# The Influence of Conscientiousness on Job Performance: The Moderating Role of Job Stress

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*Abstract:* The 21st century is an era full of opportunities and challenges. In this era, the development of science and technology, the application of 5G, and the rapid advancement of artificial intelligence have changed many industries and types of work, but human resources have always been the most scarce resource. As the smallest part of human resources, whether employees have a sense of responsibility and whether they can complete their work efficiently and achieve excellent performance is directly related to the development and destiny of the organization. This research uses SPSS 26.0 and MPLUS 7.0 software to analyze the data of 206 valid questionnaires of financial industry practitioners in first-tier cities. Through factor analysis, reliability and validity test, descriptive analysis, correlation analysis, regression analysis, etc. The hypothesis of this paper is tested and the conclusions are as follows: There are significant correlations among the three main variables, job stress, conscientiousness and job performance. There is a significant negative impact on responsibility and job performance, that is, the relationship between responsibility and job performance is an inverted U-shaped relationship, and job stress has a moderating effect between responsibility and job performance, that is, when job stress is at a high level, responsibility. The inverted U-shaped relationship between mind and job performance is stronger.

## 1. Research content

This paper takes the problems existing among job stress, responsibility and job performance as the starting point, combined with my country's national conditions, and further studies the impact of employee responsibility on job performance under the influence of job stress of Chinese enterprises. This study is expected to achieve three goals. Firstly, to explore the relationship between conscientiousness and job performance. Secondly, to build a model of the impact of conscientiousness on performance and to explore the moderating role of job stress. Thirdly, through theoretical empirical research, it will further provide guidance and guarantee for the control of job stress in the organization, so that enterprises can strengthen the construction of organizational culture, create a good and harmonious organizational atmosphere, optimize the communication mechanism and work flow within the organization and strengthen the control of employees' job stress<sup>[1]</sup> by conditioning and coaching to promote the positive impact of employee responsibility on job performance.

#### 2. Concept of responsibility, job stress, job performance

In this study, conscientiousness is defined as an individual's internal characteristics and external behavioral performance, that is an individual's motivation and behavior to achieve goals. The definition of job stress is as follows: job stress refers to a series of reactions produced by the individual after being subjected to the persistent and uninterrupted action of compulsive stressors in the interaction with the work environment, which affects the individual's willingness and ability to work. Job performance is the achievement of many results that employees want to achieve through a series of behaviors within a certain period of time under the guidance of corporate goals.

#### 3. Research hypothesis

## 3.1. Hypothesis on the relationship between conscientiousness and job performance

Barrick and Mount (1991) sorted out and analyzed the relationship between personality and performance through the method of meta-analysis and found that conscientiousness has a good predictive effect on job performance. On this basis, Tett Jackson and Rothstein (1991) conducted further research and analysis, and then found that conscientiousness not only has a predictive effect on job performance, but also has a very high validity coefficient, further illustrating the strong correlation between the two. Salgado (1997) also selected a large number of samples for meta-analysis, and the results were very similar to those of Barrick and Mount (1991).<sup>[2]</sup> To sum up, a large number of studies have shown that the dimension of responsibility can effectively predict job performance, that is, within a certain range, with the increase of responsibility, large, and job performance will decline.

Therefore, it is possible to improve the job performance of employees and the core competitiveness of enterprises by reusing employees with strong sense of responsibility. Employees with a strong sense of responsibility can work more meticulously, with high standards and strict requirements. At the same time, employees with a strong sense of responsibility will take the initiative to bear the consequences of their behavior at work and will take all measures to make the work develop in a positive direction.

In summary, this paper proposes the following hypothesis 1(see Figure 1 below for graphical representation):

Hypothesis H1: There is an inverted U-shaped relationship between conscientiousness and job performance.

Job performance

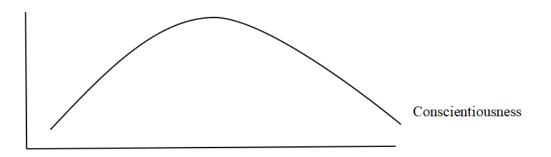


Figure 1: Hypothesis 1

#### 3.2. Hypothesis of the moderating effect of working pressure

Job stress is a series of physiological and psychological reactions produced by an individual, mainly manifested in the individual's work efficiency and work motivation (Xu Changjiang, 1995). There are many reasons for job stress, such as the difference between the work environment and individual values mentioned in the individual-environment fit theory, the mismatch between the organization's work goals and the individual's resources and abilities, and the work needs-control theory mentioned. The job stress of the study is generated by the interaction between work needs and work control, and the job stress mentioned in the cognitive interaction theory comes from the secondary cognitive evaluation in the process of interaction between individual personality and the environment. Due to individual differences in perception and tolerance of stress, the same job stress may have completely different effects on different individuals. This paper takes the employees of financial enterprises in first-tier cities such as Beijing and Shanghai as the research objects, explores the impact of job stress on the sense of responsibility. It is assumes that job stress has a moderating effect on the causal relationship between sense of responsibility and job performance. In the individual can bear within the pressure range, the individual's job stress is higher, which will further strengthen and stimulate the individual's sense of responsibility. So that the individual can develop a proactive attitude, behavior and better devote to the work, thereby improving job performance. On the contrary, when the job stress is beyond the current tolerance of the individual, in the face of a person with a strong sense of responsibility, the greater the job stress, the easier it is to think about too many things or weigh more pros and cons, leading to anxiety, depression or even anger or anger. Cause some physical and psychological diseases so that employees cannot work well, resulting in the decline of individual job performance.<sup>[3]</sup>

In summary, the hypothesis 2 of this paper is proposed (see Figure 2 below for graphical representation):

Hypothesis H2: Job stress plays a moderating role in the relationship between employee conscientiousness and job performance. Specifically, the inverted U-shaped relationship between conscientiousness and job performance was stronger when job stress was at a higher level.

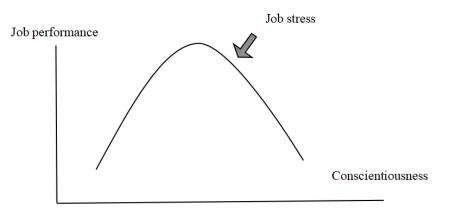


Figure 2: Hypothesis 2

## 4. Samples and Research Procedures

#### **4.1. Sample and Data Collection Procedures**

This paper selects the mature domestic and foreign measurement scales of responsibility, job performance and job stress to design the questionnaire, and randomly selects a group of subjects to

issue the questionnaire by means of snowball sampling, and then this group of subjects provides the qualified survey subjects to obtain sample data.

The design and filling of the questionnaire were carried out in two steps. The first questionnaire design includes the independent variable responsibility scale, the adjustment variable job stress scale and the control variable individual basic information and other items. It adopts the form of electronic questionnaire-questionnaire star and is randomly distributed to the research subjects through the Internet (WeChat).<sup>[4]</sup> Fill out the questionnaire. The second questionnaire survey was started after a lapse of 2 weeks. The second questionnaire design includes the dependent variable job performance scale, the moderating variable job stress scale and the key control variable individual key information. Through the statistics of the back-end data of the questionnaire star, this survey received a total of 249 questionnaires submitted by 249 respondents who participated in the survey, and removed invalid questionnaires (the two filled in not the same survey object or the same options or the answering time is less than 100 Seconds or obvious logical errors in the questionnaire answers) 43 copies, 206 valid questionnaire data were obtained after the two data were successfully matched, and the effective recovery rate reached 82.73%. The questionnaires are issued to employees in first-tier cities, and their work will have performance appraisal, which is in line with the research hypothesis of this paper. The questionnaire was collected in two times, with an interval of 2 weeks. The main purpose of collecting the two questionnaires was to reduce the bias of the common method and provide the most accurate and objective data for empirical research<sup>[5]</sup>.

In this study, the independent variable conscientiousness adopts the Big Five personality measurement tool developed by Saucier, G. (1994). This scale has a total of 40 questions in five dimensions, and 8 questions about conscientiousness are selected; the dependent variable job performance adopts Van A questionnaire developed by Dyne and Lepin (1998) to measure task performance. The Work Stress Questionnaire was designed by Peterson (1995) on the basis of the abbreviated version records of the research in 21 countries in the Journal of Management Science. The overall reliability of the scale is good. There are 13 entries. The questionnaire reliability test coefficients are shown in Table 1 below.

scale	number of entries	Cronbach's a	
Conscientiousness	8	0.81	
Job Performance	4	0.93	
Job Stress	13	0.84	
role conflict	4	0.92	
role blur	5	0.92	
task overload	4	0.96	

Table 1: Cronbach's a

#### 4.2. Descriptive Statistical Analysis

This paper involves three variables: responsibility, job performance, and job stress. There is a relationship between the independent variable and the dependent variable among these three variables, and the job stress is a moderating variable, and the moderating effect exists at the same time.

#### 4.2.1. Common method bias test and validity analysis

In this paper, the common method deviation test was mainly used Harman's univariate analysis method. Through analysis, there are a total of 6 factors with eigenvalues greater than 1, of which the first factor has the largest variance explanation rate, with a value of 27.71%, which is significantly

less than 50%. The six factors in total explained 77.03% of the variance, indicating that the subjects Therefore, the homologous variance value in this paper is within a reasonable range. The specific results are shown in Table 2.

components	Extract the load sum of squares				
components	total Percent variance		accumulation %		
1	6.93	27.71	27.71		
2	4.62	18.50	46.21		
3	2.54	10.17	56.38		
4	2.21	8.83	65.21		
5	1.60	6.41	71.62		
6	1.35	5.41	77.03		

 Table 2: Population variance explained

Validity is the validity, which reflects the accuracy of the measurement. The level of validity directly indicates the degree of agreement between the measurement results and the actual assessment, that is, the degree of validity is high, the degree of agreement is high, the validity is low, and the degree of agreement is low. The validity of this paper is tested, and MPLUS7.0 is used for confirmatory factor analysis. According to Wen Zhonglin, the reference standard for fitting statistical indicators is proposed. The smaller X2 and df, the better, and the larger CFI and TLI, the better (the full score of CFI and TLI is 1). RMSEA is less than 0.1. The specific results of this study are shown in Table 3 below. From the data, we can see that the overall fitting effect of the confirmatory factor analysis in this paper is good.

Model	X2	df	X2/df	RMSEA	CFI	TLI
Model 5	669.45	265.00	2.53	0.08	0.91	0.89
Model 4	1079.56	269.00	4.01	0.12	0.81	0.79
Model 3	2613.55	272.00	9.61	0.20	0.45	0.39
Model 2	3021.15	274.00	11.03	0.22	0.36	0.29
Model 1	3208.79	275.00	11.67	0.23	0.31	0.25

Table 3: Confirmatory factor analysis

#### **4.2.2.** Correlation analysis

Through the correlation data analysis, the three variables involved in this paper, including employee responsibility, job stress and job performance, have the relationship between independent variables and dependent variables, and the moderating effect of job stress also exists. In the demographic variables, the employee's level is related to the employee's individual sense of responsibility, and the correlation coefficient is -0.14, indicating that the higher the employee's position in the company, the weaker the employee's sense of responsibility. According to the correlation analysis data, the correlation between the three variables is as follows: the correlation coefficient between conscientiousness and job performance is 0.33 (p<0.01), the correlation coefficient between conscientiousness and job stress is -0.31 (p<0.01), the correlation coefficient between stress and job performance is -0.29 (p<0.01), indicating that there is a significant positive correlation between employee responsibility and job performance; the correlation analysis between variables is shown in Table 4.

cagetory	av	sd	1	2	3	4	5	6	7	8	9	10
1.age	31.30	4.60										
2.sex	0.33	0.47	0.03									
3.Edu	3.31	0.50	-0.15*	0.12								
4.working years	8.02	5.17	0.87**	-0.02	-0.30**							
5.company type	2.27	1.15	0.11	-0.08	0.02	0.06						
6.marriage	2.04	0.93	-0.65**	-0.00	0.13	-0.58**	-0.12					
7.time spend with leader	3.13	0.97	0.20**	-0.09	-0.15*	0.29**	-0.01	-0.20**				
8.1ever	3.08	0.91	-0.56**	-0.11	0.09	-0.53**	-0.05	0.46**	-0.20**			
9.Conscie ntiousness	5.15	0.65	0.13	-0.08	0.01	0.11	0.01	-0.09	-0.01	-0.14*		
10Job stress	3.55	0.67	-0.01	0.11	-0.04	0.05	-0.10	0.02	0.03	-0.09	-0.31**	
11Job performance	5.78	0.62	0.04	0.02	0.02	-0.01	0.07	0.01	-0.01	0.03	0.33**	-0.29**

Table 4: Correlation analysis

Note	* p < 0.05, *	<sup>**</sup> n <0.01.	N=206
rote:	p > 0.05	p ~0.01,	11-200

## 4.2.3. Adjustment effect test of job stress

variable	Model 1	Model 2	Model 3	Model4
age	0.01	0.00	0.00	0.00
Education	0.03	0.02	0.03	0.03
state-owned enterprise	0.15	0.15	0.14	0.13
Foreign companies	0.15	0.12	0.10	0.07
Private Enterprise	0.10	0.06	0.03	0.03
Time spent with leaders	-0.01	-0.00	-0.01	-0.01
Conscientiousness		0.25***	$1.98^{*}$	$2.21^{*}$
Job Performance		-0.20**	-0.20**	-0.20**
Conscientiousness *Job stress		-0.11	-0.18	-2.90*
Conscientiousness * Conscientiousness			-0.17	-0.19*
Conscientiousness * Conscientiousness * Job stress				0.27*
R <sup>2</sup>	0.01	0.16	0.18	0.19
$\triangle \mathbb{R}^2$		0.15***	0.02***	0.01***

#### Table 5: The moderating effect of work pressure

Note:\*p<0.05, \*\*p<0.01, \*\*\*p<0.001, N=206;

This study uses conscientiousness as a predictor variable, job performance as an outcome variable, and job stress as a moderator variable. From Table 5, it can be seen that the quadratic term of conscientiousness (conscientiousness \* conscientiousness) coefficient is -0.19\* (P<0.05, confidence interval [-0.36, -0.01], excluding 0), indicating conscientiousness There is an inverted U-shaped

relationship with job performance. Hypothesis 1 is verified in this paper; the coefficient of interaction term (conscientiousness \* conscientiousness \* job stress) is 0.27\* (P<0.05, confidence interval [0.01, 0.53], excluding 0), indicating that job stress plays a moderating role between responsibility and job performance. Employees under high pressure are unwilling to take the initiative to undertake work tasks and are prone to conflict in the face of difficulties and adjustments. When the task is completed or the goal is achieved in the process, it will affect their sense of responsibility and reduce their own job performance. Therefore, hypothesis 2 is verified in this paper. The moderating effect is shown in Figure 3.

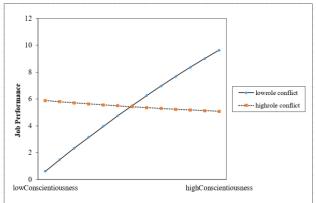


Figure 3: Working Pressure-Regulation Effect Diagram

#### **5.** Conclusion

Responsibility and job performance have an inverted U-shaped relationship.

Job stress plays a moderating role in the relationship between employee responsibility and job performance. Specifically, the inverted U-shaped relationship between conscientiousness and job performance is stronger when job stress is at a higher level.

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