# How Work Stress Affects Job Satisfaction for Employees of Japanese Companies in China Based on SPSS Software

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**Abstract**—Work stress not only is a series results of physical, psychological and behavior on individuals, but also influence job satisfaction. In this paper, we propose the research model to explore the relationship between work stress and job satisfaction of the employees of Japanese-investment companies in China. By using SPSS software, the following results are obtained: (1) The whole work stress of the employees of Japanese companies in China is in a little low level, the main stressors of employee of Japanese companies in China are the stress of career development and organizational mechanism and style. (2) The whole job satisfaction is in a low level, the main factor of unsatisfactory is compensation and benefits. (3) There is negative correlation between work stress and other factors except work itself. Based on the research findings and the cross-cultural management characteristics of Japanese companies, corresponding managerial implications are put forward.

Keywords- work stress; job satisfaction; employees of Japanese companies in China

### **1** INTRODUCTION

Since the reform and opening up, Japan started to invest directly in China and has always played an important role in attracting foreign investment in China. By the end of 2018, Japan had invested in China in 51,834 projects with a cumulative scale of 111.98 billion U.S. dollars, ranking first in the country statistics of investment in China [1]. Playing an important traction role in this is the Japanese enterprises in China. According to the survey of Japanese companies' overseas local corporations conducted by the Ministry of Economy, Trade and Industry, as of the end of March 2019, there were 7,754 Japanese companies in China, ranking first with 29.6% of the total number of Japanese companies, of which the number of manufacturing and non-manufacturing industries were basically the same, accounting for 51.6% and 48.4% of the total, respectively [2].

The issue of management of Japanese companies in China has also been of interest to Chinese and Japanese scholars. Several studies have confirmed that there is a big gap between Japanese companies and European and American companies in China in terms of profitability, localization of talents, evaluation of Chinese employees, and popularity of employment. In particular, Japanese companies in China are often criticized for their human resource management problems. In a survey conducted by the Japan Institute of Labor Policy Research (JILPT) on the operation of Japanese companies in China, the inability to attract and retain local talented people has been a problem for Japanese companies for many years. This study attempts to analyze the business management problems of Japanese companies in China from the perspective of work stress and job satisfaction in Japanese companies in China.

## **2** LITERATURE REVIEW

# 2.1 Studies on work stress and job satisfaction among employees of Japanese companies in China

Research on work stress in China began in the 1980s and has focused on the development of measurement instruments for work stress; the status of work stress in different occupational groups and the effects on related variables; research on work stressor; and research on work stress management. The study of work stress in different occupational groups is mainly focused on knowledge-based employees with high literacy levels in the fields of business, education and healthcare. The occupations involved nurses, managers, teachers, scientists, civil servants [3], while there is very limited research on employees of foreign companies.

Work stressors includes seven dimensions, which are work overload, work change and renewal, organizational and career development, foreign language and work reward, work task requirements, interpersonal relationships, and role ambiguity. Some studies found that employees in Japanese companies scored higher than employees in European and American companies in organizational and career development and foreign language and work reward, while employees in European and American companies scored higher than employees in Japanese in European and American companies scored higher than employees in Japanese in Japanese companies in the remaining five stressors [4].

While studies on job satisfaction of employees of Japanese companies in China are also very rare [5, 6]. Through empirical analysis, this study aims to investigate work stress, job satisfaction and the relationship between work stress and job satisfaction of employees of Japanese companies in China, and to provide corresponding management insights.

### 2.2 Studies on the relationship between work stress and job satisfaction

Work stress and job satisfaction are important factors that affect overall organizational performance and employees' mental health and quality of life. The general results of previous studies on work stress and job satisfaction indicate that there is a certain correlation between work stress and job satisfaction, usually a negative one, i.e. the higher the work stress, the lower the job satisfaction. However, scholars have also found that different work stressors have different effects on job satisfaction, and certain stressors can even improve employees' work attitudes and job satisfaction. Xu (2004) classifies work stressors into job endogenous stressors, which come from the job itself and are composed of job content and job standard requirements, and job exogenous stressors, which come from factors other than work activities, such as work environment and interpersonal relationships. He explored the impact of work stress on job

satisfaction among knowledge workers and found that there was a significant positive correlation between job endogenous stress and job satisfaction, while there was a significant negative correlation between job exogenous stress and job satisfaction [7].

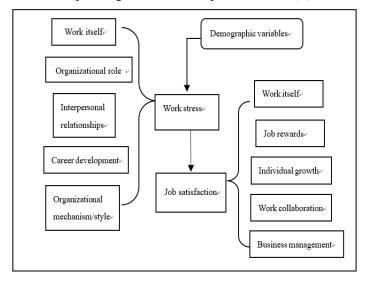


Figure 1 Research model

### **3** Method

#### 3.1 Sample

A total of 425 employees in 32 manufacturing, service, and high-tech Japanese companies in China were selected for this study. The sample was comprised of 243 females and 182 males. The proportion of employees under 30 years old is the largest, accounting for 65.4%. In terms of educational background, the proportion of undergraduate staff is the largest, accounting for 55.3%. In terms of working years, the proportion of employees with less than 5 years and 5 to 10 years was 44.5% and 40.9% respectively. The proportion of employees engaged in production operations and sales and marketing are the largest, which are 35.3% and 37.4% respectively. Middle managers accounted for 37.4% and general employees accounted for 35.3%. In terms of monthly income, 3000 to 6000 employees accounted for the largest proportion, 57.4%, and the proportion of unmarried employees was 55.8%.

#### 3.2 Measure

The work stress scale and job satisfaction scale were used to measure the work stress and job satisfaction of employees of Japanese companies in China. The initial questionnaire for the work stress scale was based on the Occupational Stress Indicator (OSI) scale [8] developed by Cooper, Soloan, and Williams (1988) and the Work stress Scale (JSS) developed by Japanese

scholar Shotaro Kosugi. A formal questionnaire consisting of 21 questions on five dimensions: work itself, organizational roles, interpersonal relationships, career development, and organizational structure and culture was finalized.

The Minnesota Job Satisfaction Questionnaire (MSQ)[9], Job Description Index Questionnaire (JDI), and the job satisfaction questionnaire developed by Chinese scholars Lu, Shi and Yang (2002)[10] were referred to for compilation. A formal questionnaire consisting of 17 questions on five dimensions: work itself, work reward, individual growth, work collaboration, and management was finalized.

The pre-survey showed that the two questionnaires had good validity and reliability. The response results were scored on a 5-point Likert scale, with respondents making self-ratings on a 5-point scale from 1(not at all) to 5(completely) according to the statements of the question items. Statistical analysis was completed by SPSS 17.0 software.

#### 3.3 Hypothesis

Based on the previous literature research, this study proposes 2 research hypotheses in 2 areas, which are mainly as follows.

(1) Maximum work stressors and job dissatisfaction factors of employees in Japanese companies in China

• Hypothesis 1: The greatest work stressor for employees in Japanese companies in China comes from the career development.

• Hypothesis 2: The most dissatisfying factor for employees of Japanese companies in China is the dissatisfaction of work reward.

(2) Relationship between work stressors and job satisfaction: there is a negative relationship between exogenous stressors and job satisfaction

- Hypothesis 1: Role ambiguity stressors is negatively related to job satisfaction.
- Hypothesis 2: Role conflict stressors is negatively related to job satisfaction.
- Hypothesis 3: Interpersonal stressors is a negatively related to job satisfaction.
- Hypothesis 4: Career development stressors is negatively related to job satisfaction.

• Hypothesis 5: Organizational structure and culture stressors is negatively related to job satisfaction.

### **4** DATA ANALYSIS AND RESULTS

# 4.1 Statistical results and analysis of the work stress of employees in Japanese companies in China

As shown in Table 1, mean score of work stress is 2.70. The dimensions that scored above the mean were work itself, organizational structure and style, and career development, with scores

of 3.00 and 3.11, respectively, and the mean of 3.19 for the two questions on career development, indicating that the greatest work stressor felt by employees in Japanese companies in China is career development stress.

	Min	Max	Mean	SD
Work stress	1.2	4.8	2.698	.6463
Work itself	1.0	5.0	3.002	1.0034
Role ambiguity	1.0	5.0	2.027	.9653
Role Conflict	1.0	4.8	2.776	.8786
Interpersonal relationships	1.0	5.0	2.094	.8380
Organizational mechanism/style and career development	1.0	5.0	3.109	.9051

**TABLE 1.** Descriptive statistics for each dimension of work stress (N=425)

# 4.2 Statistical results and analysis of the job satisfaction of employees in Japanese companies in China

As shown in Table 2, mean score of job satisfaction is 2.732, indicating that overall job satisfaction is low. The lowest mean value is 2.368 for work reward, and all five dimensions are below the mean value except for work collaboration.

	Min	Max	Mean	SD
job satisfaction	1.2	5.0	2.732	.6869
Work itself	1.0	5.0	2.708	.9130
Job rewards	1.0	5.0	2.368	.8389
Individual Growth	1.0	5.0	2.729	.8715
Work Collaboration	1.0	5.0	3.307	.8274
Business Management	1.0	5.0	2.558	.9391

TABLE 2. Descriptive statistics for each dimension of JOB satisfaction (N=425)

# **4.3** Statistical Results and Analysis of Work stress and Job Satisfaction among Employees of Japanese Companies in China

As shown in Table 3, the work itself (endogenous work stress) of employees in Japanese companies in China is not significantly related to job satisfaction and its 5 dimensions. The other 4 dimensions of work stress (exogenous work stress) showed significant negative correlations with job satisfaction and its 5 dimensions. A significant negative correlation was found between work stress and job satisfaction. All of the research hypotheses proposed in this study were validated.

	Work itself	Job rewards	Individu al Growth	Work Collabor ation	Business Manage ment	Job satisfacti on
Work itself	01	12*	.01	08	06	06
Role ambiguity	27 **	20 **	25**	33**	26**	33**
Role Conflict	18 **	13 **	22**	24**	24**	26**
Interpersonal relationships	35 **	24 **	39**	56**	46**	51**
Organizational style and career development	45 **	50 **	57**	36**	67**	65**
Work stress	42 **	42 **	50**	47**	59**	61**

TABLE 3.	CORRELATIONS	(N=425)
	CONTRELITIONS	(1, -125)

### **5 MANAGERIAL IMPLICATION**

### 5.1 Talent localization and employee career development

The empirical study shows that the overall work stress of Japanese employees in China is low, but they perceive high stress in terms of career development, organizational mechanism and style, and work itself, especially the stress from career development is the highest. The composition of the sample in this study shows that the largest proportion of employees with a university degree who are under 30 years old and have worked for less than 5 years. The characteristics of high education and youthfulness determine that these employees have clear goals and strong desire for career development. Therefore, the obstacles that hinder their career development will certainly become the main reason for their work stress. This can be seen from the fact that employees of Japanese companies in China feel the most pressure in terms of career development and have low satisfaction in terms of individual growth.

The problem of talent localization of Japanese companies in China has been criticized by scholars. The localization of talents is directly related to the career development of employees, and the results of this study also reflect the "career ceiling problem" of local employees to a certain extent. In the process of actively promoting localization, Japanese companies should do a good job of career planning for their employees, effectively combine the goals of individual employees with those of the organization, and promote the common development of the organization and individuals.

### 5.2 Compensation and Employee Incentive Mechanism

From the job satisfaction survey of Japanese companies in China, it is not hard to say that dissatisfaction with salary and benefits is still the main reason for employee dissatisfaction. Many studies by domestic and foreign scholars have also shown that the compensation and benefits of employees of Japanese companies in China are not competitive among multinational

companies and are one of the important reasons for the high turnover rate of Japanese companies. Especially, as the position rises, the income gap between Japanese companies and European and American companies is getting bigger and bigger. At the supervisory level, the difference is nearly 25%, and at the manager level and above, the difference is about two times.

Based on their reliance on China's huge market potential, most Japanese companies insist on staying in China. Then it is necessary to respond to the changes in China's labor market and make more reference to industry salary setting standards, so as to attract more excellent local talents.

#### 5.3 Strengthening cross-cultural management

The empirical analysis of this study shows that organizational mechanisms and styles are the second most important work stressors felt by employees after career development. It indicates that employees of Japanese companies in China have some resistance and discomfort in the management style and style of Japanese companies.

Culture clashes can not only cause poor communication and high human resource costs, but also hinder the development of mutual trust and localization processes. Therefore, for multinational companies, good cross-cultural management becomes an indispensable issue. Effective implementation of cross-cultural management requires firstly acknowledging the existence of cultural differences. The first is to respect each other's culture; the second is to learn each other's culture. Japanese companies can carry out communication within the company in terms of culture, values, customs and habits of both sides through intra-company networks and newspapers, and encourage employees to learn each other's language to enhance communication and eliminate cultural barriers.

### **6** CONCLUSION AND DISCUSSION

The main findings from this study are: (1) The main stressor of employee of Japanese investment enterprises in China is the stress of career development, secondly is organizational mechanism and style. (2) Except for work collaboration, the means of all other dimensions are below the median, indicating a low level of overall satisfaction. Among them, satisfaction with salary and welfare is the lowest. (3) There is negative correlation between work stress in total and other factors except job itself. (4) All four dimensions of work stress, except for the work itself, were significantly and negatively related to the five dimensions of job satisfaction and job satisfaction as a whole.

Organizational support is considered to be an important factor that affects the relationship between work stress and job satisfaction, and many studies have validated the buffering effect of perceived organizational support on work stress [11, 12]. As for job satisfaction as an important outcome of organizational support, studies have also verified the significant correlation between perceived organizational support and job satisfaction [13, 14]. The important role of organizational support in reducing work stress and improving job satisfaction of employees in Japanese companies in China can be further explored in the future (e.g., organizational support as a mediating and moderating variable). **ACKNOWLEDGMENT.** This study is supported by Beijing City University's 2020 Education Science Research Project (No. JYC20201026) and the Fundamental Research Funds for Central Universities "Research on information security behavior under the emergency resources synergy: a social network perspective" (No. ZY20210316).

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