a positive impact on the survival of the firm.

Managing employees effectively means identifying their needs. Employees bring their needs, aspirations and hopes to their jobs, and expect to find a work environment where they can utilize their abilities and satisfy many of their basic needs. Individuals become committed to employers that take concrete steps to help them to develop their abilities and to achieve their potential. For example, young graduates or new recruits often start their jobs expecting challenging assignments to help them test and prove their abilities. Employee attitudes and behaviours (including performance) reflect their

perceptions and expectations, reciprocating the treatment they receive from the organization. Kraut and Korman (1999) advocated the self-enhancement model of HR practice, which relates to an employee's need for personal achievement and development. Current HCM thinking emphasizes the benefits of meeting employee needs and enabling workers to have control over their work lives. Many firms recognize the necessity to provide the information, flexibility and voice the employees require contributing to organizational success.

Employee motivation is the power that through behaviour to product, so only satisfies the different needs of the individual, and then can adjust their work motive to move. Work efficiency can exhibit how the employees work. So the human capital management has the importance on employee motivation and work efficiency. The people who work at the human capital management department, they must through the way, such as economy, belief, promotion, felling, objective, credit, and so on, to motivate the employees and help them to enhance their work efficiency. Hence human capital management must act as a source of information about and a source of inspiration for the application of the findings of behavioral science and make them work efficiency on the high level.

Small and Medium hi-tech enterprises in Zhongguancun, they are not only developed very fast, but also made the contribution for Chinese economy. But following their development, there are many problems emerged, one is human capital management. As this paper has discussed, there are some employees motivation and work efficiency which were not high in Zhongguancun Science Park in Beijing in China. So there is a question for this research: why do employee motivation and work efficiency which is the problems to small and medium hi-tech enterprises in Zhongguancun? What are the underlying factors of human capital management practices influence them?



Therefore, by focusing on 4 fields of human capital management practices (compensation, supervisor, training, and employee relations) and find how HCM practices in these fields affect employee motivation and employee motivation affect work efficiency, this paper may find some solution to problems meted by SMEs in Zhongguancun. Overall, this research, basically, will try to answer to the foregoing research questions as outlined below:

- 1.3.1 Is there a relationship between human capital management practices and employee motivation?
- 1.3.2 Is there a significantly between employee motivation and work efficiency?
- 1.3.3 Does employee motivation play a role in intervening the relationship between human capital management practices and work efficiency?
- 1.3.4 Do age and job experience play a role in moderating the relationship between human capital management practices and employee motivation and the relationship between employee motivation and work efficiency?

#### **1.4 Objectives of Study**

Until now the study on the relationship between human capital management practices and employee motivation and work efficiency is scarce. To understand this point, I select different human resource practices that study its effect on employee motivation and work efficiency. Therefore the objectives of this research are divided into two parts. The first part consists of the main objective while the second is the additional objectives.

The main objectives of this research are as follows:

- a) To examine whether factors of human capital management practices (compensation, supervisor, training, and employee relations) has a positive impact on employee motivation to the organization.
- b) To examine whether employee motivation has a significant impact on work efficiency.
- c) To explore whether employee motivation plays an intervened role in the relationship between human capital management practices and work efficiency.
- d) To explore whether age and job experience play a moderated role in the relationship between human capital management practices and employee motivation and the relationship between employee motivation and work efficiency.

Additional objectives of this research include:

- a) To discuss the solution of employee motivation problems in human capital management practices through finding the impact of factors of human capital management practices on employee motivation.
- b) To discuss the solution of work efficiency problems in human capital management practices through finding the impact of employee motivation.

To increase managers' ability to recognize employee motivation and work efficiency, this paper will provide prospective organizations to react swiftly in meeting their strategy objectives.

### **1.5 Significance of Study**

The research on the relationship between human capital management practices and employee motivation and work efficiency are far from maturation; much study can be done here. This paper gives a helpful trial. It not only provides an example for further

study on employee motivation and work efficiency respectively, but also helps the managements of the hi-tech enterprises in Zhongguancun Science Park improving the human capital management practices. Chinese Sage Lao Tze said: The journey of a thousand miles begins with a single step. From this study, employers of small and medium enterprises will find that what and how factors can influence employee motivation and work efficiency, they are not only change their mind in human capital management, but also from the actions. Indeed recognize that employees are the most important resource or capital to their enterprises; indeed use the actions to indicate that people first.

Without doubt, this study is still limited in some fields, but the result of this research could serve as a reference for further investigations about factors of employee motivation and work efficiency.

## **1.6 Key Variable**

The key variables used in this study have specific meaning and such definition in general context as well as in the context of this research are outlined below.

### **1.6.1 Human Capital Management Practices**

Human capital refers to an organization's employees, described in terms of their training, experience, judgment, intelligence, relationships, and insight (Raymond, John, Barry & Patrick, 2004).

Human capital management refers to the policies and practices involved in carrying out the "people" or human resource aspects of a management position, including recruiting, screening, training, rewarding, and appraising (Gary Dessler,

2005).

Human capital management practices refer to the practices into every human capital management aspect: strategic planning and HR, compensation and benefits, hiring, performance management, company culture, keeping it legal, and others (Leah Rubin & Clarinda Merripen, 2003)

### **1.6.2 Employee Motivation**

Employee motivation refers to a psychological drive or force that directs someone toward an objective (Richard M. Hodgetts, 2002)

### **1.6.3 Work Efficiency**

In this paper, work efficiency approximately refers to job performance. Job performance be viewed as a function of the capacity to perform, the opportunity to perform, and the willingness to perform (Ivancevich, Konopaske & Matteson, 2005).

### **1.6.4 Compensation**

Compensation refers to all financial returns and tangible services and benefits employees receive as part of an employment relationship (Milkovich & Newman, 2005).

### **1.6.5 Supervisor**

Supervisor is a manager at the first level of management who assigned tasks, monitor

performance and appraisal result to subordinates (Vandenberghe, Bentein & Stinglhamber, 2004; DeConinck, Stilwell, 2004).

### **1.6.6 Training**

Training refers to the process of teaching new employees the basic skills they need to perform their jobs (Gary Dessler, 2005).

### **1.6.7 Employee Relations**

Employee relations refer to a field that seeks to understand work-related aspects of interpersonal relations and apply its knowledge to help organizations and individuals in facing their goals (Catherine, Paul & Robert, 2000).

## **1.7 Organization of Dissertation**

This dissertation contains 5 chapters. Chapter 1 presents an overview of the study and its importance. In addition, the significance of the study and background of research objectives are also included.

Chapter 2 discusses the literature related to the study and the definition for the variables. Evidence from this part will be the focus in this chapter.

Chapter 3 illustrates the research framework and methodology that is used in this dissertation. The research frame work basically gives an overview of the variables included while the methodology includes some hypotheses testing, sampling, data collection procedures, and instruments used. This chapter also describes the research method used and the reason for choosing this method. The definition of terms used for

this study is also included in this part.

Chapter 4 presents the findings of the study.

Chapter 5 discusses the implications, limitations, some suggestions for future research and conclusions draw from the study.





## Reference

- Andrew J. DuBrin. 2002. *Human Relations for Career and Personal Success*. 6<sup>th</sup> Edition. Prentice Hall.
- Barling, J., Iverson, R.D., Kelloway, K. (2003), "High-quality work, job satisfaction, and occupational injuries", *Journal of Applied Psychology*, Vol. 88 (2): pp.276-83.
- Bartol, Katheryn M. & Martin, David C., *Management*, McGraw Hill, 1998.
- Becker, B.E., Yang, G. (1989), "The Chinese urban labour system: prospects for reform", *Journal of Labour Research*, Vol. 10 (4): pp.411-28.
- Beijing Government Human Resource Management Report*. 2003.
- Blanchard, P. N., & Thacker, J. W. (2004). *Effective Training: Systems, Strategies, and Practices*, Second Edition. Englewood Cliffs, N.J.: Pearson/Prentice Hall.
- Burchell, Brendan & Marsh, C. 1992. *The effects of questionnaire length on survey*
- Carolyn Wiley. 1997. What motivates employees according to over 40 years of motivation surveys. *International Journal of Manpower*, Volume 18 (3) (1997): pp. 263-280.
- Catherine E. Seta, Paul B. Paulus & Robert A. Baron. 2000. *Effective Human Relations – A Guide to People at Work*. 4<sup>th</sup>. Edition. Allyn & Bacon. MA.
- Cellar, D.F., Posig, M., Johnson, D., Janega, D. (1993), "Effects of social cues, task complexity, and sex on intrinsic motivation and task perceptions: a test of the task-instrumentality hypothesis", *Basic and Applied Social Psychology*, Vol. 14 (1): pp.87-102.
- Chang, P-L., Chen, W-L. (2002), "The effect of human resource management practices on firm performance: empirical evidence from high-tech firms in Taiwan", *International Journal of Management*, Vol. 19 (4): pp.622-31.
- Childers, T. & Ferrell, O. 1979. Response Rates and Perceived Questionnaire Length in Mail Surveys. *Journal of Marketing Research*, Vol. 16: pp.429-431.
- China News, Beijing*, Nov. 13, 2006.
- Chinese Human Capital Management Questionnaire*, 2003,
- Chiu, R.K., Kosinski, F. (1995), "Chinese cultural collectivism and work related stress:

- implications for employment counsellors", *Journal of Employment Counselling*, pp.98-110.
- Chiu, R.K., Luk, V., Tang, T.L.P. (2001), "Hong Kong and China: the cash mentality revisited", *Compensation and Benefits Review*, Vol. 33 (3): pp.66-72.
- Cohen-Charash, Y., Spector, P.E. (2001), "The role of justice in organizations: a meta-analysis", *Organizational Behavior and Human Decision Processes*, Vol. 86 (2): pp.278-321.
- Colquitt J. A., Conlon D. E., Wesson M. J., Porter C. O. L. H., & Ng K. Y. 2001. Justice at the millennium: A meta-analytic review of 25 years of organizational justice research. *Journal of Applied Psychology*, 86, 425-445.
- DeConinck, J. B. & Stilwell, C. D. 2004. Incorporating Organizational Justice, Role States, Pay Satisfaction and Supervisor Satisfaction in a Model of Turnover Intentions. *Journal of Business Research*, Vol. 57, pp.225-231.
- Delaney, T.J., Huselid, A.M. (1996), "The impact of human resource management practices on perceptions of organizational performance", *Academy of Management Journal*, Vol. 39 (4): pp.949-69.
- Delery, J.E., Doty, D.H. (1996), "Modes of theorizing strategic human management: tests universalistic, contingency, performance predictions", *Academy of Management Journal*, Vol. 39 (4): pp.802-35.
- Desimone R. L., Werner J. M. & Harris D. M., 2002. *Human Resource Development*. 3<sup>rd</sup> Edition. South-Western Thomson Learning. Ohio.
- Evan H. Offstein, Devi R. Gnyawali, & Anthony T. Cobb. 2006. A strategic human resource perspective of firm competitive behavior. *Human Resource Management Review*, Volume 15, Issue 4, December 2005, Pages 305-318.
- Fan, X. (1995), "The Chinese cultural system: implications for cross-cultural management", *Sam Advanced Management Journal*, No.Winter, pp.14-20.
- Fank, M. (1994), "The development of a money-handling inventory", *Personality and Individual Differences*, Vol. 17 pp.147-52.
- Gary Dessler. 2005. *Human Resource Management*. International Edition. 10<sup>th</sup>. Edition. Prentice Hall. New Jersey.
- Gerald Cole. 2002. *Personnel and Human Resource Management*. 5<sup>th</sup> Edition. Letts Educational. Continuum. London. UK.

Gomez-Mejia, L.R., Balkin, D.B. (1992), *Compensation, Organizational Strategy, and Firm Performance*, South-Western, Cincinnati, OH.,

Greenberg J. A., Conlon & Baron Ribbens. 1997. *How Environmental Variables Influence Behaviour at Work*, in Collett, P. & Fumham, A. (Eds), *Social Psychology at Work*. Routledge, London.

Guerrero, S., Barraud-Didier, V. (2004), "High-involvement practices and performance of French firms", *International Journal of Human Resource Management*, Vol. 15 (8): pp.1408-23.

Gupta, N., Shaw, J.D. (1998), "Let the evidence speak: financial incentives are effective!!", *Compensation and Benefits Review*, Vol. 26 No.March-April, pp.28-32.

Gustafson, C. M. 2002. Employee Turnover: A Study of Private Clubs in the USA. *International Journal of Contemporary Hospitality Management*, Vol. 14 (3): pp.106-113

Hao Guo Qing. 2003. *How to Improve the Supervisors' Leadership Style*. Peking University Press.

Harel, H.G., Tzafirir, S.S. (1999), "The effect of human resource management practices on the perceptions of organizational and market performance of the firm", *Human Resource Management*, Vol. 38 (3): pp.185-99.

Hatch, N.W., Dyer, J.H. (2004), "Human capital and learning as a source of sustainable competitive advantage", *Strategic Management Journal*, Vol. 25 pp.1155-78.

Heneman, R.L. (1992), *Merit Pay: Linking Pay Increases to Performance Ratings*, Addison-Wesley, Reading, MA., .

Herzberg, F. (1987), "One more time: how do you motivate employees?", *Harvard Business Review*, Vol. 65 (5): pp.109-20.

Herzberg, F., Mausner, B., Snyderman, B. (1959), *The Motivation to Work*, John Wiley & Sons, New York, NY, .

Huang, T-C. (2001a), "The relation of training practices and organizational performance in small and medium size enterprises", *Education and Training*, Vol. 43 (8/9): pp.437-44.

Huang, T-C. (2001b), "The effects of linkage between business and human resource management strategies", *Personnel Review*, Vol. 30 (2): pp.132-51.

Irwin L. Goldstein and J. Kevin Ford. 2002. *Training in Organizations*. 4<sup>th</sup> Edition. Wadsworth Group. CA. USA.

Ivancevich J. M., Konopaske R. & Matteson M. T. 2005. *Organizational Behavior and Management*. 7<sup>th</sup> Edition. (International Edition). Boston: McGraw Hill.

Jeff Cavins, Matthew Pinto. 2005. The impact of HRM on organizational performance: an examination of contingency theory. *Human Resource Management Review*. Vol. 30, pp.357-369.

Jon-Chao Hong, Sung-De Yang, Li-Jung Wang, En-Fu Chiou, Fan-Yin Su, sui-Lan Huang. 1995. Impact of employee benefits on work motivation and productivity. *International Journal of Career Management*, Volume 7 (6) (1995): pp. 10-14.

Jordan, P.C. (1986), "Effects of an extrinsic reward on intrinsic motivation a field experiment", *Academy of Management Journal*, Vol. 29 (2): pp.405-12.

Joseph J. Martocchio. 2004. *Strategic Compensation: A Human Resource Management Approach*. 3rd Edition. Pearson Education, Inc., New Jersey.

Keith Bedinham. *Industrial and Commercial Training*, Vol. 29 (3): 1997.

Kiyoshi Takahashi. 2006. Effects of wage and promotion incentives on the motivation levels of Japanese employees. *Career Development International*. Volume 11 (3) (2006): pp. 193-203.

Lawler, E.E. (1971), *Pay and Organizational Effectiveness: A Psychological View*, McGraw-Hill, New York, NY, .

Lawler, E.E. (1990), *Strategic Pay: Aligning Organizational Strategies and Pay Systems*, Jossey-Bass, San Francisco, CA., .

Laws, J., Tang, T.L.P. (1999), "Japanese transplants and union membership: the case of Nissan Motor Manufacturing Corporation", *SAM Advanced Management Journal*, Vol. 64(2): pp.16-26.

Leah Rubin & Clarinda Merripen. 2003. *IGDA Business Committee --- Best Practices in Human Resources*. International Game Developers Association.

Li Yi Ning. 2002. *The Relationship between Compensation and Work Efficiency Research in China*. Peking University Press.

Liu Xing An. 2002. *Employee Motivation Research in Current Chinese Enterprises*.

People University Press. Beijing. China

Locke, E.A., Feren, D.B., McCaleb, V.M., Shaw, K.N., Denny, A.T. (1980), "The relative effectiveness of four methods of motivating employee performance", in Duncan, K.D., Gruneberg, M.M., Wallis, D. (Eds), *Changes in Working Life*, Wiley, New York, NY, pp.363-88.

London, M. & Howat, G. 1978. The Relationship between Commitment and Conflict Resolution Behavior. *Journal of Vocational Behavior*, 1-14.

Lowe, K.B., Kroeck, K.G., Sivasubramaniam, N. (1996), "Effectiveness correlates of transformational leadership: a meta analytic review of the MLQ literature", *Leadership Quarterly*, Vol. 7 (3): pp.385-425.

Ma Yan Bin. *Hi-Tech Enterprises Human Resource Management Research*. WuHan University Press. 2002.

Max Messmer. 2004. Closing the communication gap. *Handbook of Business Strategy*, Volume 5 (1) (2004): pp. 87-92

Milkovich, G. T. & Newman, J. M. 2005. *Compensation*. 8<sup>th</sup>. Edition. Boston: McGraw Hill.

Milkovich, G.T., Newman, J.M. (2002), *Compensation*, 7th ed., Irwin/McGraw-Hill, Boston, MA., .

Mintzberg et al., 1976 H. Mintzberg, D. Raisininghani and A. Theoret, The structure of "unstructured" decision processes, *Administrative Science Quarterly* 21 (1976), pp. 246-275.

Mowday, R. T., Steers, R. M. & Porter, L. M. 1979. The Measurement of Organizational Commitment. *Journal of Vocational Behavior*, Vol. 27, pp.224-247.

Opsahl, R.L., Dunnette, M.D. (1966), "The role of financial compensation in industrial motivation", *Psychological Bulletin*, Vol. 66 pp.94-118..

Osterman, P. (1995), "Skill, training, and work organization in American establishments", *Industrial Relations*, Vol. 34 pp.125-46.

Parker, R. J. & Kohlmeyer III, J. M. 2005. Organizational Justice and Turnover in Public Accounting firms: a Research Note. *Accounting, Organizations and Society*. Vol. 30, pp.357-369.

Patricia Huddleston, Linda K. Good. 1999. Job motivators in Russian and Polish retail

firms. *International Journal of Retail & Distribution Management*, Volume 27 (9) (1999): pp. 383-393.

Pennings et al., 1998 J.M. Pennings, Lee and K. Witteloostuijn, Human capital, social capital, and firm dissolution, *Academy of Management Journal* 41 (1998) (1), pp. 425-440.

Pfeffer, J. (1998), "Seven practices of successful organizations", *California Management Review*, Vol. 40 (2): pp.96-124.

Pfeffer, J., Veiga, F.J. (1999), "Putting people first for organizational success", *Academy of Management Executive*, Vol. 13(2): pp.37-48.

Rabey, G.P. (2001), "Motivation is response", *Industrial and Commercial Training*, Vol. 33(1): pp.26-8..

Randy K. Chiu, Vivienne Wai-Mei Luk, Thomas Li-Ping Tang. 2002. Retaining and motivating employees--Compensation preferences in Hong Kong and China. *Personnel Review*, Volume 31 (4) (2002): pp. 402-431.

Raymond A. Noe, John R. Hollenbeck, Barry Gerhart & Patrick M. Wright. 2004. *Fundamentals of Human Resource Management*. The McGraw Hill Companies, Inc.

Richard M. Hodgetts. 2002. *Modern Human Relations at Work*. 8<sup>th</sup>. Edition. The Dryden Press. FL.

Roscoe, A. M., Lang, D. & Sheth, J. N. 1975. Follow-up methods, questionnaire length, and market differences in mail surveys. *Journal of Marketing*, Vol. 39 (2): pp.20-27.

Rubenstein, C. (1981), "Money and self-esteem, relationships, secrecy, envy, satisfaction", *Psychology Today*, Vol. 15 (5): pp.29-44.

Ryan, R.M., Deci, E.L. (2000), "Intrinsic and extrinsic motivations: classic definitions and new directions", *Contemporary Educational Psychology*, Vol. 25 (1): pp.54-67.

Schuler, R.S., Jackson, S.E. (1987), "Linking competitive strategies with human resource management", *The Academy of Management Executive*, Vol. 1 (3): pp.207-19.

Shawn Smith, JD & Rebecca Mazin. 2004. *The HR Answer Book: An Indispensable Guide for Managers and Human Resources Professionals*. AMACOM. New York.

Stajkovic, A.D., Luthans, F. (1997), "A meta-analysis of the effects of organisational behavior modification on task performance", *Academy of Management Journal*, Vol. 40

(5): pp.1122-49.

Staw, B.M., Calder, B.J., Hess, R., Sandelands, L.E. (1980), "Intrinsic motivation and norms about payment", *Journal of Personality*, Vol. 48 pp.1-14.

Storey, D (1994), *Understanding the Small Business Sector*, International Thomson Business Press, London.

Tang, T.L.P., Akadne, A., Alzubaidi, A.S., Borg, M.G., Cheng, B.S., Chiu, R.K., Jen, C.K., Kazem, A.M., Lim, V.K.G. (2002), "Is the love of money the root of all evil? Income, money ethic, pay satisfaction, commitment, ethical culture, and unethical behavior in 12 countries", paper submitted for publication,.

Tang, T.L.P., Frost, A.G. (1999), "Employee turnover revisited: differences among involuntary turnover, voluntary turnover, and current employees", *Journal of Compensation and Benefits*, Vol. 15(2): pp.41-6.

Tang, T.L.P., Kim, J.K., Tang, D.S.H. (2000b), "Does attitude toward money moderate the relationship between intrinsic job satisfaction and voluntary turnover?", *Human Relations*, Vol. 53 (2): pp.213-45.

Tang, T.L.P., Singer, M.G., Roberts, S. (2000c), "Employees' perceived organizational instrumentality: an examination of the gender differences", *Journal of Managerial Psychology*, Vol. 15 (5): pp.378-406.

Thomas Li-Ping Tang, Roberto Luna-Arocas, Harold D. Whiteside. 2003. Money Ethic Endorsement, Self-Reported Income, and Life Satisfaction University Faculty in the US and Spain. *Personnel Review*, Volume 32 (6) (2003): pp. 756-773.

Vandenberghe, C., Bentein, K. & Stinglhamber, F. 2004. Affective Commitment to the Organization, Supervisor, and Work Group: Antecedents and Outcomes. *Journal of Vocational Behavior*, Vol. 64, pp.47-71.

Vogus, T.J., Welbourne, T.M. (2003), "Structuring for high reliability: HR practices and mindful processes in reliability-seeking organizations", *Journal of Organizational Behavior*, Vol. 24 (7): pp.877.

Vroom, V.C. (1964), *Work and Motivation*, Wiley, New York, NY, .

Wernimont, P.F., Fitzpatrick, S. (1972), "The meaning of money", *Journal of Applied Psychology*, Vol. 56 pp.218-26.

Wright, P.M., McMahon, G.C. (1992), "Theoretical perspective for strategic human resource management", *Journal of Management*, Vol. 18 pp.295-320.

Wu Jing Lian. *The Problems of Chinese Hi-Tech Enterprises Development*. Chinese News Press. 2002.

Younger, S.M. (1993), "Finding Time for TQM Training", *Training & Development*, Vol. 47 (2): pp.11-15.

Yu Shi Wei. 2003. *The problems of Human Resource Management Research*. The People Press. Beijing. China.