



Analysis of the Relationship Between Work Pressure and Work Efficiency of Employees in Private Enterprises

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Abstract. How to improve employee work efficiency within the scope of moderate pressure is an important problem that enterprises need to solve to maximize their benefits. In this paper, it introduces the concept of burnout on the basis of comprehensive related research to explore the relationship between work pressure and work efficiency, and uses data through the analysis of the stressors of private enterprises to preliminarily calculate the model of work pressure and work efficiency in private enterprises. Summarily, this paper concludes that the work pressure of China's private enterprises generally does not reach the critical value, and will not unduly damage the work efficiency in terms of the inverted u-shaped relationship between work pressure and efficiency.

Keywords: working pressure · working efficiency · stressors · private enterprises

1 Introduction

The private economy can strengthen the national economy, and its steady development can promote the rapid development of the national economy. The goal of private enterprises is to make a profit, and employees are an important part of creating profits for enterprises. How to maximize the value of employees has become a problem that enterprises want to explore. How to improve employee productivity within the appropriate pressure range is an important problem that needs to be solved. This not only improves the utilization rate of resources, but also reduces the psychological illness caused by the work of employees; the mechanism of work pressure and work efficiency can improve the efficiency of private enterprises, thereby reducing the burden on business owners, encouraging more people to invest in entrepreneurial industries, thereby strengthening the national economy.

In China, there have been many studies on how to improve work efficiency, but there are very few studies on the work pressure of employees, especially in private enterprises, and even fewer studies have linked the two. The most recent document related to it is A Study on the Impact of Managers' Work Pressure and Work Efficiency: A Case Study of State-Owned Enterprises and Private Enterprises [1], which explores

the “dual-low” reverse cycle mode as the role of management employee work pressure on work efficiency in these two types of enterprises, and introduces the “inverted U-shaped model”. However, most literature studying work pressure and work efficiency only mentions the term “critical value” without clarifying its current mobility situation, nor does it explain the reasons for the change at both ends of the “threshold”. What’s more, they did not subdivide the sample population, which was too single.

This paper will focus on the analysis of the transformation mechanism of the critical value of the inverted U-shaped model in the new era, refining the sample population and dividing the data personnel into two categories: general employees and managers.

2 Assumptions and Inferences

2.1 Hypothesis 1

IF employees are exposed to work stressors for a long time, negative psychological reactions will continue to increase [2], resulting in employees with work burnout. Burnout is a state of severe stress caused by the long-term effects of stressors [3]. This paper introduces the concept of burnout to quantify the degree of psychological fatigue of employees. When employees are not under the work stress, burnout is considered 0.

There is an inverted U-shaped relationship in management, that is, work efficiency will rise with the increase of work pressure, and decline after reaching a critical point which called threshold. Excessive work pressure makes people too depressed (that is burnout), and as the degree increases, excessive stress levels will become a force and negative factor of conflict. When stress becomes particularly great or less than people desire, such pressure may be too great to cope with moderately or uncontrollably and may interfere with work performance [4], such as an increase in error rates. However, it is not the increase in stress that leads to a decrease in productivity. Since there are many other factors involved, such as the remuneration factor as an example, when the settlement method is a piece-rate wage system, employees may be more efficient in the face of increased workload pressure. Therefore, there are many other intermediate variables that act, so burnout is only a partial intermediary variable.

H1: Burnout can act as a part of the mediating variable between work stress and productivity.

2.2 Hypothesis 2

According to the analysis of the nonlinear relationship between work pressure and work performance, efficiency increases with working pressure before the pressure reaches a critical point; after that, efficiency gradually decreases [5]. Before the root is at the critical value, benign pressure sources can have a positive effect on work efficiency [6]. Since the increase in stress at work reaches a given level, it will lead to an increase in burnout, and thus the employee’s work enthusiasm will decrease, it will be difficult to concentrate, and the memory will decline rapidly [7]. At this point, tiredness begins to have a negative effect on work efficiency, so that the incentive effect of benign stressors on work efficiency continues to weaken. When the burnout reaches a certain level,

the incentive effect of benign stressors on work efficiency and the inhibition effect of fatigue on work efficiency are exactly offset, and the efficiency is at the highest point at the moment, which is called “optimal burnout”. After that, benign stressors no longer play a role, while inferior stressors have a suppressive effect on work efficiency. The combination of inferior stressors and burnout makes the degree of efficiency reduction more pronounced.

H2: The inverted U-model cut-off is the optimal burnout an individual can tolerate.

3 Research Process

3.1 Research Subjects

The study took employees working in private enterprises in different region in China as the research object. 230 questionnaires were distributed, of which 154 were valid questionnaires. 85 (55.2%) were managers and 69 (44.8%) were managed.

In terms of region classification, 33.8% of the respondents worked in Jiangxi Province, 30.3% in Jiangsu Province, 20.6% in Zhejiang Province, and 15.3% in other regions (Shanghai, Guangdong, Inner Mongolia, Yunnan, Beijing, Tianjin, etc.).

3.2 Research Methodology

This paper uses The Work Stress Scale of Kimetal (1996) and the Work Efficiency Scale of Lam, and uses burnout as an intermediate variable to assess employee stress from the four structures of work stress, role conflict, work situation and skill use mentioned above. The questionnaire includes a pressure gauge and an efficiency scale, and burnout is easily measured by the degree of willingness of employees to leave. All three use a five-point scoring method, and the higher the score, the greater the pressure, the lower the efficiency, and the higher the burnout. Later, the calculations made for stress, efficiency and burnout were introduced into SPSS for data analysis.

4 Conclusions

In this paper, the following figure is obtained by linear regression of pressure level and burnout level, pressure level and efficiency level, pressure level and burnout level and efficiency level, respectively (Tables 1, 2 and 3).

Therefore, level1 → tired, level1 → level2 are significant; After the equation is added to the tiered, the tired is significant, and the level1 coefficient is reduced, so the tired is partially mediated.

After determining that burnout is a mediating variable, hypothesis 1 is confirmed. After the regression linear analysis of work pressure, work efficiency and burnout, the following results (Tables 4 and 5).

Since the significance degree in ANOVA is less than 0.05, the regression function is valid, resulting in:

$$Y = 0.773 + 0.182a + 0.586b \quad (1)$$

Table 1. Coefficientsa [Owner-draw]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-.198	.442		-.447	.656
	level1	.946	.158	.499	5.986	.000

a. Dependent Variable: tired

Table 2. Coefficientsa [Owner-draw]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.658	.374		1.760	.081
	level1	.736	.134	.469	5.514	.000

a. Dependent Variable: level1

Table 3. Coefficientsa [Owner-draw]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.773	.271		2.857	.005
	level1	.182	.112	.116	1.632	.106
	tired	.586	.059	.707	9.956	.000

a. Dependent Variable: level2

Table 4. ANOVAb [Owner-draw]

Model		Sum of Squares	df	Mean square	F	Sig.
1	Regression	54.863	2	27.432	78.575	.000 ^a
	Residual	37.355	107	.349		
	Total	92.218	109			

a. Predictors: (Constant), tired, level1. b. Dependent Variable: level2

Among them, Y is employee work efficiency, “a” is the dependent variable work pressure, and b is the intermediary variable burnout.

Table 5. Coefficients^a [Owner-draw]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.773	.271		2.857	.005
	level1	.182	.112	.116	1.632	.106
	tired	.586	.059	.707	9.956	.000

^a. Dependent Variable: level2

From the above verification process, it can be seen that the private enterprise employees will be exposed to various stressors when they are working. These stressors will interact. When the inferior stressors continue to increase, it will have a negative impact on the efficiency of employees' work, which is reflected in the increase in unquantified burnout. Benign stressors motivate employees to increase productivity, but work pressure will hinder productivity through increased burnout: within a certain range, the greater the work pressure, the higher the work efficiency, and burnout is only part of the mediating variable. The range is determined by burnout, due to the different working environment, salary, living environment, personality and experience of employees, etc., the maximum burnout degree that each person can bear is also different, so the range value in the above regression model should be analyzed on a case-by-case basis.

In addition, it can also be seen that the employee pressure performance relationship of China's private enterprises is on the left side of the inverse U-shaped model, that is, benign pressure sources in the two gender stressors can still dominate, which has an incentive effect on work. It can be seen that employee burnout has not reached the optimal state, so in general, private enterprises can appropriately increase their workload to approach the optimal state and improve work efficiency.

5 Deficiencies and Ways to Improve

The situation of private enterprises have changed with the development of the economy, so the data in the references may differ from reality. Even the vertices of the inverted U-shaped model have shifts. Therefore, it is suggested to use more literature reviews and emerging research results of recent years.

The data collected by this paper through the distribution questionnaire is relatively small, which will inevitably produce special cases that only represent the situation of employees in some regions. The follow-up research can expand the base of participants to obtain the data of participants with a large working pressure span, and try to study the relationship between working pressure and efficiency after the critical point of the inverse U-shaped model. It will be a method calculate the critical point.

The work area of the participants in this paper is relatively concentrated, mostly in the East China region. Due to the lack of data, it is impossible to compare the differences caused by different working areas. So the follow-up researchers can conduct in-depth

research in this direction. Besides, although this paper classifies whether the sample is a manager, it is not presented clearly in the results. Therefore, subsequent research can draw different models based on whether samples are managers.

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