

Examining the Causes and Negative Effects of Skills shortages in China

Ying Wang

School of Management and Marketing Charles Sturt University, Australia
yiwang@csu.edu.au

Ramudu Bhanugopan

School of Management and Marketing Charles Sturt University, Australia
bramudu@csu.edu.au

Examining the Causes and Negative Effects of Skills shortages in China

Abstract

The purpose of this study is to examine the causes and negative effects of skills shortages among Chinese managers. Drawing on interviews with Chinese managers, we identified the existence of skills shortages existing in three types of organizations viz state-owned, private and foreign-invested, in China. We found that the skills shortages associated with skills deficiencies and scarcity exacerbate negative impacts and significantly affect the managerial performance. We ascertained a number of causes for skills shortage which are wide-ranging and multifaceted. Implications for current and future skills shortages research are discussed.

Key Words: Skills shortage, skills scarcity, organization, China

Nowadays, organizations in all over the world have to face enormous challenges and rising competitions, since the business environment is turning increasingly complex and rapidly changing (Akuratiyagamage, 2007; Dastgeer & Rehman, 2012). Under this circumstance, organizations recognise that employees' knowledge, skills and abilities are critical to gain and maintain competitive advantages (Hartmann, Feisel, & Schober, 2010; Zhu, Iles, & Shutt, 2011). However, even with this realization, organizations have to face a growing shortage of skilled human resources (Zhu et al., 2011). The skills shortage is especially acute among managerial staff. For instance, in China, which is one of the fastest growing economies in the world, the shortage of skilled managers is predicted to be one of the greatest barriers to its development and growth (Jiang, Baker, & Frazier, 2012; Li, Li, Wu, & Xiong, 2012; Zhu et al., 2011). Although China has a huge population of 1.3 billion, it is facing a serious shortage of management professionals (Farre & Grant, 2005; Hulme, 2006; Kasper, Muehlbacher, Kodydek, & Zhang, 2012; Schafer, 2005a, 2005b; Sheldon & Li, 2013). The problem of skills shortage of managers becomes even harder for multinational enterprises (MNEs) in China (such as Li & Sheldon, 2010; Warner & Zhu, 2010). This viewpoint has been reported in an earlier study by Hewitt Associates' (2004) study, which found 75% of 265 participating multinational organizations doing business in China reported the skills shortage at the managerial level. This study aims to identify the skills shortage of Chinese managerial staff, to explore the reasons and negative effects of this, and to offer suggestions to address the issues of skills shortage.

In China, the topic of skills shortage has not yet received adequate attention. According to Bai and Enderwisch (2003, p. 22), "no systemic studies" on skills shortages of Chinese managers

appears to have been undertaken,. Although a relatively small handful of studies (Bai & Enderwick, 2003; Beamish, 2005; Capelli, 2012; Chien, 2006; Economist, 2005; Farre & Grant, 2005; Groves, Hong, & Naughton, 2000; Hawser, 2008; Jiang et al. 2012) have specifically identified skills shortage among Chinese managers, its causes, negative effects and possible solutions are still open to question. The remainder of article is structured in the following order. The next section reviews the relevant literature. The subsequent section presents the methodology which includes sampling framework and data collection and analysis procedure. Then the results are presented, followed by discussions, implications and limitations of this study.

BACKGROUND CONCEPTS AND LITERATURE

Skills Shortage: An Overview and Definition

According to Watson, Webb and Johnson (2006a, p. 37), debates surrounding the topic of skills shortage have become gradually 'more prominent' in the academic literature during the last two decades. However, the definition of 'skills shortage' remains substantially ambiguous (Chan & Dainty, 2007; Haskel & Martin, 2001). This study applies the definition by Green & Ashton (1992), who divide skills shortage into two notions: quantity-oriented Vs. quality-oriented. Green & Ashton (1992) note skills shortage exists when there are not adequate number of people available with the skills needed to do the jobs which need to be done (i.e. skills scarcity); or when existing employees have fewer skills than those required for the position (i.e. skills deficiency).

Skills Shortage in China: The paradox of causes and negative effects

Existence of Skills Shortage. Many other researchers (such as Farre & Grant, 2005;

Grant & Dexsaux, 2005; Hulme, 2006; Li et al., 2012; Li & Sheldon, 2010; Warner & Zhu, 2010) also have note that China has a shortage of skilled managers, despite having an almost inexhaustible supply of labor. It is estimated that China will need 75,000 competent global managers over the next ten to fifteen years; right now there are only around 3,000 to 5, 000 of these types of managers in the country (Farre & Grant, 2005; Farrell, Puron, & Remes, 2005; Hartmann et al., 2010; Sheldon & Li, 2013). On the other hand, other researchers note there is a gap between the skills acquired by Chinese managers and skills required by employers (Berry, 2006; Capelli, 2012; Farre & Grant, 2005). For instance, Farre & Grant (2005) note that despite the abundance of people, only a small proportion of them have adequate skills required for management positions.

Cause of skills shortage. The causes of skills shortage could be viewed from both demand-side and supply-side. On the one hand, the scarcity of skilled managers in China is mainly caused by its booming economy and increasing influx of foreign direct investment (FDI). China has achieved rapid economic growth, at 9% annually over the last three decades, since the beginning of its open-door policy in 1978 (Knight, Quhengc, & Shi, 2011). At the same time, its fast growing economy has attracted multinational enterprises (MNEs) to greatly increase their levels of foreign investment (Hartmann et al., 2010; Sheldon & Li, 2013), particularly since 1990s, (Hartmann et al., 2010; Q. Jiang & Wang, 2011). For instance, China received USD 46.4 billion in FDI in 2002 alone, and received USD 91 Billion in 2009 (UNCTAD, 2009)¹. As a result, more and more companies establish business in China. According to Schafer (2005b), there are around 25,000 state owned companies and 4.3

¹ UNCTAD refers to United Nations Conference on Trade and Development.

million private businesses in China. All of them are competing for experienced managers from the same shallow labor pool. This is the demand-side causes of skills shortage. There are also supply-side causes of skills shortages, since China's Vocational Education and Training (VET) system have been criticized for not supplying sufficient managerial graduates with appropriate skills (Hutchingsa, Zhua, Coopera, Zhangb, & Shaoa, 2009; Li & Sheldon, 2010; Sheldon & Li, 2013). Zhu, Iles, & Shutt (2011) argue, there is often a mismatch between the skills of graduates and the skills required by employers. In 2008, there were 5.6 million graduates, and another 6.1 million graduated in 2009. Around 1.7 million were, however, unable to find jobs. This high rate of graduate unemployment is mainly due to rapid structural changes in the economy, which the education system cannot keep up with (Zhu et al., 2011).

Negative effects. Managers usually have knowledge of the key factors that affect organization performance (Chen, Li, Su, & Yao, 2012). Therefore, skills shortage of managers is causing problems for organizations in China, such as high turnover rate and soaring salary and benefits for managers. At first, high turnover remains a significant problem. All companies doing business in China are chasing the same group of skilled Chinese managers, and this creates extreme competition (China Business Review, 2006; Li & Sheldon, 2010). According to Li & Sheldon (2010), employers in China redress skills shortages in China by "poaching", which means "targeting a competitor's pool of employees as part of a systematic recruiting effort" (2010, p. 187). The "poaching" leads to skilled workers benefit from having more employment choices. This causes rising wages and high turnover rate. The employee turnover rate is about 10% in

METHODOLOGY

This study collected data from Chinese managers through semi-structured interviews. Access to participant organizations in China began with compiling list of organizations from the Economy and Commerce Committee and national Chambers of Commerce. The study was conducted with two phases. Prior to the actual study, a pilot study was undertaken with three Chinese managers. The interview questions were then modified according to their suggestions. For the interview phase, after the pilot study, a description of the project's objectives along with interview questions package was sent to the contact person in each organization. Participation in the study was voluntary and anonymous. The contact person in each organization provided a list of managers. From the list, 20 managers were randomly selected. Finally, 16 managers were interviewed, who had at least five years management experience. 13 were males and three were females. The all aged from 28 to 55. Nine participants had undergraduate degree, and seven had postgraduate degree.

During the interviews, participants were asked about their experience of skills shortage, hard-to-fill vacancies (HFV), hard-to-fill vacancies caused by skills shortage (HFVSS) and skills deficiencies, based on the EMSPS (Green et al., 1998). In addition, to determine how skills shortage affects companies in China, this study also investigated negative effects of skills shortage. These negative effects were also generated based on the NESS07 (Learning Skills Council, 2008) (Question C8 and C9 of NESS07 questionnaire). All interview questions were initially drafted in English and translated into Chinese. In order to ensure the accuracy of all translations, items were back-translated into English by two bilingual experts. To analyze interview data, all transcriptions were coded and analyzed by using NVivo.

RESULTS

The Existence of Skills Shortage

The existence of skills scarcity

This study examined the existence of skills shortage amongst Chinese managers, drawing on data from the in-depths interviews. Data on this come from managers' response to two questions: Question 1: Were there any managerial vacancies in your organization needed to fill but had difficulty doing so in the previous 12 months? Question 2: Were there any managerial hard-to-fill vacancies in your organization caused by the shortage of skills in the previous 12 months? Results showed that the scarcity of skilled Chinese managers existed in six of nine companies that reported HFV among managerial positions; five organizations reported HFVSS. 12 of 16 interviewed managers claimed that there were HFVs. Nine of them asserted those vacancies were caused by skills shortage. Several managers offered specific examples as following:

We do have unfilled vacancies for management positions. We tried to fill a management vacancy for the last three months, but so far we had not got any suitable candidates.

We have been trying for four months to hire a manager for the sales department. So far, we have not got one yet.

Sometime ago we wanted to hire a manager for manufacturing department and therefore advertised on the newspapers, internet and with head-hunting company. But three months pasted now, we are still unable to find suitable candidates.

Some managers expressed that the HFVs were caused by skills shortage. One of them noted, "The reason for that is due to skills shortage not because of lack of applicants".

The existence of skills deficiency

Participants were asked to indicate managers' deficient skills existing in their organizations. They identified ten most deficient skills of Chinese managers. Six of them, namely creativity, leading change, risk taking, interviewing skills, developing junior staff, and retaining talent, were also defined as deficit skills by previous studies (Bai & Enderwick, 2003; Development Dimensions International (DDI), 2005; Jiang et al.2012). The other four deficit skills were identified by present study only, including verbal communications, reviewing performance progress, motivating others and making meetings work. However, results show that some deficient skills are identified by previous studies but not motioned by this study, namely team spirit, foreign language skills, and similar working experience (Farre & Grant, 2005; Hulme, 2006; Schafer, 2005b).

The Causes of Skills Shortage

The shortage of skilled managers may be caused by the traditional employment practices in China, such as lifetime employment, seniority promotion, ministry-based appointment of managerial staff, iron wage and the importance of personal relationship in workforce (Benson, Yuasa, & Debroux, 2007). First, most managers in state-owned companies are appointed by the Chinese government, especially middle and senior managers, as one of the interviewees noted, *"Previously, our company did not need to recruit employees. All employees including managers were assigned by the government."* Additionally, another interview participant pointed out that the managers in state owned companies are assigned by the government according to quota system. He argued *"Higher level managers are appointed by the quota system, which is decided by the government but not by the company. This quota is made*

according to the size of the company, as well as assets and profit of the company.”

Secondly, the lifetime employment (also known as “cradle to grave”) provides “rock-solid security” for those who are employed by state-owned companies (Warner & Zhu, 2010). Employees can keep their jobs for life and are infrequently dismissed. This would hamper managers’ desire of developing and promoting skills (Warner & Zhu, 2010). A manager working in state owned company argued, *“Employees in state owned company still feel they are holding an iron rice bowl. They still consider working in state owned company is more stable than working in private or foreign invested companies, where they may lose their jobs when their contracts expire.”*

Thirdly, one of the most important critical characteristics of the Chinese employment system is seniority based employment system, which refers to promotion and reward is based on years of service. As a result, old and loyal employees continue to be employed, even if they no longer perform their duties effectively (Khatri & Tsang, 2003). On the contrary, talents may be blocked from advancement of position and reward due to lack of seniority. This can lead to talented managers leaving the company (Khatri & Tsang, 2003). This argument is supported by a senior manager working in state owned companies. *“When we select managers for promotion, we have to consider about the years he or she has been working in our company. Many times, elder employees are more likely to get the position. It may cause the leave of talent managers who are not promoted, as they feel unfair.”*

Fourthly, another critical characteristic of the Chinese employment system is iron wage system, which refers to everyone at the same position are paid equally without consider about performance or skills. A general manager explained the egalitarianism in China with a better

well-know term, “Da Gou Fan”, (i.e. egalitarian practice of everyone eating from the same big pot). He said, “*We call that (i.e. traditional reward mechanism) “eating from the same big pot”. It means everyone of the same position get the same pay, irregardless on how much work they do.*” This kind of pay method cannot motivate manager to improve their skills, because managers are getting an equal share of reward regardless of the work done, and are treated the same despite the differences in performance, contribution and skills. Like one of the interviewees claimed, “*Currently, some of our managers feel unfair, because they have spent a lot of time on developing their skills, but they still earn the same salary with those who have few skills.*”

Finally, the personal relationship or the connections, (i.e. the term “guanxi” is used in Mandarin), is another major character of Chinese society. Warner (1993, p. 47) notes that “Who you know” is still very important for one’s working life and career, even if technocratic qualifications have become more necessary. The result of this study shows that hired employees may not suit the job, as they are selected because of their personal relationship with the existing managers rather than their capability or qualification. As a general manager also pointed out, “*Most employees are hired through network connections (i.e. personal relationship) few employees are recruited from external labour market. As we have to consider about an employee’s personal relationship with existing managers, sometimes we don’t select the employees with the best qualifications.*” Khatri & Tsang (2003, p. 286) comment that “individuals are allocated tasks, appraised, and rewarded” by their managers, since they are recruited. As a result, the subordinates do not see the need to excel average skills levels, because they are rewarded on the basis of the relationship with people who are in

the higher formal hierarchy of an organization, rather than competence or skills. Participated managers echoed the same result. For example, an assistant manager stated, *“Although some managers want to be creative or to make change, they are limited by Chinese culture and the system in state owned company.”* In addition, one of the interviewed general managers claimed *“in order to maintain harmony in the workplace, Chinese employees are less likely to be distinctive, as everyone is trying to be consistent with the majority of workforce”*.

Negative Effects of Skills Shortage

Interview participants were also asked to indicate negative impacts of skills shortage on their companies. The result showed that the most important negative effects of skills shortage on is high turnover rate among management staff. This is followed by the low profits both low loyalty, turnover of general staff and the soaring salary of managerial staff as.

IMPLICATIONS

It is expected that the benefits of this study will be significant. At first, the results of this study can provide guidelines for those organizations doing business in China to understand the reasons for shortages and deficiencies of management talent and ways to minimize its impact. Those organizations may want to investigate such skills shortage within their own organizations in order to discover and to address the issues of skills shortage of their managers. It is also expected that the findings for this study will help to provide a more accurate signal as to the extent of the problems caused by skills shortage in The Peoples' Republic of China and thus help to reduce the costs (monetary and non-monetary) of the identified shortages. In addition, this study may provide benefits to educational and training organizations that are offering managerial education, training and development programs for

Chinese students and managers. In this sense, and in line with what Marchante et al. (2006) and Hogarth & Wilson (2004) have noted, the current skills development courses offered by training providers must stress the importance of employers in deciding what skills are required; and how individual employees must make decisions regarding the type and level of skills to which they aspire. By doing that, students who join those programs can also benefit, as they can gain an appreciation of the skills needed when applying for managerial positions. Even if they do not attend a training course, Chinese managers could improve their skills simply on the basis of the skills identified in this study. Additionally, the study may identify problems or issues that will warrant further research and study. The outcome of this study then is likely to have a significant impact on the way in which 'talent scarcity' and 'skills deficiencies' of Chinese managers can be addressed. Finally, this study is likely to serve as an illustration to other developing countries as to the ways and means China is tackling the skills shortage problem and thus provide some useful guidelines for other countries.

REFERENCES

- Akuratiyagamage, V. M. (2007). An Integrated Approach to Management Development: A Framework for Practice and Research *The Journal of Business Perspective*, 11(4), 1-11.
- Bai, X., & Enderwick, P. (2003). Economic transition and management skills: the case of China. *Business Education and Emerging Market*(November 7, 2003).
- Beamish, P. (2005). Ivey On...China: To go or not to go *Ivey Business Journal*, 70(3), 2.
- Benson, J., Yuasa, M., & Debroux, P. (2007). The prospect for gender diversity in Japanese employment. *Int. J. of Human Resource Management*, 18(5), 890-907.
- Berry, J. (2006). Chinese checkers for your practice: Where do you fit? How do you win? *Consulting To Management*, Vol. 17, (No. 1.), p. 19 – 20.
- Capelli, P. (2012). Why companies aren't getting the employees they need. Retrieved 22 July, 2013, from http://www.wtb.wa.gov/Documents/WhyCompaniesCannotFindtheEmployeesTheyNeed_WaStreetJournal.pdf
- Chan, P. W., & Dainty, A. (2007). Resolving the UK construction skills crisis: a critical perspective on the research and policy agenda. *Construction Management and Economics*, 25(April 2007), 375-386.
- Chien, K. (2006). China's skills shortage vexes foreign firms. Retrieved 20/04/06, from http://www.aquent.com/press/articles/2005/Reuters_111605.html
- ChinaBusinessReview. (2006). China's tight talent market *China Business Review*. Retrieved 13/03/06, from chinabusinessreview.com
- Dastgeer, G., & Rehman, A. u. (2012). Effectiveness of management development in Pakistani corporate sector: Testing the D'Netto model. *Journal of Management Development*, 31(8), 740-751.
- Development Dimensions International (DDI). (2005). Leadership in China: Keeping Pace with a Growing Economy. *China Business Review*, 24-25.
- Economist. (2005). China's people problem. *Economist*, 375, 53-54.
- Farre, D., & Grant, A. J. (2005). China's looming talent shortage. *McKinsey Quarterly*(4), 70-79.
- Farrell, D., Puron, A., & Remes, J. K. (2005). Beyond cheap labor: Lessons for developing economies. *The McKinsey Quarterly*(1), 98-109.
- Grant, S., & Dexasaux, G. (2005). Narrowing Chjin's corporate-leadership gap. *China Daily*. .
- Green, F., & Ashton, D. (1992). Skill Shortage and skill deficiency: a critique. *Work, Employment and Society*, 6(2), 287-301.
- Green, F., Machin, S., & Wilkinson, D. (1998). The meaning and determinants of skills shortages p166-187. *Oxford Bulletin of Economics and Statistics*. UK: Blackwell Publishers Ltd, 60(2), 166-187.
- Groves, T., Hong, Y., McMillan, J. , & Naughton, B. (2000). China's Evolving Managerial Labor Market. *Journal of Political Economy*, 103, 873 – 876.
- Hartmann, E., Feisel, E., & Schober, H. (2010). Talent management of western MNCs in China: Balancing global integration and local responsiveness. *Journal of World Business*, 45(2), 169 -178.
- Haskel, J., & Martin, C. (2001). Technology, wages, and skill shortages: evidence from UK micro data. *Oxford Economic Papers*, 53, 642-658.

- Hawser, A. (2008). China faces growing skills shortage. *Global Finance*, 22(1), 4-4.
- Hewitt Associates. (2004). Salaries starting to rise in Asia Pacific, Hewitt annual study finds *Hewitt Associates*: Hewitt Associates.
- Hogarth, T., & Wilson, R. (2004). *Skills in England 2003, key messages*. Coventry: Institute for Employment Research, University of Warwick.
- Hulme, V. A. (2006). Short Staffed. *China Business Review*, 18 – 23, 56. .
- Hutchingsa, K., Zhua, C. J., Coopera, B. K., Zhangb, Y., & Shaoa, S. (2009). Perceptions of the effectiveness of training and development of 'grey-collar' workers in the People's Republic of China. *Human Resource Development International*, 12(3), 279 - 296.
- Jiang, B., Baker, R., & Frazier, G. (2012). An analysis of job dissatisfaction and turnover to reduce global supply chain risk: Evidence from China. *Journal of Operations Management*, 27(2), 169 - 184.
- Jiang, Q., & Wang, Z. (2011). The Framework for the Introduction of Transnational Corporations' Low-carbon Foreign Investment in Zhejiang Province in China. *Energy Procedia*, 5, 1837 - 1841.
- Kasper, H., Muehlbacher, J., Kodydek, G., & Zhang, L. (2012). Fringe benefits and loyalty on the Chinese labour market – a trend towards higher individual and performance-orientation: A case study focusing on technology companies in the Shanghai region. *Journal of Technology Management in China*, 7(2), 164-176.
- Khatri, N., & Tsang, E. W. K. (2003). Antecedents and consequences of cronyism in organizations. *Journal of Business Ethics*, 43(4), 289-293.
- Knight, J., Quhengc, D., & Shi, L. (2011). The puzzle of migrant labour shortage and rural labour surplus in China. *China Economic Review*, 22(4), 585 - 600.
- Learning Skills Council. (2008). *National Employers Skills Survey 2007*, Learning Skills Council, Coventry.
- Li, H., Li, L., Wu, B., & Xiong, Y. (2012). The End of Cheap Chinese Labor. *The Journal of Economic Perspectives*, 26(4), 57 - 74.
- Li, Y., & Sheldon, P. (2010). HRM lives inside and outside the firm: employers, skill shortages and the local labour market in China. *The International Journal of Human Resource Management*, 21(12), 2173 - 2193.
- Marchante, A. J., Ortega, B., & Pagán, R. (2006). Determinants of skills shortages and hard-to-fill vacancies in the hospitality sector. *Tourism Management*, 27(5), 791-802.
- Schafer, S. (2005a). Help Wanted. *Newsweek (Pacific Edition)*, 146(9), 40-44.
- Schafer, S. (2005b). Help Wanted. *Newsweek International*(August 29, 2005 Issue.).
- Sheldon, P., & Li, Y. (2013). Localized poaching and skills shortages of manufacturing employees among MNEs in China. *Journal of World Business*, 48(2), 186 - 195.
- UNCTAD. (2009). World investment report 2009: Transnational corporations, extractive industries and development. Retrieved 5 May 2013 http://unctad.org/en/docs/wir2009_en.pdf
- Warner, M. (1993). Human resource management 'with Chinese characteristics'. *The International Journal of Human Resource Management*, 4(1), 45 - 65.
- Warner, M., & Zhu, Y. (2010). Labour and management in the People's Republic of China: seeking the 'harmonious society'. *Asia Pacific Business Review*, 16(3), 285 - 298.
- Watson, D., Webb, R., & Johnson, S. (2006a). Influence costs and the reporting of skill deficiencies. *Human Relations. (SAGE Publications)*, 59(1), 37-59.
- Zhu, X., Iles, P., & Shutt, J. (2011). Employability, skills and talent management in Zhejiang Province. *Journal of Chinese Entrepreneurship*, 3(1), 1756-1396.