Occupational Health and Safety(OHS) in Small and Medium Size Enterprises (SMEs):

A Primary Review[1]

SANTE ET SECURITE PROFESSIONNELLES(OHS) DANS LES PETITES ET MOYENNES ENTREPRISES(PME) :

UNE REVUE PRIMAIRE

Liu Pingqing[2] Liu Fang[3] Gao Chunjing[4]

Abstract: Problems of occupational health and safety(OHS) in small and medium size enterprises(SMEs) in that mainly are private enterprises, are severe in China where as, the corresponding theoretical study are lagged behind regretfully. This paper summarizes the representative progress in this discipline simply. The exploratory results will be used to make an initial evaluation of SMEs needs, and will help orient future research.

Key words: Occupational health and safety, Small and Medium Size Enterprises, review

Résumé: Les problèmes de Santé et sécurité professionnelles(OHS) dans les petites et moyennes entreprises(PME) sont principalement ceux dans les entreprises privées et sont graves partout en Chine. La recherche théorique correspondante est largement et malheureusement arriérée. Cette thèse fait un résumé sur le progrès représentatif dans cette seule discipline. Les résultats exploratoires seront utilisés pour faire une évaluation initiale des demandes des PMEs et nous aideront l'orientation des recherches futures.

Mots-clés: Santé et sécurité professionnelles, les petites et moyennes entreprises, revue

1. INTRODUCTION

Small and Medium Size Enterprises (SMEs) having less than 50 employees comprise the majority of enterprises in many countries, and they employ 40∽90% of the

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[2] School of Management & Economic, Beijing Institute of Technology, China.

[3] School of Management & Economic, Beijing Institute of Technology, China.

[4] School of Management & Economic, Beijing Institute of Technology, China.

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total work-force. Despite their economic importance and the number of employees dependent on them, SMEs have received very little attention in the past from Occupational health and safety (OHS) researchers in most countries. In terms of either research or support for preventive initiatives, estimates suggest that SMEs have serious problems aggravated by limited access to economic, human and technological resources. Moreover, it is now recognized that methods developed specifically for large firms cannot be transferred to smaller firms. In recent years China has become notorious internationally for weak OHS protection, with many fatal accident reported by its own media and international press. The research presented in this paper attempts to summarizes the representative progress in this discipline.

2. OHS IN SMES IN DEVELOPED COUNTRY

The potential of SMEs in European economic growth has been recognized by the European Union and a number of supportive activities developed to improve the business environment for SMEs. Some programs, such as “introduction of measures to encourage improvements in the safety and health of workers at work” aimed at facilitating improvements in health and safety in SMEs, have been developed since 1980. Its introduction in 1989 was hailed as a major advance in OHS legislation and placed the emphasis on risk management as the backbone of workplace health and safety management (Neal & Wright, 1992). As a result, all European Union member states were required to introduce national legislation that implements the requirements of the Directive by the end of 1992. European business was thus faced with the challenges of implementing this legislation, following a proliferation in the late 1980s and onwards of accredited quality management systems. In some cases, the introduction of quality management systems has led to improvements in health and safety performance (Redman, Snape, & Wilkinson, 1995).

Within the United Kingdom (UK), supporting small firms in managing health and safety risk continues to be priority for the UK Health and Safety Commission (HSC, 1998) and they have undertaken several supportive actions (Borley, 1997). A survey by the British Chambers of Commerce indicated that the majority of small firms regarded health and safety as important, but adopted a “common sense" approach to it. They also considered that regulations were too complex and time consuming and were reluctant to approach the UK Health and Safety Executive for fear it might stimulate a visit.

Key differences between the UK and Spanish are that there is an enhanced level of awareness of health and safety legislation, a higher prevalence of safety and quality management systems, and a greater involvement of senior managers in managing health and safety in UK enterprises. All of these factors are acknowledged as important in improving health and safety performance (HSE, 1997). Over half the UK and Spanish sample expressed interest in a voluntary scheme for health and safety. However, in this study, the sample sizes are small and are biased toward the manufacturing sector, therefore, further work is required to test the concept further among a wider audience and to identify possible options for such a scheme (Luise Vassie and Amparo Oliver, 2000).

In contrast to Europe, SMEs in North America have received very little attention to the organization of work and OHS practices. This is coupled with an absence of complete and credible statistics for small firms. Base on the data-bank of firms for which information had been validated on the telephone included 603 small firms in the garment sector and 778 in the metal products sector in small firms in Quebec, Danie` le Champoux and Jean-Pierre Brun(2003) described the OHS problems of SMEs and links them to the firms’ organizational characteristics. This study met its goal of producing an initial portrait of OHS management in Quebec small manufacturing firms. The responses obtained from the owner-managers questioned for the study were highly consistent. The effect of blaming accidents on employees or denying the existence of safety problems is to avoid questioning the firm’s management and organization of work. The results suggest that SMEs owner-managers are isolated, overworked, do not use the services offered by the OHS sector associations, and generally do not belong to business groups. They also appear to be poorly informed and do not realize the extent of their problems. This conclusion is consistent with the conclusions of most of the research examined in the literature survey. Some prevention activities appear to be frequent and even regular in small firms. Another significant finding in their research is the division of the sample small firms into four clusters, each with a characteristic, multi-dimensional profile. This result confirms there are some significant differences in OHS management among SMEs. This result suggests that interventions with small firms, including provision of support to OHS management, be aimed at specific sub-groups of small firms, based on their practices, their owner-managers’ perceptions and their management styles, as well as on certain organizational characteristics.

Although SMEs are a significant economic driving force, most of the studies show that it extremely difficult to manage OHS, and that accidents occur more frequently than in other size categories. The nature of the OHS problems in small firms and the factors explaining the higher relative risk level are a topic of interest.

Firstly, Most employers tend to underestimate and even trivialize risk; they believe risk is an inherent part of the work activity and do not believe their employees are in any significant danger. Holmes et al. (1997) have pointed out significant disagreement between employers and employees regarding risk evaluation. Some employers believe their OHS management is adequate simply because problems rarely occur. Others tend to ascribe OHS problems to external factors such as inflation, taxes, regulations, minimum wages and workforce quality. They appear less aware of internal factors over which they have control, including the organization of work. Time constraints tend to be significant in SMEs, roles are not always clear, tasks are not defined and training is summary at best. As a result, they do not ascribe much importance to prevention. Those that have had bad experiences tend to take OHS more seriously, but they do not have a systematic approach and thus their choice of problems to be solved is arbitrary and based on the occurrence of accidents.

Second, SMEs are more fragile financially, which makes OHS investments less attractive because the financial benefits of prevention are not obvious in the short term. SME managers tend to be personally responsible for virtually all management functions in their firms without any management training, even though it is impossible to have expertise in all relevant areas. It is clear that the economic restrictions in small firms, combined with the frequent variation of contracts and tasks, mean that it can be more difficult for them to select preventive measures than would be the case, for example, in firms with a more stable production base. Accordingly, small firms tend to use less elaborate and less effective control methods, focusing on individual behavior and individual protection.

Moreover, the workforce is an important factor. Antonsson (1997) and Gardner et al. (1999) recognize there may be significant differences among SMEs in terms of general operations and OHS management. Generally speaking, the larger the workforce, the more stable and specialized the employees' jobs will be. In SMEs, the technical control mechanisms are less elaborate and exposure to risk factors is greater. However, significant variations in tasks can mean shorter exposure to risk, which can actually reduce the risk level compared with a larger firm where the employees spend more time doing the same job. As workforce size increases, the owner-manager is more likely to obtain assistance with management tasks, and may employ specialists in certain areas of production. SME employees are generally younger, less educated and less experienced than their counterparts in large corporations, and this may enhance the risk of workplace accidents. In addition, due to lack of knowledge and information, employees may not necessarily be aware of the risks they face, they may not know how to protect themselves and tend to manifest risk acceptance. Employees are required to be highly versatile, which exposes them to a broader range of risks. Indeed, some authors believe that, in sectors such as chemistry, construction, forestry and small manufacturing, where the procedural and technical risk is inherently high, organizational problems actually add to and enhance the level of risk in small firms.

In a word, the research tends to show that OHS management problems in SMEs are related to organizational characteristics including employer and employee, lack of OHS knowledge, and a lack of resources. Most authors seem to agree that a specific approach is required to promote awareness and management of OHS in SMEs.

3. OHS IN SMES IN CHINA

Over the past fifty years, China has been undergoing a dramatic foundation and transformation from a socialist command system and a market economy. This process effects on occupational health and safety management enormously.

To meet the needs of industrialization, occupational services in the 1950–1960 consisted of curative occupational medicine and work-related diseases, industrial hygiene for work environmental monitoring and assessment of control engineering, and industrial toxicology assaying for chemical toxicity, preventive medicine, occupational health started to develop in the early 1950s soon after the founding of the People's Republic of China. By the late 1970s, following economic reform and policy of opening the country, the structures and activities of occupational health were further developed to include identification, evaluation, prevention, and control of occupational hazards at work as most of the industrialized countries adopted. Gradually, modern occupational health has developed to cover not only the prevention of traditional occupational diseases and work-related disorders with the help of occupational hygiene, occupational medicine, and industrial toxicology, but also the ergonomic aspects of the work environment and the work organization, psychological stress at work, as well as the primary health care for general health problems.

From a rigidly planned economic system China has been transformed into a decentralized economy. In line with this, the industrial sector has been significantly restructured since 1980s. SMEs including rural collective enterprises in villages and townships, private enterprises and. foreign-funded enterprises that were non-existent as of two decades ago, have mushroomed and flourished. These have challenged the state-owned sector, which has shrunk due to the collapse of many state-owned enterprises. The oversight of OHS conditions have become decentralized and highly deregulated outside the state-owned industrial sector, and increasingly so within the state sector. The

economic reforms have shaped an industrial structure that is difficult to monitor. Before the market reform, the state sector, followed by the urban collective sector, were dominant. There was no private sector, and the state-owned factories tended to be large, often employing some thousands of workers. They were therefore easier to monitor. In contrast, after the market reforms many tens of thousands of SMEs sprang up, making monitoring of OHS protection a daunting task. In addition, there is a booming sector of foreign-invested enterprises managed by Hong Kong, Taiwanese and Korean firms, which are notorious in China for their lack of concern for workers' health and safety (Meei-shia Chena and Anita Chan, 2004).

In recent years, China's rapid modernization drive is leading to an explosive growth of hazardous industries and unsafe workplaces and enormous challenges in occupational health problems. China has become notorious internationally for weak OHS protection, with many fatal accidents reported by its own media and the international press. With a total population of 1.25 billion, approximately 700 million are in the active workforce, and most of them are blue-collar workers. Of which, a large proportion is exposed to potentially occupational hazards. Work-related diseases and injuries have been acknowledged as serious problems by both health professional people and the highest levels of government. Over-time workdays and 'over-dose' exposure to dusts, chemicals, and other occupational hazards, and psychological stress at work as well as ergonomic problems are the emerging issues (Youxin Liang and Quanyong Xiang, 2004). The number of workers exposed to silica-containing dusts is estimated to be as high as 12 million. Pneumoconiosis has long been the most serious and yet preventable occupational disease, and ranked at the top of the 10 leading causes of occupational disease.

Based on incomplete statistics there were 6920 small-scale enterprises with 459,540 employees in Shanghai. Most of them had hazards including occupational diseases in different degrees. Lu Wei and Wu Shi-da(2004)'s investigation indicated that only 19.7% of the enterprises had occupational diseases protection equipments, and only 12.0% provided personal protection devices for those workers in hazardous workplaces. According to government statistics, there were 12,458 occupational disease cases from 1998 to 2002 in Shanghai. The small-scale industries accounted for 15.6%, with 1939 cases. Of the 833 cases of acute poisoning in Shanghai, the small-scale industries were 24.5%, with 204 cases. The data suggested that the rate of occupational hazards detected in small-scale industries was below the Shanghai's average level from 1998 to 2002. In recent years, the situation has improved even more.

The rates of industrial fatalities, injuries and contraction of OHS diseases were so alarming that the Chinese government awoke to the fact that immediate stopgap measures had to be instituted: two new laws—on the prevention and treatment of occupational diseases and on safe production—were promulgated in 2001. According to the new law, every employer is obligated to comply with the requirements related to work environment, hazards control, and implementation of occupational exposure limits. The serious situation in occupational diseases and injuries was compounded by a restructuring of government bureaucracies at the national level at the end of the nineties, accompanied by a massive downsizing of personnel. In 1998 the Bureau of Labor Protection under the Ministry of Labor was disbanded and its staff lay off. Nationwide there is no longer a special government institution in charge of OHS. Instead, the Bureau's functions were taken over by the State Economic and Trade Commission. The latter is China's bureaucracy in charge of economic development, and in the absence of an effective peak employers association in China this Commission has played that role. As such, it has not been protective of labor. When dramatic fatal accidents continued to be reported in the Chinese press, the Chinese government realized it was necessary to rebuild its OHS bureaucratic system. In 2001 the State Economic and Trade Commission established the National Safe Production Supervision Management Bureau, and to emphasize the government's seriousness in improving the country's OHS conditions, a Safe Production Committee was set up under the State Council (Meei-shia Chena and Anita Chan, 2004).

Since most of SME employees are rural people with less educated and less experienced (Called nongmingong), the effectiveness of the new regulations will depend not only on implementation but also on communication and education. The emerging challenge will be to get the new law to the small makeshifts or crudely converted workshops in villages and small towns in rural areas by a long-term perspective of communication, education, and applicable supervision.

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THE AUTHORS

Liu Pingqing, School of Management & Economic, Beijing Institute of Technology, Beijing, 100081, P. R. of China.

Liu Fang, School of Management & Economic, Beijing Institute of Technology, Beijing, 100081, P. R. of China.

Gao Chunjing, School of Management & Economic, Beijing Institute of Technology, Beijing, 100081, P. R. of China.

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