

## A Causal Model of Job Performance of College Teachers' Stress

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### ABSTRACT

University teachers play a crucial role in the development of higher education in China, serving as a reserve force necessary for promoting discipline construction and an important link in promoting sustainable development of schools. However, the pressure of real life has brought them many challenges and confusion, and has become an important obstacle to the healthy growth of this group. In recent years, researchers have begun to pay attention to the stress experienced by this special group of university teachers, and have found that the current state of stress perception among this group is not optimistic, which directly leads to serious consequences such as low mood, depression, anxiety, and reduced efficiency among teachers. At the same time, teacher job performance is not only related to teacher stress, but also directly related to teacher personal competence and teacher dedication. This article constructs a research model for the work performance of university teachers, using work stressors, teacher competence, and teacher engagement as independent variables, job satisfaction as an intermediate variable, and teacher work performance as the outcome variable. The model is applied to the study of the current situation, structure, and influencing mechanism of work stress among university teachers. This article combines various theories such as work pressure theory and performance evaluation theory, and comprehensively uses research methods such as questionnaire survey, literature research, and structural equation modeling. Following the research idea of "mechanism analysis feature analysis evaluation indicators evaluation model empirical analysis", a performance evaluation system for university teachers is established, providing a scientific evaluation model and technical tools for strengthening teacher performance management in universities, and providing rational suggestions for improving key performance of university teachers.

**Keywords:** Teacher stress, Teacher competency, Teacher professional dedication, Job satisfaction, Self-efficacy, Job performance.

### Introduction

The development of the global knowledge economy has intensified competition among countries, highlighting the importance of knowledge. As an important place for the production and dissemination of knowledge, universities have become an important pillar for countries to improve their economic competitiveness, and governments around the world are optimistic about the important role of universities in technological progress and economic development. In order to meet the needs of the overall socio-economic development, China has implemented a policy of popularizing higher education and expanded the enrollment scale since 1999. The expansion of enrollment in universities has put both quality and quantity stress, as well as resource shortages, on the development of various universities. In order to compete for limited government resources and more market resources, competition among universities is becoming increasingly fierce, and the stress faced by university organizations is unprecedentedly increasing.

This paper mainly discusses the stress management of university teachers under the background of the existing university management system and the main factors affecting the performance of university teachers and other related issues. Through the investigation, the author finds out the current situation and problems of the stress management of university teachers, and explores how to construct a scientific management mechanism in the process of the construction of the teaching staff in universities, so as to promote the healthy growth and development of teachers.

## Literature Review

**A Study on Job Stress of College Teachers.** The university in this study refers to a comprehensive higher education institution that provides teaching and research conditions and authorizes degrees. It is the core of higher education and represents the level of higher education in a country. Generally speaking, university teachers include teachers engaged in teaching and research, staff engaged in book collection and management, teachers engaged in administrative coordination and management, etc. In this study, "university teachers" refers to the narrow concept, that is, on-the-job front-line teachers engaged in teaching and research in colleges and universities, including teachers of scientific research series and teacher post series, excluding full-time administrative personnel and teaching assistants working in colleges and universities.

The study found that long-term mental fatigue and excessive stress in the situation, teachers' physical health will be affected by the corresponding degree of adverse effects. Clinical medical research has found that cardiovascular and cerebrovascular diseases, respiratory diseases, cancer, endocrine system disorders and so on are related to individual psychological stress and emotional instability. Moreover, for teachers, mental health is particularly important, and Pan Xin found that 80% of teachers feel stress for a long time, 75% of college teachers often feel tired, and 46% of the total number of college teachers often lose sleep. An important reason for this is that the work stress of college teachers is too high. Zhou Guangya (2012)'s research on the relationship between college teachers' stress and somatization shows that there is a significant positive correlation between each component factor of work stress and depression and somatization symptoms; Li Chaoping (2009) found that role conflict, role ambiguity and role overload have significant impact on teachers' mental health. Role overload has the greatest impact on teachers' physical health, and role overload and role ambiguity have the greatest impact on teachers' mental health. In a word, the work stress of teachers is closely related to their physical and mental health.

**Research on Job Satisfaction.** Job satisfaction is an important psychological factor affecting work efficiency and quality of work life. In traditional work stress research, it is generally believed that the increase of work stress will lead to the decrease of job satisfaction, and the relationship between them is generally negative correlation. But as the study progressed, researchers began to question the idea that more stress means less satisfaction. A large number of empirical studies show that the relationship between job stress and job satisfaction is not only a simple positive or negative correlation, both are affected by very complex work system factors, using general measures, it is difficult to find the correlation between the two, in fact, different stressors have different effects on job satisfaction, some stressors can improve workers' work attitude and job performance. Xu Xiaodong (2004) found that there is a positive correlation between job endogenous stress and job satisfaction, and a negative correlation between job exogenous stress and job satisfaction. Other studies suggest that the relationship between job stressors and job satisfaction is affected by other variables, and social support from some sources has a buffer effect on the relationship between job stressors and job satisfaction.

The correlation between job satisfaction and job performance has also been extensively studied in the field of organizational behavior for many years. One view holds that high satisfaction leads to good performance; another view holds that good performance leads to satisfaction. There is supportive research for both views, but no simple, direct relationship has been found between job satisfaction and performance. At present, more and more researchers combine turnover intention, physiological status, job performance and other individual and organizational outcome variables, using structural equation

and path analysis methods to study the relationship between job stress and job satisfaction model. Some studies have found that role ambiguity and role conflict have a direct impact on job satisfaction and physiological status, and then affect turnover intention.

**Research Review on Teacher Dedication.** Since the concept of employee engagement emerged, research on the relationship between employee engagement and employee performance has been a hot topic in the field of human resource management both domestically and internationally. In theory, there should be a positive correlation between dedication and job performance, which should lead to improvements and enhancements in job performance. Kahn's (1990) research findings indicate that compared to employee satisfaction, work engagement, etc., employee dedication as a more positive and positive work attitude has a more direct and significant impact on employee job performance. Employees with higher levels of dedication are more likely to devote more time and energy to their work. Kahn's (1992) study confirmed a positive correlation between employee job performance and engagement. In addition, the studies of Huy (1999), Rafaeli & Worline (2001), and others also support Kahn's research findings. However, the research findings of Salanova et al. (2005) indicate that employee dedication cannot directly predict employee job performance, and using Service Climate as a mediating variable can have a positive impact on job performance.

Regarding the relationship between employee engagement and job performance, domestic scholars have also conducted meaningful explorations. For example, Huo Yuanyuan (2008) conducted a study on the intrinsic relationship between engagement, job characteristics, and employee performance. The research results showed that engagement has an important impact on employee performance, and has a significant positive impact on both task performance and organizational citizenship behavior. In addition, dedication can serve as a mediating variable between job characteristics and job performance. Yang Xinguo's (2008) study on the dedication of primary and secondary school teachers showed that work dedication can directly predict job performance positively.

**Research on the Relationship between Competence and Performance.** Competence refers to a series of personal characteristics, including knowledge, skills, self-concept, motivation, traits, attitudes, and social roles. In recent years, domestic and foreign scholars have made rich theories on the relationship between relevant factors and job performance in the field of competence, as well as a large amount of empirical research. The relevant research results provide empirical support for the prediction of competence on job performance.

There is a close relationship between competence and performance, and foreign scholars have also explored and studied this field, and verified the relationship between the two through multiple aspects, resulting in research on the relationship between competence and performance from different traits. Asree (2010) and other scholars surveyed 88 hotels in Malaysia for service type companies such as hotel employees, and conducted data analysis and model construction using structural equation modeling. They found that employee competency characteristics, including leadership, professional and technical abilities, organizational culture, and other factors, can affect their relationship with customers, which can also lead to performance and income differences among employees. Hon (2012) conducted a survey on hotel service department employees in Hong Kong, China, and selected 219 samples to determine the relationship between employee competence and performance. They also verified the close relationship between the two: employee knowledge, skills, attitudes, personality traits, and other competency elements have a significant impact on employee performance, directly affecting employee performance. However, the research results of scholars such as Alegre (2012) deny the relationship between competence and performance. A survey of employees in the information technology field found that the correlation between employee competence and performance is weak. Maloney (2013) believes that there is a correlation between the competence and performance of clinical internship students. The attitudes, skills, and knowledge acquired by students during clinical internships can all affect their achievement of excellent grades. Therefore, it can be seen that competence and performance are closely related.

**Conceptual Framework.** Teacher stress, competence, and dedication together constitute the core elements that affect the work status of teachers. Long term overload stress can easily lead to

emotional exhaustion, weaken job satisfaction and classroom engagement; Teacher competence, as a key moderating variable, can not only buffer the negative impact of stress, but also promote teaching strategy optimization through continuous professional reflection, thereby improving work performance; The level of teacher dedication is reflected in a positive cycle of emotional commitment and professional development. The dynamic interweaving of the three factors, with job satisfaction serving as an intermediary link, is constrained by stress management and ability growth, while also feeding back on teachers' teaching efficacy.

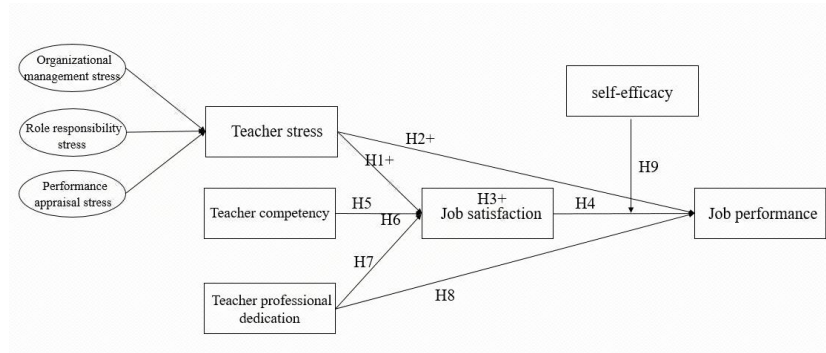


Figure 1 Conceptual Framework

## Methodology

The purpose of this study is to explore the influencing factors and mechanisms of stress on university teachers. Therefore, the focus will be on analyzing which stress in the current environment will affect university teachers, as well as the mechanisms of the impact of stress sources.

**Literature method:** combing and analyzing the relevant literature is the premise of writing this paper. Read the literature on the review of stress management mode, stress source, stress measurement method and stress management theory at home and abroad, and determine the research content, research focus and research method.

**Questionnaire survey method:** Questionnaire survey method can effectively save time, manpower and material resources, while the data is convenient for statistical processing and analysis, suitable for large-scale investigation, the research questionnaire includes the following parts: Through the above contents, using SPSS mathematical statistics, descriptive statistics, factor analysis and other methods to find out the current university teachers' stress self-perception, stress sources and the problems existing in the stress management of university organizations.

**Interview method:** interview method is generally classified as qualitative research. Its advantages are high response rate of interviewees, open and in-depth interview content, and effective information captured in words and actions of interviewees through observing their expressions, psychological changes and attitudes in the form of interview for some information not suitable for quantification. Through talking with college teachers, in-depth understanding of their subjective feelings of the school in the management of occupational stress, college teachers' opinions and suggestions on the management of school stress.

## Results

**Qualitative data analysis.** Based on the interview results, we found that the primary source of stress is the criteria for professional title evaluation. The second source of pressure is research tasks and requirements. The reason may be that with the intensification of enrollment and employment issues in higher education institutions, the competition for survival and development of universities is becoming increasingly fierce. This is consistent with the survey results of Liu Zhicheng and Sun Jia (2009) on the psychological pressure of teachers in six universities in central and eastern China, where research pressure ranks first among many pressures. Meanwhile, through interviews, we learned that the job competence and dedication of university teachers are the core driving forces that affect their job satisfaction and performance. Job competence directly enhances teachers' job satisfaction and performance: Highly competent teachers can efficiently complete tasks, reduce stress, and gain a sense

of achievement, thereby being more satisfied with their work; At the same time, its ability advantages are directly translated into performance outputs such as scientific research achievements and teaching evaluation. Work dedication promotes both through emotional investment and proactive effort.

**Correlation Analysis.** The following table shows the research abbreviations and specific meanings of each variable test item in subsequent studies.

Table1 Abbreviation Explanation of Test Items

| Abbreviation | Specific meaning                   |
|--------------|------------------------------------|
| RRS          | Role responsibility pressure       |
| OMS          | Organizational management pressure |
| PAS          | Performance evaluation pressure    |
| TC           | Teacher competency                 |
| TPD          | Teacher professional dedication    |
| JS           | Job satisfaction                   |
| JP           | Job performance                    |
| SE           | Self-efficacy                      |

In order to study the correlation between various variables, a correlation analysis was conducted on all variables with a correlation coefficient between -1 and 1. It is generally believed that a correlation coefficient greater than 0.8 indicates a strong correlation between two variables, a correlation coefficient between 0.6 and 0.8 indicates a strong correlation, a correlation coefficient between 0.4-0.6 indicates a moderate correlation, a correlation coefficient between 0.2-0.4 indicates a weak correlation, and a correlation coefficient less than 0.2 indicates no correlation.

Table2 Pearson Correlation Coefficient of Variables

|     | TS      | TC      | TPD     | JS      | JP     | SE |
|-----|---------|---------|---------|---------|--------|----|
| TS  | 1       |         |         |         |        |    |
| TC  | 0.312*  | 1       |         |         |        |    |
| TPD | 0.436** | 0.405** | 1       |         |        |    |
| JS  | 0.659** | 0.605** | 0.496** | 1       |        |    |
| JP  | 0.604** | 0.494** | 0.530** | 0.659** | 1      |    |
| SE  | 0.102   | 0.212   | 0.232   | 0.162   | 0.229* | 1  |

As shown in the table above, the results indicate a significant positive correlation between TS and JS ( $r=0.659$ ,  $p<0.01$ ), as well as JP ( $r=0.604$ ,  $p<0.01$ ); TC showed a significant positive correlation with JS ( $r=0.605$ ,  $p<0.01$ ) and JP ( $r=0.494$ ,  $p<0.01$ ); TPD showed a significant positive correlation with JS ( $r=0.496$ ,  $p<0.01$ ) and JP ( $r=0.530$ ,  $p<0.01$ ); However, SE was only significantly positively correlated with JP ( $r=0.229$ ,  $p<0.05$ ).

Table 3 Pearson Correlation Coefficient of Subscales

|     | RRS     | OMS     | PAS     | TC      | TPD     | JS      | JP     | SE |
|-----|---------|---------|---------|---------|---------|---------|--------|----|
| RRS | 1       |         |         |         |         |         |        |    |
| OMS | 0.451** | 1       |         |         |         |         |        |    |
| PAS | 0.424** | 0.293** | 1       |         |         |         |        |    |
| TC  | 0.672** | 0.552** | 0.593** | 1       |         |         |        |    |
| TPD | 0.483** | 0.559** | 0.407** | 0.405** | 1       |         |        |    |
| JS  | 0.571** | 0.511** | 0.450** | 0.605** | 0.496** | 1       |        |    |
| JP  | 0.460** | 0.559** | 0.572** | 0.494** | 0.530** | 0.659** | 1      |    |
| SE  | 0.187   | 0.229   | 0.117   | 0.212   | 0.232   | 0.212*  | 0.229* | 1  |

Note: \*\*\* $p<0.001$ , the diagonal is rooted in AVE

As shown in the table above, in the TS dimension, RRS is significantly positively correlated with JS ( $r=0.571$ ,  $p<0.01$ ) and JP ( $r=0.460$ ,  $p<0.01$ ); OMS showed a significant positive correlation with JS ( $r=0.511$ ,  $p<0.01$ ) and JP ( $r=0.559$ ,  $p<0.01$ ); PAS showed a significant positive correlation with JS ( $r=0.450$ ,  $p<0.01$ ) and JP ( $r=0.572$ ,  $p<0.01$ ).



In summary, the hypothesis validation of this study is shown in the following table:

Table 4 The Result of All Path Hypothesis Testing

| Hypotheses | Hypotheses Content   | Result    |
|------------|--|-----------|
| H1a        | Organizational management pressure has a direct impact on the job satisfaction of university teachers.   | Establish |
| H1b        | The stress of role responsibility has a direct impact on the job satisfaction of university teachers.    | Establish |
| H1c        | The stress of performance evaluation has a direct impact on the job satisfaction of university teachers. | Establish |
| H2a        | Organizational management stress has a direct impact on college teachers' job performance.               | Establish |
| H2b        | Role responsibility stress has a direct impact on college teachers' job performance.                     | Establish |
| H2c        | Performance appraisal stress will have a direct impact on college teachers' job performance.             | Establish |
| H3a        | Job satisfaction mediates the relationship between organizational management stress and job performance. | Establish |
| H3b        | Job satisfaction mediates the relationship between role responsibility stress and job performance.       | Establish |
| H3c        | Job satisfaction mediates the relationship between performance appraisal stress and job performance.     | Establish |
| H4         | College teachers' job satisfaction has a direct impact on performance.                                   | Establish |
| H5         | Job competency has a direct impact on job satisfaction.  | Establish |
| H6         | Job competency has a direct impact on job performance.   | Establish |
| H7         | College teachers' professional dedication has a direct impact on job satisfaction.                       | Establish |
| H8         | College teachers' professional dedication has a direct impact on job performance.                        | Establish |
| H9         | Self-efficacy moderates the relationship between job stress and job performance.                         | Establish |

## Discussion and Conclusion

**The impact of teacher work stress on job satisfaction and performance.** The work stress of teachers has a significant positive impact on their job satisfaction and performance. The research results support H1a, H1b, H1c, H2a, H2b, H2c. As the core of the education system, the relationship between teachers' work stress, job performance, and job satisfaction has always been a focus of research in educational psychology and organizational behavior. With the increasing complexity of the educational environment, teachers are facing increasing stress, which not only affects their job performance but may also have a profound impact on their career satisfaction and mental health.

**The impact of teacher competence on teacher job performance.** Teacher competence has a significant positive impact on teacher job satisfaction and performance. The research results support H5 and H6. Teacher competence is the core driving force of educational quality and directly affects teachers' job performance. Competence not only includes teachers' professional knowledge and skills, but also encompasses their emotional attitudes, classroom management abilities, and potential for sustained development. Based on the characteristics of teacher performance and the theoretical basis of developmental evaluation, scholars designed a performance evaluation system from two levels: teacher teaching quality and research ability. They measured and evaluated teacher job competence, revealing that teacher competence affects teacher job satisfaction, which in turn affects teacher job

performance. These studies all indicate that in educational practice, teacher competence affects job performance through multidimensional pathways, including teaching effectiveness, student development outcomes, and overall school effectiveness.

**The impact of teacher dedication on teacher job performance.** Teacher dedication has a significant positive impact on teacher job satisfaction and performance. The research results support H7, H8. Teacher engagement, as an important concept in the field of organizational behavior, has been validated in academia for its mechanism of action on job satisfaction and performance. In terms of job performance, highly dedicated teachers often demonstrate better teaching innovation behavior and student learning outcomes. The internal mechanism is reflected in the "virtuous cycle" effect formed by sustained investment, which encourages teachers to actively participate in professional development activities, and their subject teaching knowledge updates faster than the low dedication group.

**Mediating role of teacher satisfaction.** Teacher satisfaction plays a mediating role between the stress and job performance of university teachers, and the research results support H3a, H3b, H3c. In the field of higher education, the complex relationship between work stress and job performance of university teachers often forms a mediating transmission mechanism through job satisfaction. Based on the stress strain theory (Lazarus & Folkman, 1984), when teachers face multidimensional stressors such as research assessments, teaching workloads, and role conflicts, their cognitive evaluation system will trigger a dual effect: challenging evaluations may enhance work engagement, while obstructive evaluations can lead to emotional exhaustion. Structural equation modeling verification shows that there is a significant partial mediating effect of job satisfaction in the stress performance relationship. This intermediary model has practical implications for university management: by constructing stress buffering mechanisms (such as flexible assessment cycles) and satisfaction enhancement strategies (such as developmental evaluation systems), teachers can maintain higher performance output under the same level of stress.

**Conclusion and suggestions.** The research on the work performance of university teachers has certain theoretical significance. This article studies teacher job performance from three aspects: teacher stress, teacher competence, and teacher dedication, and draws corresponding conclusions. However, the rich connotation of teacher job performance still needs further exploration and discussion. Based on the conclusions drawn in this article, further exploration can be conducted on the work performance of university teachers in various aspects.

(1) Further expand the scope of the research sample. The survey questionnaire used in this study is mainly focused on universities in Shaanxi Province, and can only represent the views of this group of university personnel, which will inevitably lead to limitations in the research. In the study of teacher performance evaluation in China, it is necessary to select samples from universities nationwide as much as possible to ensure the practicality of the research results. (2) Further explore the mechanisms by which teacher stress, teacher competence, and teacher dedication affect the performance of university teachers. Teacher performance is a framework concept that is influenced by numerous buffering variables such as personality traits, self-efficacy, organizational support, and coping strategies.

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