



# The Moderating Effect of Inhibition of Emotional Expression on the Relationship Between Stress and Job Burnout of College Teachers

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**Abstract.** In order to explore whether the relationship between stress and job burnout of college teachers is regulated by the inhibition of emotional expression, the stress scale, emotional regulation strategy questionnaire and job burnout questionnaire were used to investigate college teachers. The results show that: stress, expression inhibition and college teachers' job burnout are significantly positive correlation. Both stress and expression inhibition have significant effects on job burnout of college teachers. Expression inhibition enhanced the effect of stress on job burnout of college teachers, and further found that emotional expression inhibition increased the effect of stress on deindividuation and low sense of accomplishment of college teachers. Therefore, inhibition of emotional expression regulates the relationship between stress and job burnout of college teachers.

**Keywords:** Inhibition of emotional expression; College teachers; Job burnout

## 1 Introduction

The contingent of university teachers is great significance to a country that is strong in education, science and technology, and human resources. However, in recent years, the enthusiasm of college teachers for work decreases, the phenomenon of obsessive passion for academic will, the enthusiasm for teaching decreases, the sense of professional value, happiness and work involvement is greatly reduced, and the situation of job burnout appears. Job burnout refers to the individual can not reasonably cope with the work pressure, in the behavior, emotion, attitude and thought showed a state of exhaustion, specific performance as emotional exhaustion (a mood depression produced in the process of work, Long-term and diffuse), dehumanization (individuals adopt a negative, indifferent and evasive attitude in the face of daily teaching content and students or colleagues) and low personal achievement (teachers' negative evaluation of themselves and low self-efficacy in the work)<sup>[1]</sup>. Burnout not only affects the physical and mental health of teachers themselves, job satisfaction, work behavior and turnover intention, but also affects the

social behavior problems of college students. Teachers' job burnout is affected by many factors such as individual characteristics and occupational characteristics, and it is the results of the mixed effects of many factors. The research shows that teachers in colleges and universities are engaged in mental and emotional labor for a long time, and have multiple pressures such as scientific research and teaching, and experiencing more pressure is easy to lead to job burnout<sup>[2]</sup>. However, teachers who experience the same level of stress have different degrees of change in job burnout. Therefore, it is necessary to explore whether the relationship between stress and job burnout is regulated by other variables.

The study found that emotional factors are an additional variable leading to job burnout apart from job stress<sup>[3]</sup>. Inhibition of emotional expression is a form of emotion regulation, which refers to the conscious suppression of emotional expression after the occurrence of emotional experience<sup>[4]</sup>. Studies have shown that inhibition of emotional expression can increase individual job burnout, and those who habitually use inhibition of emotional expression have more negative emotional experience, worse interpersonal relationship and lower life satisfaction than those who do not<sup>[5]</sup>. According to the resource conservation theory, it can be inferred that individuals who adopt expression suppression strategies are more likely to consume their own emotional resources, leading to job burnout<sup>[6]</sup>. Therefore, expression inhibition may regulate the relationship between stress and job burnout. Based on this, the hypothesis is put forward that expression inhibition can regulate the relationship between stress and job burnout of college teachers and its three dimensions, which will reveal the "under what conditions" the influence of stress on job burnout of college teachers is stronger, that is, when college teachers adopt the emotional regulation mode of expression inhibition, they will experience more serious job burnout. In order to verify this hypothesis, we will take 122 college teachers as the research objects, and use the stress perception scale to measure the stress of college teachers, the job burnout scale to measure the job burnout of college teachers, and the emotional regulation Strategy scale subscale to measure the frequency of the expression inhibition strategy of college teachers, and explore the relationship between the three through the analysis of relevant data.

## 2 Participants and Methods

### 2.1 Participants

A total of 122 college teachers were selected as the survey objects. Male and female accounted for 75.8% and 24.2% respectively. The number of young teachers in the 31-35 age group is the largest, accounting for 51%; The proportion of married teachers with children is the highest (49%), and 28.4% of teachers are currently single; The proportion of teachers who graduated from other teaching and research institutions in China was 60.5%; The teachers with intermediate or lower titles accounted for the largest proportion (45.8%). The proportion of teachers who have received honorary awards is 20.1%.

## 2.2 Research Tools

The stress perception scale includes the two dimensions of tension and loss of control, with a total of 14 questions<sup>[7]</sup>. A 5-point scale was adopted, with 1 to 5 points for each question according to the options. The higher the score, the more sensitive the perception of pressure. The internal consistency reliability of the scale was 0.860.

The Emotional Regulation Scale contains two dimensions: cognitive reappraisal and expression inhibition, and measures the emotion regulation strategies preferred by individuals<sup>[8]</sup>. A 7-point scale was used, with 1 to 7 points for each question according to the choice. The higher the score, the more frequently an individual would use the strategy. The internal consistency reliability of the expression inhibition scale in this study was 0.74.

Job burnout includes 3 dimensions of emotional exhaustion, depersonalization and low sense of accomplishment<sup>[9]</sup>. A total of 15 questions were scored with 7 points, and each question was scored with 1 to 7 points according to the options. The internal consistency reliability of this scale was 0.91.

## 2.3 Statistical Analysis

spss24.0 software was used for descriptive statistical analysis and correlation analysis. The spss macro program process was used to test the moderating effect.

# 3 Results

## 3.1 Common Method Deviation Test

Because the items of each scale are different, all scales are averaged. In this study, the collected data were controlled by anonymous collection, reverse item scoring and other methods to control the common method bias, and Harman single factor test was used to test the common method bias. A total of 6 factors with feature roots greater than 1 were extracted from the results of unrotated exploratory factor analysis, and the maximum factor variance explanation rate was 33.54%, which was lower than the critical standard of 40%. Therefore, there was no significant common method bias in this study.

## 3.2 Correlation Analysis of Perceived Stress, Inhibition of Emotional Expression and Job Burnout

Pearson correlation analysis was conducted between stress, inhibition of emotional expression and the total score of job burnout scale and the scores of three dimensions. The results showed that there was a significant positive correlation between stress and the total score of burnout scale and the three dimensions. The inhibition of expression was significantly positively correlated with the three dimensions of the total score of the burnout scale (see Table 1 for the results). The results indicate that the more stress college teachers experience, the more serious the job burnout of college teachers. The

more college teachers use expression suppression strategies, the more serious the job burnout.

**Table 1.** Mean value, standard deviation and correlation of each variable

	M (SD)	1 Gender	2Ages	3Stress perception	4Burnout	5 Emotional regulation (Expression suppression)
1 Gender	1.39 (0.49)	—				
2 Ages	2.63 (0.88)	0.19*	—			
3Stress perception	1.44 (0.45)	0.06	0.05	—		
4 Burnout	1.87 (0.67)	0.12	0.03	0.66***	—	
5 Emotional regulation (Expression suppression)	3.84 (1.25)	-0.19*	-0.02	0.23*	0.37***	—

\* p < 0.05; \*\* p < 0.01; \*\*\* p < 0.001. Same below

### 3.3 Analysis of the Moderating Effect of Inhibition of emotional Expression on Stress and Job Burnout

Model 2 hierarchical regression model of process was used to test whether inhibition of emotional expression could regulate the relationship between perceived stress and job burnout. Firstly, with stress perception, expression inhibition and their interaction as independent variables, and job burnout as dependent variables, a hierarchical regression model was established with gender and age. The results showed that the main effect of stress perception was significant,  $\beta = 0.8519$ ,  $SE = 0.1090$ ,  $p < 0.0001$ , 95%CI [0.6358, 1.0679]. The main effect of expression inhibition was significant,  $\beta = 0.1399$ ,  $SE = 0.0391$ ,  $p = 0.0005$ , 95%CI [0.0625, 0.2174], the interaction between stress perception and expression inhibition was significant,  $\beta = 0.2946$ ,  $SE = 0.0708$ ,  $p = 0.0001$ , 95% CI [0.1544, 0.4349] (as shown in Table 2).

**Table 2.** Analysis results of multiple moderating effects of expression inhibition on perceived stress on job burnout

	Job Burnout			
	Model 1		Model 2	
	<i>b</i>	<i>se</i>	<i>b</i>	<i>se</i>
Intercept	1.53074***	0.20807	1.56044***	0.19782
Age	0.02792	0.05061	0.02032	0.04813
Gender	0.19104*	0.09353	0.16171	0.08920
Perception of stress	0.86529***	0.09990	0.94602***	0.09739
Expression suppression	0.13769***	0.03677	0.11913**	0.03529
Perceived stress *			0.23687***	0.06412

Expression inhibition

$$R^2 = 0.4986$$

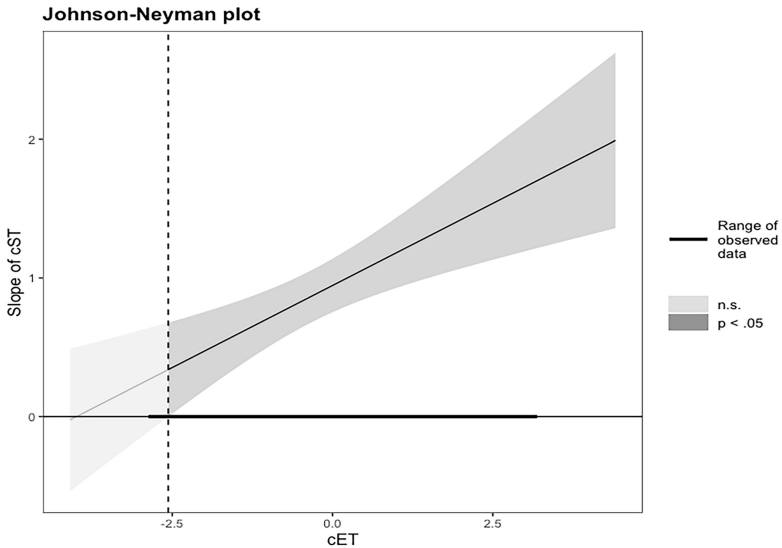
$$R^2 = 0.5514$$

$$\Delta R^2 = 0.0628^{***}$$

$$F_{(4, 117)} = 29.09^{***}$$

$$F_{(5, 116)} = 28.52^{***}$$

To further uncover this moderating effect, we used Johnson-Neyman analysis to examine significant areas<sup>[10]</sup>. It was found that the effect of perceived stress on burnout was significant when expression inhibition (normalized) was greater than or equal to -2.5626 (as shown in Figure 1). In other words, cognitive reappraisal can negatively regulate the relationship between classroom negative emotion and job burnout. Therefore, if an individual can use cognitive reappraisal frequently, the impact of negative classroom emotion on job burnout will be less.



**Fig. 1.** J-N chart of the moderating effect of expression inhibition on job burnout and perceived stress

### 3.4 Analysis of the Moderating Effect of Inhibition of Emotional Expression on the Relationship Between Stress and Job Burnout (Dehumanization)

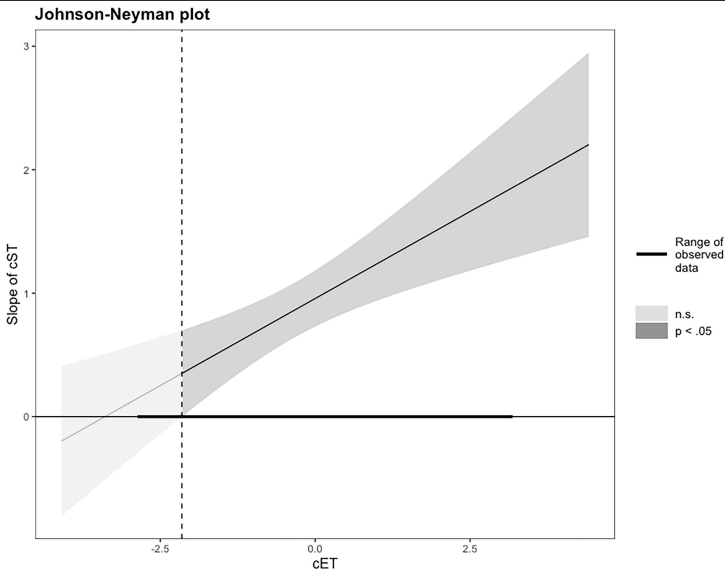
In order to further test the relationship between inhibition of emotional expression and the dimension of stress and dehumanization, Model 2 hierarchical regression model of process was used to test whether inhibition of emotional expression could regulate the relationship between perceived stress and job burnout (dehumanization). Firstly, with stress perception, expression inhibition and their interaction as independent variables and dehumanization as dependent variables, a hierarchical regression model was established based on gender and age. The results showed that the main effect of stress perception was significant,  $\beta = 0.8454$ ,  $SE = 0.1286$ ,  $p < 0.0001$ , 95%CI [0.5906, 1.1003]. The main effect of expression inhibition was significant,  $\beta = 0.1166$ ,  $SE =$

0.0461,  $p = 0.0128$ , 95%CI [0.0253, 0.2080], the interaction between heavy stress perception and expression inhibition was significant,  $\beta = 0.3497$ ,  $SE = 0.0835$ ,  $p = 0.0001$ , 95%CI [0.1843, 0.5151](as shown in Table 3).

To further uncover this moderating effect, we used Johnson-Neyman analysis to examine significant areas. It was found that the effect of perceived stress on dehumanization was significant when expression inhibition (normalization) was greater than or equal to -2.1512 (as shown in Figure 2). In other words, cognitive reappraisal can negatively regulate the relationship between classroom negative emotion and job burnout. Therefore, if an individual can use cognitive reappraisal frequently, the impact of negative classroom emotion on job burnout will be less.

**Table 3.** Analysis results of multiple moderating effects of emotion regulation strategies on dehumanization of stress perception

	Job burnout (Dehumanization)			
	Model 1		Model 2	
	<i>b</i>	<i>se</i>	<i>b</i>	<i>se</i>
Intercept	1 1.45466 ***	0.24571	1.49004***	0.23337
Age	0.05562	0.05977	0.04656	0.05678
Gender	0.16082	0.11045	0.12588	0.10523
Perception of stress	0.86112***	0.11797	0.95729***	0.11489
Expression suppression	0.11629**	0.04342	0.09418*	0.04163
Perceived stress *			0.28215***	0.07564
Expression inhibition				
	$R^2 = 0.4000$		$R^2 = 0.4643$	
	$\Delta R^2 = 0.0643***$			
	$F(4, 117) = 19.50***$		$F(5, 116) = 20.11***$	



**Fig. 2.** J-N chart of the moderating effect of expression inhibition on perception and dehumanization of stress

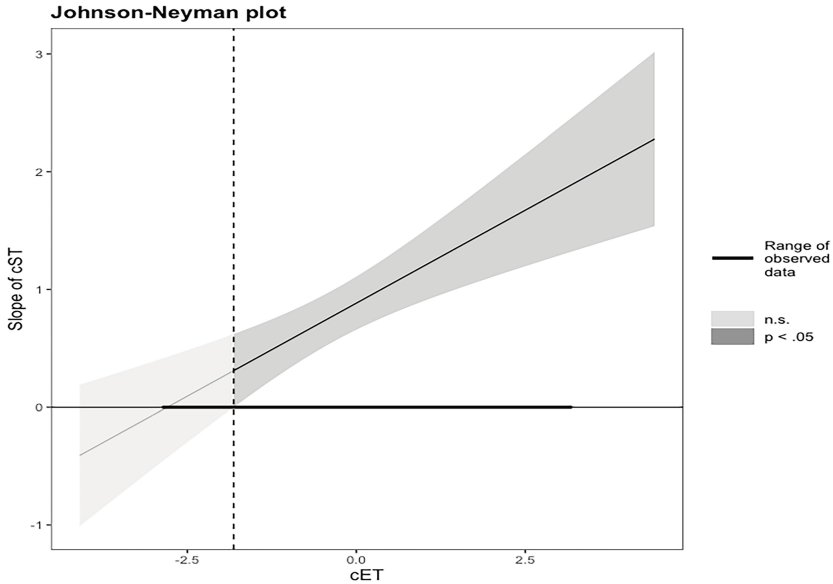
### 3.5 Analysis of the Moderating Effect of Inhibition of Emotional Expression on Stress and Job Burnout (Low Sense of Accomplishment)

The Model 2 hierarchical regression model of process was used to examine whether inhibition of emotional expression modulated the relationship between perceived stress and job burnout (low sense of accomplishment). Firstly, with stress perception, expression inhibition and their interaction as independent variables and low sense of accomplishment as dependent variables, a hierarchical regression model was established based on gender and age. The results showed that the main effect of stress perception was significant,  $\beta = 0.7458$ ,  $SE = 0.1265$ ,  $p < 0.0001$ , 95%CI [0.4952, 0.9964]. The main effect of expression inhibition was significant,  $\beta = 0.1837$ ,  $SE = 0.0454$ ,  $p = 0.0001$ , 95%CI [0.0938, 0.2736], the interaction between stress perception and expression inhibition was significant,  $\beta = 0.3996$ ,  $SE = 0.0821$ ,  $p < 0.0001$ , 95% CI [0.2369, 0.5623] (as shown in Table 4).

To further uncover this moderating effect, we used Johnson-Neyman analysis to examine significant areas. It was found that the effect of perceived stress on low fulfillment was significant when expression inhibition (normalized) was greater than or equal to - 1.8152 (as shown in Figure 3). In other words, cognitive reappraisal can negatively regulate the relationship between classroom negative emotion and job burnout. Therefore, if an individual can use cognitive reappraisal frequently, the impact of negative classroom emotion on job burnout will be less.

**Table 4.** Analysis results of multiple moderating effects of emotion regulation strategies on the relationship between perceived stress and low sense of accomplishment

	Job burnout (low sense of accomplishment)			
	Model 1		Model 2	
	<i>b</i>	<i>se</i>	<i>b</i>	<i>se</i>
Intercept	1.45466 ***	0.24571	1.49004 ***	0.23337
Age	0.05562	0.05977	0.04656	0.05678
Gender	0.16082	0.11045	0.12588	0.10523
Perception of stress	0.86112 ***	0.11797	0.95729 ***	0.11489
Expression suppression	0.11629 **	0.04342	0.09418 *	0.04163
Perceived stress * Expression inhibition			0.28215 ***	0.07564
	$R^2 = 0.4000$		$R^2 = 0.4643$	
	$\Delta R^2 = 0.0643 ***$			
	$F_{(4, 117)} = 19.50 ***$		$F_{(5, 116)} = 20.11 ***$	



**Fig. 3.** J-N chart of the moderating effect of expression inhibition on perceived stress and low sense of accomplishment

### 3.6 Analysis of the Moderating Effect of Inhibition of Emotional Expression on Stress and Job Burnout (Emotional Exhaustion)

In order to further test the relationship between inhibition of emotional expression and the dimension of stress and emotional exhaustion, this study adopted the process Model 2 hierarchical regression model to test whether emotion regulation strategies can regulate the relationship between perceived stress and job burnout (emotional exhaustion). Firstly, with stress perception, expression suppression and their interaction as independent variables and emotional exhaustion as dependent variables, a hierarchical regression model was established based on gender and age. The results showed that the main effect of stress perception was significant,  $\beta = 0.9843$ ,  $SE = 0.1346$ ,  $p < 0.0001$ , 95%CI [0.7175, 1.2510]. The main effect of expression inhibition was significant,  $\beta = 0.1060$ ,  $SE = 0.0483$ ,  $p = 0.0301$ , 95%CI [0.0104, 0.2017], the interaction between stress perception and expression inhibition was not significant,  $\beta = 0.1246$ ,  $SE = 0.0874$ ,  $p = 0.1568$ , 95% CI [-0.0486, 0.2977], therefore, there was no moderating effect.

## 4 Discussion

The results of this study show that stress positively predicts job burnout and three dimensions



(emotional exhaustion, dehumanization and low sense of accomplishment) of college teachers, that is, the more stress experienced, the more severe job burnout, which is consistent with previous studies. In fact, job burnout can be understood as a kind of adaptation and self-regulation to chronic occupational stress. Only when an individual realizes that the pressure exceeds his own tolerable limit can it lead to job burnout, which is the individual's self-protection. This paper also finds that inhibition of emotional expression can increase the job burnout of college teachers, which is a risk factor for the job burnout of college teachers, which is the same as the previous research conclusion. In addition, according to the resource conservation model, this paper examines the moderating effect of inhibition of emotional expression on the relationship between stress and job burnout of college teachers. The results show that inhibition of emotional expression moderates the relationship between stress and job burnout of college teachers. Through the analysis of three dimensions of inhibition of emotional expression, stress and job burnout, it is found that Inhibition of emotional expression moderates the relationship between stress and job burnout (deindividuation) and job burnout (low sense of accomplishment), but does not regulate the relationship between stress and job burnout (emotional exhaustion).

The study showed that for college teachers who experienced less stress, college teachers who used expression suppression strategies more (vs. There was no significant change in job burnout among college teachers who used less expression suppression strategies (vs). However, for college teachers who experienced more stress, college teachers who used more expression suppression as an emotion-regulating strategy (vs. The job burnout of college teachers with less use of expression inhibition was significantly increased. Therefore, expression inhibition enhanced the risk effect of stress on the job burnout of college teachers, that is, it made the job burnout worse. Previous studies have shown that the use of expression inhibition is related to low self-esteem, low life satisfaction, high depression and high anxiety symptoms, and expression inhibition will induce stronger negative emotional experience, which is related to anxiety and mood disorders. According to the theory of resource conservation, the more pressure an individual experiences, the more stressful it is. It means that the individual's resources are lost. When the individual is aware of the depletion of their own resources or the potential threat of depletion, they will feel more job burnout.

This study also found that inhibition of emotional expression moderates the relationship between stress, job burnout (deindividuation) and job burnout (low sense of accomplishment).

Previous studies have found that college teachers have a low sense of self-achievement, lack of sense of value and satisfaction, and some college teachers do not know enough about students or have too high requirements for students in their work<sup>[11]</sup>. Losing patience and enthusiasm for students and work, poor communication in academic work leads to communication gap with colleagues, which in the long run will shake the professional spirit, dissolve the professional ideal, lose the professional belief and form job burnout.

## 5 Conclusions

This study finds that inhibition of emotional expression regulates the relationship between stress and job burnout of college teachers. Through the analysis of three dimensions of inhibition of emotional expression, stress and job burnout, it is found that inhibition of emotional expression regulates the relationship between stress and job burnout (deindividuation) and job burnout (low sense of accomplishment). Inhibition of emotional expression did not regulate the relationship between stress and job burnout (emotional exhaustion).

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