Managers' Occupational Stress and Job Satisfaction: Structure and Characteristics

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ABSTRACT: China is the first manufacturing country in the world with a great amount of labor force in the industry. Managers in this industry are facing great stress and lower job satisfaction. In this paper, structure and characteristics of occupational stressor of middle level managers in manufacturing are studied. The result indicated that there were 6 stressors for middle level managers, including: occupational development, job tasks and demands, organizational structure and climate, role ambiguity and conflict, interpersonal relationships, feeling in the work. Stressors that significantly influence job satisfaction are "feeling in the work" and "job tasks and demands". Other job stressors have no significant influences on job satisfaction. KEYWORD: manufacturing Industry; middle level managers; job stressor

1 INTRODUCTION

Occupational stress has been a significant problem throughout the industrial society. Its negative consequences on employee's health and quality of work and life are increasingly concerned all over the world. Previous studies have consistently found that occupational stress is negatively related employee's job satisfaction. It is reported that 10% of United Kingdom's GNP were lost because of absenteeism and turnover caused by occupational stress(CARTWRIGHT & COOPER, 1997). The manufacturing industry in China is facing fierce market competition. As a result, middle level managers, the backbone of enterprises, are bearing more occupational stress than before. It is an important topic that how to incentive them to keep them in high job satisfaction so as to contribute more to their company. However, most researches concentrate on the stress of some so called "stressful occupations" such as nurse, teacher. There is little concern on manager's occupational stress in manufacturing industry. What's more, too little research is available on structure and characteristics of middle level managers' occupational stress and its effect to job satisfaction. This can't provide guidance on control and relief of middle level managers' occupational stress. Thus it is worthwhile to research structure and characteristics of middle level manager's stressors and their characteristics.

2 LITERATURE REVIEW

Stressor, the core of occupational stress, is always an important topic in relative research. Early research put emphasis on objective stressors' negative effect on health, such as temperature, noise, workload, etc (French & Caplan 1970). In a research by Rizzo (1970), organizational factors became occupational stress. Rizzo pointed out that role conflict and role ambiguity are important stressors in complex organizations. Thereafter, role conflict and role ambiguity become stressors in many research (FRENCH & CAPLAN, 1970; MOHR, PUCK, 2007).

With the deep study of occupational stress, researchers realized the complexity of stress sources. Concentrating on a part of stressors can not reveal the reality of occupational stress. Therefore, systematically study on occupational stressor becomes a necessity. However, there is no coincident result because of different research perspectives. Most research explored stressor structure from individual perspective. Cooper & Marshal (1976) suggested a model of stress at work, including intrinsic to job, role in organization, career development, relationships at work, organizational structure and climate, extra-organizational sources of stress. Their research laid a foundation of further study. Cooper, Sloan & Williams (1988) developed occupational stress indicator (OSI), which incorporate 6 stressors: intrinsic to job, role in organization, career development, relationships at

work, organizational structure and climate, work/family interface. Ivancevich & Matteson(1980) divided stressors into exogenous stressors and endogenous stressors, including 5 basic aspects: psychological aspect, individual level, team level organizational level and exogenous level. Some scholars, on the other side, keep improving stress model.

China's research on stressor lags behind western countries. However, scholars have gained abundant achievements. Shu (2005) studied characteristics of managers' stressors in state owned and private enterprises and found that managers' stressors are composed of 7 factors, and stressors that influence job satisfaction in the two groups are different. Shi (2009) classified stressors into 3 categories: environment elements, organizational elements, and individual elements.

Home and abroad researches show that stressor is closely related to job content and characteristics. The aim of this study is to find out the structure of middle level manager's occupational stressor and which stressor significantly influences their job satisfaction.

3 RESEARCH METHOD

3.1 Participants

In this study, we investigated 30 manufacturing companies in Shenzhen, Guangzhou, Nantong, Changsha, Qingdao, Yantai. In every company, we choose some middle level managers (mainly persons in charge of a department) as sample. Questionnaires are distributed and collected in the way of interpreting, fulfilling and returning on the spot. 400 questionnaires were distributed and 348 returned, of which 322 were valid. The total valid rate was 80.5%. In the valid questionnaires, there were 56.7% of male managers and 43.3% of female managers.

3.2 Measures

Occupational stressors: The occupational stressor scale was the revised version of OSI by Cooper, Sloan & Williams (1988). Cooper & Cartwright (1996) confirmed its validity. In recent years, some Chinese researches applied the instrument (LU, et al.2009; SIU, 2002). In this study, we revised content and expression of the scale. As a result, a scale containing 20 items was constructed. Every item is on a 5-point scale.

Job satisfaction scale: The scale was referred to shorten version of Minnesota satisfaction questionnaire (MSQ). Some items were adapted according features of managers in the context of manufacturing industry. Each item was rated on a 5-point scale.

4 RESULTS

4.1 Factor analysis

In order to find out if the data was suitable for factor analysis, KMO test and the Bartlett test on original data was analyzed. The result indicated that KMO value was 0.81; significant level of Bartlett test was 0, which rejected the null hypothesis that the correlation coefficient matrix was unit matrix. That is, there was correlation between variables. The data were suitable to factor analysis.

Based on the principle of eigenvalue greater than 1, six factors were attracted. These factors explained 78.275% of total variance. In other words, the cumulative contribution rate was 78.275%. The six factors well generalized the meaning of 20 items. The aim of reducing variables was achieved.

In order to name and interpret the extracted factors, there was an orthogonal varimax rotation to the result of factor analysis. Thus it was easier to explain and name the six factors.

Factor 1 included 6 items, such as slow promotion or lack of promotion space, lack of enough personal development space. This factor was named "occupational development".

Factor 2 was composed of 4 items, such as endless job tasks, job complexity and quantity, often work overtime, job demands surpass personal ability. It was named "job tasks and demands".

Factor 3 included 3 items. They were ambiguous job targets, unreasonable policy, application and rules, superiors can't or unwilling help me solve problems in the work. It was named "organizational structure and climate".

Factor 4 was composed of 3 items, including unclear job tasks, sometimes assigned jobs in different areas, knowledge or ability out of date. This factor was named "role ambiguous and conflict".

Factor 5 included 2 items. They are conflict with college and inconsistent requirement from superiors. It was named "interpersonal relationships".

Factor 6 included 2 items. They are tedious in the work and feel lonely in the work. This factor was named "feeling in the work".

4.2 Occupational stressors characteristics

As the result of factor analysis showed, there were six stressors for middle level managers. What we want to know is the difference of these factors and find out which one is more influential to job satisfaction. In this study, stepwise regression was conducted to investigate the predicting factors on job satisfaction. The result of stepwise regression is in Table 1. As is shown in Table 1, the percent variance explained by 6 stressors on job satisfaction was 38.7%. The stressors entered stepwise regression model was "feeling in the work" and "job tasks and demands". The result indicated that two stressors

have significant influence on job satisfaction. Studying the standardized regression coefficient, we find out that the factor that influence job satisfaction most is "feeling in the work". The second on is "job tasks and demands". However, the coefficient of the former is higher than the latter.

Table 1. Stepwise regression result

variable	Beta		Sig
F6	-0.614		0.000
F2	-0.257		0.000
R square		0.95	
Adjusted R square		0.93	

5 CONCLUSION AND DISCUSSION

In recent years, China's manufacturing industry has been facing the pressure of transformation and upgrading. The disadvantages of original operational mode hinder development of enterprises and individual. Middle level managers are reform promoter because of their occupational experience and need. They pay special attention to their occupational development. On the other hand, they more or less tie their career and even fate together to the fate of their company. Thus they often complain about the existing disadvantages and shortcoming in their company, wishing the company continuous reform and keep paces with the times, so as to access to better development and more benefit. What's more, other factors constraining them to fulfill responsibility, such as factors intrinsic to job (job tasks and demands), organizational structure and climate, interpersonal relationships, role ambiguous and conflict, feeling in the work, also press them a lot.

stressors that significantly influence manager's job satisfaction are "job feeling" and "job tasks and demands". This is not similar to result in studies. found previous Shu (2005) organizational structure and climate, work condition and demands were the main stressors that influent satisfaction of managers in state owned enterprise, while occupational development and managerial roles in private enterprise. Lu et al. (2009) found that organizational structure and climate were main stressor in SOEs and private enterprises. The difference arises from specific context manufacturing industry. In China, traditional management mode is still working in most manufacturing enterprises. As a result, organizations have problems such as rigid structure, unreasonable internal process, and extensive management style. Working in the context for years, middle level managers are accustomed to it. Although they think organizational structure and climate a stressor, they don't think it a serious

stressor that influent their job satisfaction. By contrast, many manufacturing enterprises are in stage of "small variety and mass production" with simple and repeating job tasks and fewer rotation opportunity for managers, which make them feel tedious. They may find that their new thoughts and practices are unacceptable to their colleagues, some of which even be rejected. So they often feel lonely. The tedious and lonely feelings accumulate over a long period, then become a kind of strong negative feeling, which surpass organizational structure and climate to be a main factor that influent job satisfaction.

It is evident in the result that job tasks and demands is an important element that influences middle level manager's job satisfaction, although its influence is smaller. Obviously, frequent work overtime, work overload, high work standards and performance oriented management may reduce manager's satisfaction. However, it is common for manufacturing enterprise to face lacking employees and frequent meeting deadlines. Managers in the industry have to accustom to increased work load and work time and take it a basic feature of this industry. Thus this kind of stressor can't become the most influential factor.

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