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Performance Pressure, Workplace Anxiety, Emotional Exhaustion, and Job Performance: An Empirical Research on Chinese Public Universities

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Abstract

This research surveyed the public universities in Sichuan Province of China, adopting the PIS-SEM for data analysis to verify (1) the different influences of performance pressure on teaching and research performance, (2) the role of workplace anxiety and emotional exhaustion on the relationship between performance pressure and teachers' job performance, and (3) the influence of performance-related pay size on the relationship between performance pressure, job performance, and workplace anxiety. The researchers selected by experts' consultation 9 public universities in Sichuan Province, and obtained responses from 407 university teachers via online data collection. The results show that: (1) Performance pressure directly affects university teachers' teaching performance but has no significant effect on research performance; (2) Workplace anxiety and emotional exhaustion have a suppressing effect on the relationship between performance pressure and teaching performance; and (3) Performance-related pay size has no significant influence on the relationship between performance pressure, teaching performance and research performance. The research findings reveal the influence of performance pressure in the higher education field, and provide the theoretical basis and work suggestions for performance management in universities.

Keywords: *University teachers, performance pressure, workplace anxiety, emotional exhaustion, performance-related pay size, job performance*

1. Introduction

Since the "Performance Appraisal" reform in the 1970s, the performance appraisal has been widely applied to the education system of many countries. The general trend was to pay more attention to school performance and make teachers take more direct responsibility through rewards and punishments (Andrew & Zhang 2009). However, performance appraisal cannot only stimulate teachers' work engagement and improve their work performance (Li, Lin & Su, 2018) to a certain extent (Liao, Wen & Wang, 2010). It may also harm teachers' work motivation (Kallio & Kallio, 2014) and

destroy their creativity (Ter Bogt & Scapens, 2012). Take China as an example, some colleges unilaterally pursue performance and use one-size-fits-all quantitative methods to evaluate teachers. The number of SCI papers, citation times, highly cited papers, and impact factors become the core indicators for teachers' academic and professional title evaluation. On the one hand, teachers' pressure keeps rising, and job burnout appears (Zheng, Chen & Yang, 2021). On the other hand, teachers publish papers and textbooks crazily to complete the task performance and even take the number of published SCI papers, papers with high impact factor, and papers with high citation as the fundamental goal (Ministry of Education, China, 2012).

Since performance appraisal is required in higher education, many scholars have researched performance appraisal-related issues in universities. These studies focus on the construction of teacher performance appraisal system, teacher performance appraisal, and evaluation methods (Xie, Wang & Hu, 2019). However, there is not much research on the performance appraisal of university teachers. There is a gap in research on the relationship between performance pressure (PP), workplace anxiety (WA), emotional exhaustion (EE), teachers' teaching performance (TP) and research performance (RP), as well as its mechanism. It is necessary to understand further why colleges "do not please painfully [in Chinese expression]" difficulties and make teachers feel "stressed out." It helps universities improve the quality of teachers' performance appraisal and teachers' work performance. This study focused on the impact of performance pressure and performance-related pay size on teachers' task performance [teaching and research performance/ job performance], emotional exhaustion, and psychology [workplace anxiety] to understand comprehensively the impact of performance requirements and material incentives on employees' task performance.

Performance pressure is the subjective perception that employees must improve performance to avoid adverse consequences (Mitchell, Baer, Ambrose, Folger & Palmer, 2018). It is a disturbing perception of the need for high performance arising from a solid commitment to goals and the availability of goals (Eisenberger & Aselage, 2009). When individuals perceive their performance lags behind, the pressure on expected performance will increase (Zimmerman & Kitsantas, 1996). Such pressure may motivate employees to act proactively and produce better job performance and cause employees to react negatively; such pressure also negatively affects job performance (Zhang, Nie & Wang, 2020).

Goal-setting theory and the Job Demands-Resources Model provide a robust framework to explain performance pressure's "double-edged sword" effect. The theory of goal setting holds that goal setting has a positive effect on job performance (Locke, Saari, Shaw & Latham, 1981). When individuals have a strong focus on goals and knowledge and the ability to achieve goals, goal setting is directly proportional to job performance (Locke & Latham, 2006). According to the Job Demands-Resources Model (JD-R), job requirements, namely the physical or psychological efforts required in work, will lead to

physical and mental consumption (Qi & Wu, 2018a) as well as emotional exhaustion. In comparison, job resources are those factors that can reduce the physical and psychological costs of work requirements (Ma, Zhang & Yang, 2020). They can stimulate employees' work motivation and promote work efficiency (Bakker & Demerouti, 2007). Therefore, this study proposes that performance stress can promote the job performance of university teachers but also cause their workplace anxiety and job burnout, thus reducing their job performance.

Performance-related pay mainly reflects employees' performance and contribution (Ma & Shan, 2013). Many universities use part of the salary as incentive performance-related pay. It is a resource for those who can get above-average performance-related pay. For those who expect performance-related pay to be less than their paid off, it is considered a "demand." Therefore, the researchers have an assumption that performance-related pay size will strengthen the impact of performance stress on work anxiety, emotional exhaustion, and job burnout. It can also strengthen the impact of performance stress on job performance. The greater the performance-related pay size, the more significant the impact of performance pressure on workplace anxiety, emotional exhaustion, and job performance.

To sum up, the main contribution of this study lies in two aspects. First, based on the goal-setting theory and the Job Demands-Resources Model, university teachers' job performance, workplace anxiety, and emotional exhaustion are introduced simultaneously to explain the "double-edged sword" effect of performance pressure on employees' work performance (Gardner, 2012). Second, this study views that pay-for-performance size will affect the relationship of performance pressure on job performance, workplace anxiety, and emotional exhaustion. The researchers were to construct a mediation model to analyze the influence of performance pressure on employees' performance mechanism and boundary conditions to enrich the university teachers' performance appraisal theory and help to enhance university management.

2.Theoretical Basis and Research Hypothesis

2.1 Theoretical Basis

2.1.1 Goal Setting Theory

The goal-setting theory was proposed by Locke in 1968, which is an essential theory in the field of organizational behavior research (Miner, 2003). This theory reveals the relationship between conscious performance goals and task performance levels (Li & Zhang, 2006) and assumes that motivated employees in an organization will focus or mobilize their attention toward the goal until it is finally achieved (Jeffrey, 2017). Goal setting has a positive effect on job performance (Locke, Saari, Shaw & Latham, 1981). When individuals have a strong focus on goals and knowledge and the ability to achieve goals, goal setting is directly proportional to job performance (Locke & Latham, 2006).

2.1.2 Job Demands-Resources Model

The Job Demands-Resources Model (JD-R) is a theoretical framework for studying job characteristics and individual work stress and emotional exhaustion. It has been widely used to predict emotional exhaustion (Bakker, Veldhoven & Xanthopoulou, 2010). The model classifies various job characteristics into job demands and job resources. Job demands refer to the factors of physical or psychological efforts that need to be paid during work; they relate to physical and mental consumption (Qi & Wu, 2018b). Work resources are factors that can reduce the physical and psychological costs of work requirements and promote individual learning, development, and growth, such as organizational support, job control, and career opportunities (Ma, Zhang & Yang, 2020). Many studies have shown that there are two pathways in the JD-R model: the process of health impairment and the process of motivation stimulation. Job demands are the main predictor of health impairment. Long-term and intense job demands will lead to health impairment and emotional exhaustion. Adequate work resources can serve as a motivational potential to promote work engagement while alleviating emotional exhaustion (Bakker & Demerouti, 2007).

2.2 Research Hypothesis

2.2.1 Performance Pressure and Workplace Anxiety

According to the Job Demands-Resources Model, job requirements relate to employees' physical and mental consumption (Qi & Wu, 2018a). Many universities usually carry out teachers' performance appraisals once a year in China. Performance pressure is a common and persistent source of pressure on teachers. Task performance is a job requirement for teachers. Inadequate performance may mean that they will be "punished" by the organizational system. At the same time, they may feel that their status in the organization has declined. They could be despised or rejected by the organization (Mitchell, Baer, Ambrose, Folger & Palmer, 2018). Workplace anxiety is a unique manifestation of anxiety in the workplace, usually accompanied by pressure or specific tasks. Li, Wang, Zhu & Zhan (2018) found that performance pressure influences employees' pro-organizational non-ethical behaviors through workplace anxiety. Based on the above understanding, this study proposes:

Hypothesis 1: Performance pressure positively affects workplace anxiety.

2.2.2 Performance Pressure and Emotional Exhaustion

Emotional exhaustion is one of the three critical components of job burnout (Leiter, 1991), which is a response to stress (Fullerton, 1983), and a state of mental exhaustion (Schaufeli & Bakker, 2004). Studies have shown that work overload, lack of job autonomy, and low social support can lead to emotional exhaustion and negative emotions (Enzmann, Schaufeli, Janssen & Rozeman, 1998). According to the Job Demands-Resources Model (Demerouti, Bakker, Nachreiner & Schaufeli, 2001), emotional exhaustion occurs when a job relates to highly demanding, but with limited work resources (Demerouti et al., 2001).

Excessive work requirements will lead to excessive consumption of employees' physical and mental resources and even harm health. Insufficient work resources will damage employees' work motivation, cause cynicism at work, and reduce out-of-role performance (Bakker, Demerouti & Verbeke, 2004). Based on the above understanding, this study proposes:

Hypothesis 2: Performance pressure positively affects emotional exhaustion.

2.2.3 Performance Pressure and Job Performance

In the teachers' performance appraisal, universities usually formulate corresponding performance objectives and tasks according to teachers' ranks and positions. According to the goal-setting theory, goal setting positively affects job performance (Eisenberger & Aselage, 2009). Research shows that individuals will continuously monitor their progress in pursuing desired goals, and performance pressure will increase when they perceive their performance lags (Zimmerman & Kitsantas, 1996). The more significant the gap between actual and target performance, the more likely performance pressure will occur (Chen & Yang, 2017). Such pressure will motivate individuals to adopt more professional knowledge and skills and focus on the current task, thus generating greater internal motivation and creativity for work (Eisenberger & Aselage, 2009). Based on the above understanding, this study proposes:

Hypothesis 3: Performance pressure positively affects teaching performance.

Hypothesis 4: Performance pressure positively impacts research performance.

2.2.4 Workplace anxiety and emotional exhaustion

Anxiety is a signal that indicates the detection of danger and the perception of a threat to survival, which is usually accompanied by a threat (Muris, Luermans, Merckelbach & Mayer, 2000). Workplace anxiety is a unique manifestation of anxiety in the workplace, usually accompanied by pressure or specific tasks. Employees' workplace anxiety can make them lose their work enthusiasm and reduce their job satisfaction (Xu & Li, 2019), which may cause emotional exhaustion. Allen, Herst, Bruck & Sutton (2000) found that workplace anxiety caused by work-family conflict seriously affects employees' job satisfaction. Green, Wu, Whitten & Medlin (2006) found that after a financial crisis and economic recession, employees would feel anxious about work and life and have lower job satisfaction and job engagement. They are more likely to have work deviation behaviors, such as dismissal and absenteeism. Gao et al. (2022) found that occupational stress positively correlates with anxiety, and anxiety positively collects emotional exhaustion. Based on the above understanding, this study proposes:

Hypothesis 5: Workplace anxiety positively affects emotional exhaustion.

2.2.5 Emotional Exhaustion and Job Performance

Motivation has a guiding effect on people's behavior. It can encourage employees to devote themselves to work with enthusiasm. Job motivation positively promotes job

performance, while occupational stress reduces job performance (Bakker & Demerouti, 2007). As a state of one's mental exhaustion (Schaufeli & Bakker, 2004), emotional exhaustion generates a chronic tiredness and cynical, negative attitude (Maslach, Schaufeli & Leiter, 2001). Emotional exhaustion negatively correlates with job performance (Taris, 2006). Employees with a high degree of emotional exhaustion are difficult to complete tasks with the whole spirit. Based on the above understanding, this study proposes:

Hypothesis 6: Emotional exhaustion negatively affects teaching performance.

Hypothesis 7: Emotional exhaustion negatively affects research performance.

2.2.6 The Mediating Role of Workplace Anxiety and Emotional Exhaustion

From the above analysis, the performance pressure of university teachers affects their work performance. Performance stress positively affects workplace anxiety and emotional exhaustion, and emotional exhaustion negatively correlates with job performance (Taris, 2006); too much stress can affect work productivity (Latthasaksiri, 2021). This research proposes the following hypotheses:

Hypothesis 8: Workplace anxiety and emotional exhaustion relates to performance pressure and teaching performance.

Hypothesis 9: Workplace anxiety and emotional exhaustion relates to performance pressure and research performance.

2.2.7 Moderating Effect of Performance-Related Pay Size

Performance-related pay is performance-oriented variable pay (Gerhart, Rynes & Fulmer, 2009), which has attracted much attention in management research and practice due to its ability to link employee performance with salary (Zu et al., 2010). Many studies have shown that performance-based pay is an effective tool for improving employee performance. It has a positive incentive effect on employees and forms a compelling incentive for their work efforts (Chen & Shen, 2018). However, performance-related pay does not always improve employee performance (Bowman, 2010), for it may also lead to vicious competition among employees. Widening the income gap may lead to unfairness, frustration, and a low sense of achievement (Green & Heywood, 2008) and increase work pressure and job burnout (Godard, 2001). Eisenberger & Aselage (2009) proved that employees' expectation of bonuses brought by high performance is positively correlated with performance pressure and correspondingly with employees' interest in work. The performance bonus for college students increases their performance pressure and affects their inner interest and creativity by performance pressure. In the relationship between performance pressure and job performance, if the performance-related pay increases, employees are more likely to work harder to meet the performance requirements. In other words, performance-related pay will strengthen the impact of performance pressure on job performance. Therefore, this research proposes:

Hypothesis 10: Performance-related pay size has an effect on the relationship between performance pressure and teaching performance.

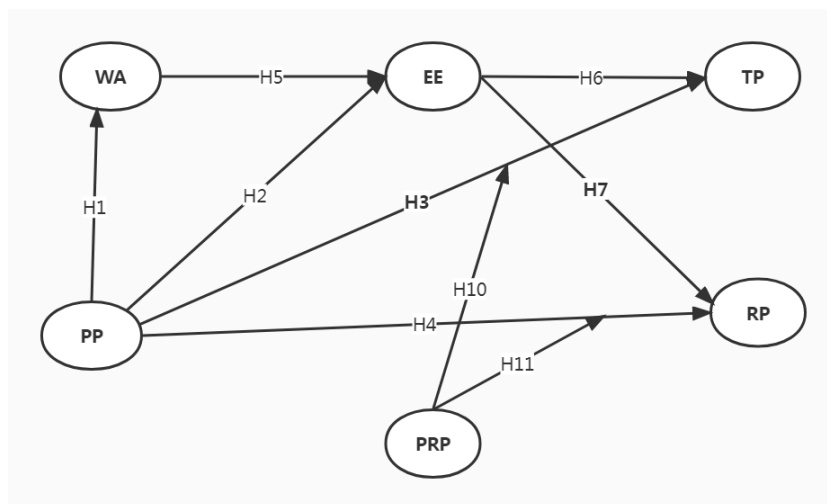
Hypothesis 11: Performance-related pay size has an effect on the relationship between performance pressure and research performance.

3. Research Design and Variable Measurement

3.1 Model Construction

Based on the above analysis of the effect of performance pressure, the researchers considered the advantages of the PLS-SEM model in dealing with variable measurement errors and its ability to predict more complex models. It is appropriate in exploratory and explanatory studies (Zhang, Jiang & Zhou, 2016). According to the goal-setting theory and Job Demands-Resources Model (Lin, Xie, Wang & Wei, 2016), as well as the current research results and Partial Least Square (PLS) SEM model research method, the researchers constructed a research model (Figure 1). The purpose is to investigate further the relationship between performance pressure and workplace anxiety, emotional exhaustion, teaching and research performance, and its mechanism.

Figure 1: Research Model



3.2 Sampling and Data Collection

Public undergraduate universities of Sichuan were selected as the sampling university because Sichuan is a central province in education on the country's fifth educational scale (Zhu, 2019). There are 39 public undergraduate universities in Sichuan Province (Liu, 2018a). Over ten years, universities in Sichuan Province have implemented the performance-related pay system and conducted standardized employee performance appraisals since October 1, 2010. Sichuan Province's university faculty, as the research object of performance appraisal, represent the national higher education system for desirable characteristics of performance appraisal at the higher education level.

As for the population of this research--the full-time instructors engaged in teaching and research work. The researchers obtained the number of full-time teachers from the official websites of relevant universities. In addition to 7 universities, the profiles of the other 29 universities show the number of full-time teachers. Since the number of full-time teachers has been kept organizationally confidential, and the number of full-time staff is relatively stable, the researchers adopted the data of the number of full-time teachers in each university in Sichuan province published in 2018 for these 7 universities. To date, there are 47,086 full-time teachers in public universities in Sichuan Province (Liu, 2018b). According to the calculation formula of Krejcie & Morgan (1970), when the desired confidence level is 0.95 and the confidence interval is 0.05, the required sample size is 384. Considering that it would not be possible to recover 100%, the researchers distributed the questionnaires up to 150% of the required sample size. It should be noted that the research object or the faculty were appraised last year. The researchers used one initial criterion for their participation in the study: willingness to respond to the questionnaire with their true feeling about the appraisal system.

In this research, 39 public universities in Sichuan province were divided into double-first-class universities and ordinary universities by a stratified sampling method. According to experts' consultation, two double first-class universities and seven ordinary universities were selected to carry out the investigation. The online survey was used for convenience flexibility in data collection. This type of survey is conducive to access to samples with different backgrounds at a lower cost, and reduces data input errors (Chen & Shen, 2018). The researchers distributed 65 to 70 questionnaires to each university through an online platform. A total of 600 questionnaires were distributed; 410 questionnaires were recovered and screened as valid at 407. The sample distribution is shown in Table 1.

Table 1: Sample Distribution Frequency

Variables	Items	Frequency	Percentage
Gender	Men	216	53.07
	Women	191	46.93
Age	Under the age of 34	111	27.27
	35 and 44	173	42.51
	45 to 54	90	22.11
	More than 55	33	8.11
Education background	Undergraduate and below	61	14.99
	Master	208	51.11
	PhD and above	138	33.91
	Within five years, 6-10 years	102 74	25.06 18.18

Working age	11 to 15 years	65	15.97
	16-20 years	66	16.22
	21 years or above	100	24.57
	Teaching Assistants and below	66	16.22
Title	Lecturer	169	41.52
	Associate professor	124	30.47
	Professor	48	11.79
	0-5%	56	13.76
Performance-related pay size	6% - 15%.	66	16.22
	16% - 30%.	102	25.06
	31% - 50%.	89	21.87
	51-69%	45	11.06
	More than 70%	49	12.04

3.2 Measuring Tools

The variables involved in this research include performance pressure, workplace anxiety, emotional exhaustion, teaching performance, research performance, and performance-related pay size. The scale design is based on the existing mature scale. In order to better suit this research, some items were modified through expert discussion. According to the research content, the researchers selected the performance pressure scale developed by Mitchell et al. (2018), and slightly adjusted it. The Workplace Anxiety Scale was the one developed by McCarthy, Trougakos & Cheng (2016). Job performance was measured by the scale developed in 2005 by Hu & Mo (2005) specifically for the work of college teachers. The Likert seven-level scale was used for all variables, from 1 to 7 indicating "completely inconsistent" to "completely consistent," respectively. After the practice of Du (2009), the performance-related pay size was measured by one question: "What is the proportion of your performance-related pay in your total income last year?" Please choose one option according to the following criteria: (1) 0-5%, (2) 6-15%, (3) 16-30%, (4) 31-50%, (5) 51-69%, and (6) more than 70%. (See Appendix 2 for the measurement items.)

4. Data Statistics and Analysis

4.1 Control and Test of Common Method Deviation

In order to avoid common method deviation, all responses to the questionnaire in this study were filled in anonymously (Zhou & Long, 2004). In statistics, this research adopted Harman's one-factor method to test common method deviation. The variance contribution of the first principal component was 31.367%, indicating that there was no serious common method bias in the questionnaire data.

4.2 Scale Reliability and Validity Test

Since all scales in this study were mature scales, confirmatory analysis was used to test their reliability and validity.

First, the researchers adopted the suggestion of Chen & Shen (2018) that the scale's reliability was measured by the internal consistency of the items by testing the Composite Reliability and Cronbach's Alpha (α) coefficient. The Cronbach coefficients of the five latent scales were all above 0.86, and the combined reliability was higher than the base value of 0.70. The factor loadings of all items were above 0.7. The scale had good reliability. Specific indicators are shown in Table 2.

Table 2: Reliability Index of the Scale

Variables	Cronbach's Alpha (α)	Combination Reliability (C.R)	Factor Loading	Items
PP	0.86	0.90	0.83	PP1
			0.88	PP2
			0.89	PP3
			0.74	PP4
WA	0.94	0.95	0.78	WA1
			0.84	WA2
			0.88	WA3
			0.83	WA4
			0.85	WA5
			0.79	WA6
			0.86	WA7
			0.85	WA8
EE	0.94	0.95	0.88	EE1
			0.92	EE2
			0.90	EE3
			0.91	EE4
			0.89	EE5
TP	0.91	0.93	0.73	JP8
			0.87	JP9
			0.92	JP10
			0.91	JP11
			0.83	JP12
			0.85	JP13
			0.83	JP14
			0.90	JP15
RP	0.92	0.94	0.87	JP16
			0.80	JP17
			0.82	JP18

The main indexes of the questionnaire validity are convergence validity and discriminative validity. The Average Variance Extracted amount (AVE) must be greater

than 0.5. The square root of the AVE value must be greater than the correlation coefficients of other latent variables (Peng & Lai, 2012). In this research, the average extraction variation (AVE) of the five scales were 0.697, 0.702, 0.717, 0.728, and 0.806, respectively, which were all higher than the baseline value of 0.50. The square roots of AVE were all greater than the correlation coefficients between latent variables, indicating that the scale had good discriminative validity. See Table 3 for specific data.

Table 3: Correlation Matrix of Latent Variables and Square Root of AVE

	WA	PP	RP	TP	EE
WA	0.835				
PP	0.702	0.838			
RP	0.098	0.1	0.847		
TP	0.133	0.211	0.462	0.853	
EE	0.493	0.473	0.013	0.075	0.898

Note: The elements on the diagonal represent the square root of AVE and the other elements represent the correlation coefficients between latent variables.

The variable cross load table was also constructed in this study. The load values of all 28 item loadings in the set latent variables were higher than those in other latent variables (see Appendix 1 for the table of item loadings and cross loadings), which further proved that the scale had good convergence validity and discriminative validity (Gefen, Straub & Boudreau, 2000).

4.3 Variable Description Statistical Analysis

The variable description statistical analysis is shown in Table 4 below.

Table 4: Variable Description Statistical Analysis

Variables	Samples	Minimum value	Maximum value	Mean	Standard deviation
PP	407	1	7	4.62	1.11
WA	407	1	7	4.43	1.22
EE	407	1	7	4.18	1.24
TP	407	1	7	5.12	0.96
RP	407	1	7	4.23	1.13

Statistically speaking, the self-rated performance pressure, workplace anxiety, and teachers' emotional exhaustion in public universities in China are all higher than the

median of 4, and the mean value of performance pressure is the highest, reaching 4.62. Teachers' self-rated teaching performance is much higher than scientific research performance, and the standard deviation is rather small.

4.4 Evaluation of Prediction Ability of the Model

In the PLS-SEM model evaluation, the explainable variation (R^2) of the endogenous structure was used to represent the explanatory degree of the independent variable of the current model to the dependent variable variation, the Stone-Geisser's Q^2 was used to represent the prediction correlation of the model, and the calculated goodness of fit is used to characterize the relationship between the quality of all measurement models and the quality of all structural models (Lin, Xie, Wang & Wei, 2016), where $GoF_{small} = 0.1$, $GoF_{medium} = 0.25$, and $GoF_{large} = 0.36$ (Tenenhaus, Esposito Vinzi, Chatelin & Lauro, 2005). In this research, the calculated goodness of fit (GoF) value is 0.386, indicating that the model has high goodness of fit (Wetzels, Odekerken-Schroder & Van Oppen, 2009). Relevant indicators are shown in Table 5.

Table 5: Index Data of Model Prediction Ability Evaluation

Variable	R^2	Communality
WA	0.493	0.609
PP*		0.501
PRP*		1
RP	0.023	0.597
TP	0.103	0.591
EE	0.275	0.697

Note*: In the model of this study, PP is the independent variable and PRP is the regulating variable. They're all exogenous variables without R^2 .

4.5 Hypothesis Verification

In this study, Smart-PLS bootstrapping calculation was used to verify the research hypotheses. The results are shown in Table 6.

Table 6: Hypothesis Testing Results of the Model

Hypotheses	The paths	Path coefficient	T	Confidence interval		Results
				0.025	0.975	
Hypothesis 1: Performance pressure positively affects workplace anxiety.	PP -> WA	0.702	19.739	0.633	0.772	Support

Hypotheses	The paths	Path coefficient	T	Confidence interval		Results
				0.025	0.975	
Hypothesis 2: Performance pressure positively affects emotional exhaustion	PP -> EE	0.249	2.864	0.067	0.406	Support
Hypothesis 3: Performance pressure positively affects teaching performance.	PP -> TP	0.306	5.329	0.194	0.419	Support
Hypothesis 4: Performance pressure positively impacts research performance.	PP -> RP	0.125	1.412	0.082	0.258	Does not support
Hypothesis 5: Workplace anxiety positively affects emotional exhaustion.	WA -> EE	0.318	3.843	0.159	0.486	Support
H6: Emotional exhaustion negatively affects teaching performance.	EE -> TP	0.225	3.497	0.351	0.094	Support
H7 Emotional exhaustion negatively affects research performance.	EE -> RP	0.038	0.421	0.189	0.157	Does not support
H8: Workplace anxiety and emotional exhaustion relate to performance pressure and teaching performance	PP -> WA -> EE -> TP	0.05	2.601	0.094	0.018	Support
H9: Workplace anxiety and emotional exhaustion relate to performance pressure and research performance.	PP -> WA -> EE -> RP	0.008	0.394	0.046	0.041	Does not support
H10: Performance-related pay has an effect on the relationship between performance pressure and teaching performance.	Moderating effect 1 -> TP	0.064	1.929	0.041	0.119	Does not support

Hypotheses	The paths	Path coefficient	T	Confidence interval		Results
				0.025	0.975	
H11: Performance-related pay has an effect on the relationship between performance pressure and research performance.	Regulatory effect 2 -> RP	0.05	0.846	0.123	0.096	Does not support

5. Research Conclusions and Discussion

Based on the goal-setting theory and job demand-resource model, the researchers adopted smart-PLS3.3 to analyze the survey data of 407 university teachers by introducing workplace anxiety and emotional exhaustion as mediating variables and performance-related pay size as moderating variables. The research finds that the influence of performance pressure on teaching performance is significantly negatively and indirectly influenced by teachers' workplace anxiety and emotional exhaustion. In other words, performance pressure can promote teachers' teaching performance and trigger teachers' workplace anxiety and emotional exhaustion, which can offset the positive promoting effect of performance pressure on teaching performance to a certain extent. Performance-related pay size has no significant moderating effect on the relationship between performance pressure, teaching performance, and workplace anxiety. These conclusions partly support the original idea of this research.

5.1 Performance pressure positively impacts university teachers' workplace anxiety, emotional exhaustion, and teaching performance but has no predictive effect on research performance. Performance pressure is one of the characteristics of performance appraisal and is also a typical concern of teachers with performance appraisal in universities. Exploring its influence on teaching and research performance will not only help to deepen the theory of performance appraisal further but also help to improve the practice of performance appraisal in universities. This research found that performance pressure positively affects teaching performance, workplace anxiety, and emotional exhaustion of university teachers. This conclusion supports previous research results that performance pressure can improve employee task performance (Bu, 2013). However, it can also lead to workplace anxiety (Li, Wang, Zhu & Zhan, 2018) and emotional exhaustion (Jia & Lin, 2013; McCarthy et al., 2016). Regarding this "double-edged sword" effect, Mitchell, Greenbaum, Vogel, Mawritz & Keating (2019) proposed that performance pressure is a dynamic work pressure source. Individuals' different evaluations of pressure sources will produce different coping styles. Suppose performance pressure is evaluated as a challenge, individuals tend to focus on the potential positive results of high performance, such as promotion and salary increases. Such a focus will trigger individuals to turn their

attention to the opportunity to complete tasks more effectively and efficiently, stimulate exploration and learning, and promote work performance. However, when performance pressure is evaluated as a threat, individuals tend to focus on the difficulty of improving performance and the possible negative consequences while trying to meet performance requirements. The threat consumes individual self-resources and ultimately leads to individual negative behaviors.

As for why performance pressure can affect the teaching performance of university teachers but has no predictive effect on the research performance, the researchers this study considered that scientific research has its own academic standing for teachers' ability, quality, and technical level. According to the goal-setting theory, goal-setting does not necessarily improve the employees' work performance. Only when individuals strongly focus on goals and have the knowledge and the ability to achieve the goals. Goal-setting is directly proportional to performance (Locke & Latham, 2006). At present, the scientific research ability of some Chinese university teachers still needs improvement. At the same time, scientific research requires more innovation and cooperation, while performance pressure has been proved to have a destructive effect on colleague relationships in organizations and evaluative performance appraisal negatively affects employees' innovation performance (Qiu, 2016).

5.2 Workplace anxiety positively affects emotional exhaustion and negatively affects teaching performance but has no significant predictive effect on research performance. Workplace anxiety is often accompanied by emotional exhaustion, which leads to problems, such as job dissatisfaction and absenteeism (Xu & Li, 2019). Numerous studies have shown that workplace anxiety can harm employee performance, but there is no consensus on this conclusion. Zhang, Powell & Bonaccio (2021) found that the correlation between employee anxiety and job performance was close to zero in interview responses. The correlation between workplace anxiety and job performance in assessment was also close to zero. That is, anxious employees performed as well as their less anxious colleagues. In this research, the influence of workplace anxiety on university teachers' job performance was further detailed in that workplace anxiety has a significant negative effect on teaching performance. However, the prediction effect on scientific research performance was not significant. This could stem from the subjects' reported performance on research work significantly lower than teaching performance, which was consistent with the characteristics of teachers' performance in Chinese universities. The result indicated that universities have been under tremendous pressure on the performance of teachers' scientific research work (Li & Li, 2019). In this context, no matter whether they were anxious or exhausted, teachers perceived their research performance as not high enough, and the survey revealed no significant effect of other factors on research performance.

5.3 Workplace anxiety and emotional exhaustion have suppressing effects on the relationship between performance pressure and teaching performance. This study found that performance pressure positively impacts the teaching performance of university teachers, and the path coefficient is 0.306. Performance pressure significantly influences teaching performance through workplace anxiety and emotional exhaustion, but the path coefficient is -0.05. That indicates that in the path of performance pressure— workplace anxiety— emotional exhaustion — teaching performance, workplace anxiety, and emotional exhaustion have a covering effect on the impact of performance pressure on teaching performance (Wen & Ye, 2014). On the one hand, the existence of the "suppressing effects " of workplace anxiety and emotional exhaustion proves an indirect mechanism in that performance pressure influences teaching performance through workplace anxiety and emotional exhaustion. This finding responds to the study by McCarthy, Trougakos & Cheng (2016) that found emotional exhaustion mediating the relationship between workplace anxiety and job performance. It also indicates that there are mediating variables with greater effects between performance pressure and teaching work performance. There are mediating mechanisms with greater effects that have not been included in this research, and the issues need further investigation. These would provide a reference for setting goal performance tasks and teacher development support for university teachers.

5.4 Performance-related pay has no significant moderating effect on the relationship between performance pressure, teaching work performance, and research performance. In this research, the influence of performance-related pay is different from that reported in the previous studies. To the researchers, there could be two possible reasons. The research object of this study was the teachers in universities where the knowledge workers pay more attention to mental health and self-value realization ways of incentive. They pay little attention to material incentives (Song & Li, 2021). Their intrinsic motivation and interest tend to influence their work enthusiasm in the job. In addition, the research samples are all from Chinese universities of which the performance-related pay size remains roughly the same.

6. Closing Points and Suggestions

This research explored the impact of performance pressure on the teaching and research task performance of university teachers. Empirical data were collected to verify different impacts of performance pressure on teaching and research performance. The results revealed the negative impact of performance pressure on teachers' task performance through workplace anxiety and emotional exhaustion. However, the effect of performance-related pay size was indistinctive in the relationship between performance pressure and university teachers' task performance and workplace anxiety. It was expected that the obtained findings would enrich the research on the influence mechanism

of performance pressure in universities with implications for the current performance management practice.

Based on the research findings, the researchers would like to suggest the following:

First, it is necessary to reasonably make performance assessment indicators and control the performance pressure level. The workload and quality requirements of teaching and scientific research should be reasonably determined according to the nature of the school, the development goals, the teachers' ability, and the characteristics of disciplines and specialties. It is also necessary to strengthen training to improve teachers' scientific research ability and their overall working performance.

Secondly, it is necessary to identify and monitor performance pressure sources. As far as possible, universities need to assign teachers in their proper position and let them "make the best." It is not appropriate to "kidnap" teachers to participate in all kinds of work, resulting in the "no effort to please [in Chinese expression]" phenomenon—meaning using a lot of energy for a little result, and the negative effects of workplace anxiety and emotional exhaustion.

Thirdly, it is necessary to care about teachers' mental health status. Universities need to evaluate teachers' occupational stress levels and investigate their mental health status from time to time. Furthermore, provision of counseling and consultation can help prevent teachers' health damage caused by workplace anxiety and emotional exhaustion.

Finally, authorities concerned need to scientifically understand performance appraisal and performance management as two separate entities. Importantly, performance-related pay should not be treated as the only incentive.

There are also some limitations in this research. First of all, the researchers investigated only the mediating role of workplace anxiety and job burnout in the relationship between performance pressure and teachers' job performance, but did not include the influence of different performance pressure levels. Besides, the reasonable extent of performance pressure still needs to be further verified. Secondly, the research samples were taken from only nine of 39 public universities in Sichuan Province of China. Future research could include more types of colleges, and if possible cross-cultural aspects of university staff performance appraisal systems. Such investigation could generate findings in support of the performance appraisal theory. Thirdly, individual personality traits could have a particular impact on work anxiety and burnout—the issue not included in this research. Specific relevant variables should be investigated for a conclusive picture of the impact of performance pressure and personality traits on anxiety and burnout to benefit decision-makers in the areas of performance appraisal and related issues.

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8. References

- Allen, T. D., Herst, D. E., Bruck, C. S. & Sutton, M. (2000). Consequences associated with work-to-family conflict: A review and agenda for future research. *Journal of Occupational Health Psychology*, 5(2), 278-308. doi 10.1037/1076-8998.5.2.278
- Andrew, B. & Zhang, W. (2009). The introduction of performance management into England's primary schools: Historical, theoretical and practical perspectives. *Chinese Journal of University Education Science*, 2009, (01), 84-91.
- Bakker, A. B. & Demerouti, E. (2007). The job demands-resources model: State of the art. *Journal of Managerial Psychology*, 2007, 22(3), 20. doi 10.1108/02683940710733115
- Bakker, A. B., Demerouti, E. & Verbeke, W. (2004). Using the job demands-resources model to predict burnout and performance. *Human Resource Management*, 2004, 43(1), 83-104. doi 10.1002/hrm.20004
- Bakker, A. B., Van Veldhoven, M. & Xanthopoulou, D. (2010). Beyond the demand-control model thriving on high job demands and resources. *Journal of Personnel Psychology*, 2010, 9(1), 3-16. doi 10.1027/1866-5888/a000006
- Bowman, J. S. (2010). The success of failure: The paradox of performance-related pay. *Review of Public Personnel Administration*, 2010, 30(1), 70-88. doi 10.1177/0734371x09351824
- Bu, M. (2013). The Relationship between Performance Pressure, Learning Willingness and Employee Performance Improvement. A Doctoral Thesis. Dongbei University of Finance and Economics, China.
- Chen, X. & Shen, W. (2018). Empirical Methods in Organization and Management Research. Beijing: Peking University Press.
- Chen, J. L. & Yang, L. (2017). Performance pressure: Concept definition, formation source and measurement. *Chinese Journal of Bohai University (Philosophy & Social Science Edition)*, 2017, 33(5), 76-80. doi 10.13831/j.carol carroll nki. Issn 1672-8254.2017.05.016
- Demerouti, E., Bakker, A. B., Nachreiner, F. & Schaufeli, W. B. (2001). The job demands-resources model of burnout. *Journal of Applied Psychology*, 2001, 86(3), 499-512. doi 10.1037/0021-9010.86.3.499
- Du, X. (2009). Pay for performance: A double-edged sword. *Chinese Journal of Nankai Business Review*, 2009, 12(03), 117-124, 134.
- Eisenberger, R. & Aselage, J. (2009). Incremental effects of reward on experienced performance pressure: positive outcomes for intrinsic interest and creativity. *Journal of Organizational Behavior*, 2009, 30(1), 95-117. doi 10.1002/job.543

- Enzmann, D., Schaufeli, W. B., Janssen, P. & Rozeman, A. (1998). Dimensionality and validity of the burnout measure. *Journal of Occupational and Organizational Psychology*, 1998, 71, 331-351. doi 10.1111/j.2044-8325.1998.tb00680.x
- Fullerton, S. (1983). Burnout from tedium to personal growth--pines,a, aronson,e. *Children and Youth Services Review*, 1983, 5(3), 305-307. <Go to ISI>://WOS:A1983RN69100010.
- Gao, Y., Zhao, J. Q., Zhao, Y. Y., Zhao, C. X., Shi, J. M. & Li, J. G. (2022). The effect of occupational stress on anxiety of nursing staff in a third-grade general hospital and mediating effect of job burnout. *Chinese Journal of Industrial Hygiene and Occupational Diseases*, 2022, 40(2), 127-131. doi 10.3760/cma.j.cn121094-20210224-00106
- Gardner, H. K. (2012). Performance pressure as a double-edged sword: Enhancing team motivation but undermining the use of team knowledge. *Administrative Science Quarterly*, 2012, 57(1), 1-46. doi 10.1177/0001839212446454
- Gefen, D., Straub, D. W. & Boudreau, M. (2000). Structural equation modeling and regression: Guidelines for research practice. *Communications of the Association for Information Systems*, 2000, 4(7), 1-70. doi 10.17705/1CAIS.00407
- Gerhart, B., Rynes, S. L. & Fulmer, I. S. (2009). Pay and performance: Individuals, groups, and executives. *Academy of Management Annals*, 2009, 3, 251-315. doi 10.1080/19416520903047269
- Godard, J. (2001). High performance and the transformation of work? The implications of alternative work practices for the experience and outcomes of work. *Industrial & Labor Relations Review*, 2001, 54(4), 776-805. doi 10.2307/2696112
- Green, C. & Heywood, J. S. (2008). Does performance-related pay increase job satisfaction? *Economica*, 2008, 75(300), 710-728. doi 10.1111/j.1468-0335.2007.00649.x
- Green, K. W., Wu, C., Whitten, D. & Medlin, B. (2006). The impact of strategic human resource management on firm performance and HR professionals' work attitude and work performance. *International Journal of Human Resource Management*, 2006, 17(4), 559-579. doi 10.1080/09585190600581279
- Hu, J. & Mo, Y. (2005). A research on organizational commitment and job performance of university teachers. *Chinese Journal of Zhejiang Sci-Tech University (Social Sciences Edition)*, 2005, (4), 420-425+429.
- Jeffrey, A. M. (2017). 40 Must-Read Theories for Management and Organization Studies. Peking: Peking University Press.
- Jia, X. & Lin C. (2013). The relationship between job stress, coping style and job burnout of newly promoted universities teachers. *Journal of Psychology and Behavior*, 2013, 11(6), 759-764.
- Kallio, K. M. & Kallio, T. J. (2014). Management-by-results and performance measurement in universities—implications for work motivation. *Studies in Higher Education*, 2014, 39(4), 574-589. doi 10.1080/03075079.2012.709497
- Krejcie, R. V. & Morgan, D. W. (1970). Determining sample size for research activities. *Educational and Psychological Measurement*, 1970, 30(3), 607-610. doi 10.1177/001316447003000308
- Latthasaksiri, N. (2021). Stress management at workplace in challenging situations. *RICE Journal of Creative Entrepreneurship and Management*, 2021, 2(3), 31-38.

doi 10.14456/rjcm.2021.31.

Leiter, M. P. (1991). Coping patterns as predictors of burnout: The function of control and escapist coping patterns. *Journal of Organizational Behavior*, 1991, 12(2), 123- 144.
doi 10.1002/job.4030120205

Li, C., Lin H. & Su Y. (2018). Empirical research on the relationship between performance appraisal, knowledge sharing and scientific research innovation of university teachers. *Chinese Journal of Modern Educational Management*, 2018, (9), 56-62.

Li, C.P. & Shi, K. (2003). The influence of distributive justice and procedural justice on job burnout. *Chinese Journal of Acta Psychologica Sinica*, 2003, (5), 677-684.

Li, Z., Wang, Z., Zhu, Z. & Zhan, X. (2018). The impact of employee performance pressure on pro-organizational non-ethical behavior based on emotional cognitive evaluation. *Chinese Journal of Management*, 2018, 15(3), 358-365.

Li, A. & Zhang, Q. (2006). Goal setting theory and human resource Management. *Journal of Chongqing University (Social Science edition)*, 2006, (4), 64-70.

Liao, J., Wen, P. & Wang, J. (2010). From accounting to pointing out the maze: The strategic shift of performance management. *Chinese Journal of Human Resources Development in China*, 2010, (2), 67-70.

Lin, P. & Li, J. (2019). The effects of university teachers' research stress on research performance: The mediating and moderating roles of job satisfaction and emotional intelligence. *Chinese Journal of Forum on Education and Culture*, 2019, 11(1), 130-131.

Lin, R., Xie, Z., Wang, X. & Wei, J. (2016). Institutional pressure, information security legalization and organizational performance: An empirical study based on Chinese enterprises. *Chinese Journal of Management World*, 2016, (2), 112-127, 188.

Liu, T. (Ed). (2018a). *I, Number of Schools*. Sichuan Education Yearbook. Sichuan: Sichuan Education Press, 45.

Liu, T. (Ed). (2018b). *VI, Number of Full-time Faculty*. Sichuan: Sichuan Education Press, 50.

Locke, E. A. & Latham, G. P. (2006). New directions in goal-setting theory. *Current Directions in Psychological Science*, 2006, 15(5), 265-268. doi 10.1111/j.1467-8721.2006.00449.x

Locke, E. A., Saari, L. M., Shaw, K. N. & Latham, G. P. (1981). Goal setting and task-performance--1969-1980. *Psychological Bulletin*, 1981, 90(1), 125-152. doi 10.1037/0033-2909.90.1.125

Ma, F., Zhang, Q. & Yang, L. (2020). Research on the mechanism of college teachers' job burnout based on JD-R model: Taking D college as an example. *Chinese Journal of Management Case Studies*, 2020, 13(03), 302-314.

Ma, J., & Shan, M. (2013). The inverted “U-shape” Performance pay pattern in research-oriented universities: The impact and optimization of hierarchical pay structure. *Chinese Journal of Shanghai University (Social Sciences Edition)*, 2013, 30(1), 111-124.

Maslach, C., Schaufeli, W. B. & Leiter, M. P. (2001). Job burnout. *Annual Review of Psychology*, 2001, 52, 397-422. doi 10.1146/annurev.psych.52.1.397

McCarthy, J. M., Trougakos, J. P. & Cheng, B. H. (2016). Are anxious workers less productive workers? It depends on the quality of social exchange. *Psychology*, 2016, 101(2), 279-291.
doi 10.1037/apl0000044

- Miner, J. B. (2003). The rated importance. Scientific validity, and practical usefulness of organizational behavior theories: A quantitative review. *Academy of Management Learning & Education*, 2003, 2(3), 250-268. doi 10.5465/amle.2003.10932132
- Ministry of Education, China (2012). Breaking the "Sci First" of College Papers and Establishing the Correct Evaluation Orientation. (Online).
[EB/OL]: <http://jyt.ah.gov.cn/public/7071/39920464.html>, May 11, 2022.
- Mitchell, M. S., Baer, M. D., Ambrose, M. L., Folger, R. & Palmer, N. F. (2018). Cheating under pressure: A self-protection model of workplace cheating behavior. *Journal of Applied Psychology*, 2018, 103(1), 54-73. doi 10.1037/apl0000254
- Mitchell, M. S., Greenbaum, R. L., Vogel, R. M., Mawritz, M. B. & Keating, D. J. (2019). Can you handle the pressure? The effect of performance pressure on stress appraisals, self-regulation, and behavior. *Academy of Management Journal*, 2019, 62(2), 531-552. doi 10.5465/amj.2016.0646
- Muris, P., Luermans, J., Merckelbach, H. & Mayer, B. (2000). "Danger is lurking everywhere". The relation between anxiety and threat perception abnormalities in normal children. *Journal of Behavior Therapy and Experimental Psychiatry*, 2000, 31(2), 123-136. doi 10.1016/s0005-7916(00)00016-1
- Peng, D. X. & Lai, F. (2012). Using partial least squares in operations management research: A practical guideline and summary of past research. *Journal of Operations Management*, 2012, 30(6), 467-480. doi 10.1016/j.jom.2012.06.002
- Qi, Y. & Wu, X. (2018a). Job requirements-resource model: An extension of theoretical and empirical research. *Chinese Journal of Beijing Normal University (Social Science Edition)*, 2018, (6), 28-36.
- Qi, Y., & Wu, X. (2018b). Job demands-resources model: The development of theoretical and empirical research. *Journal of Beijing Normal University (Social Sciences)*, 2018, (6), 28-36.
- Qiu, M. (2016). Research on the Influence Mechanism of Performance Appraisal Purpose on Employee Proactive Behavior and Innovation Performance. A Doctoral thesis. Huazhong University of Science and Technology, China.
- Schaufeli, W. B. & Bakker, A. B. (2004). Job demands, job resources, and their relationship with burnout and engagement: A multi-sample study. *Journal of Organizational Behavior*, 2004, 25(3), 293-315. doi 10.1002/job.248
- Song, W. & Li, X. (2021). Research on human resource management of knowledge workers -- taking university teachers as an example. *Chinese Journal of Marketing*, 2021, (4), 120-122.
- Taris, T. W. (2006). Is there a relationship between burnout and objective performance? A critical review of 16 studies. *Work & Stress*, 2006, 20(4), 316-334. doi 10.1080/02678370601065893
- Tenenhaus, M., Esposito Vinzi, V., Chatelin, Y. M. & Lauro, C. (2005). PLS path modelling. *Computational Statistics & Data Analysis*, 2005, 48, 159-205. doi 10.1016/j.csda.2004.03.005
- Ter Bogt, H. J. & Scapens, R. W. (2012). Performance management in universities: Effects of the transition to more quantitative measurement systems. *European Accounting Review*, 2012, 21(3), 451-497. doi 10.1080/09638180.2012.668323
- Wen, Z. L. & Ye, B. J. (2014). Different methods for testing moderated mediation models: competitors or backups? *Chinese Journal of Acta Psychologica Sinica*, 2014, 46(5), 714-726.

- Wetzels, M., Odekerken-Schroder, G. & Van Oppen, C. (2009). Using PLS path modeling for assessing hierarchical construct models: *Guidelines and Empirical Illustration. MIS Quarterly*, 2009, 33(1), 177-195. doi 10.2307/20650284
- Xie, Q, Wang, Z. & Hu, Y. (2019). Review and prospect: Visualization analysis of hot spots and frontier trends of performance management in domestic universities. *Chinese Journal of Contemporary Education Forum*, 2019, (4), 60-71.
- Xu, H. & Li, X. (2019). Research review and future prospects of workplace anxiety. *Chinese Journal of Leadership Science*, 2019, (4), 79-82.
- Zhang, I. Y., Powell, D. M. & Bonaccio, S. (2021). The role of fear of negative evaluation in interview anxiety and social-evaluative workplace anxiety. *International Journal of Selection and Assessment*, 2021, 30(2), 302-310. doi 10.1111/ijsa. 12365
- Zhang, J., Jiang, X. & Zhou, H. (2016). Research on partner selection of technological innovation alliance in strategic emerging industries: Empirical analysis based on PLS-SEM model. *Chinese Journal of Macroeconomics*, 2016, (5), 79-86, 159.
- Zhang, J., Nie, Q. & Wang, Z. (2020). The "double-edged sword" effect of leadership's high performance requirements on employee performance: From the perspective of stress cognitive evaluation theory. *Chinese Journal of South China Normal University (Social Science Edition)*, 2020, (6), 142-157, 192.
- Zheng, Q.Q., Chen, X. & Yang, W.W. (2021). Research on the status quo of job stress and job burnout of young teachers in colleges and universities in Guangdong Province. *Chinese Journal of Guangxi Normal University for Nationalities*, 2021, 38(3), 40-45.
- Zhou, H. & Long, L. (2004). Statistical test and control method of common method deviation. *Chinese Journal of Advances in Psychological Science*, 2004, (6), 942-950.
- Zhu, H. (2019). In the past 70 years, Sichuan education has undergone a historic change and has become a veritable education province. (Online). <http://www.sc.gov.cn/10462/10464/10797/2019/9/6/f812da4047f24405be158c7f84e33ebc.shtml>. (In Chinese), September 6, 2021.
- Zimmerman, B. J. & Kitsantas, A. (1996). Self-regulated learning of a motoric skill: The role of goal setting and self-monitoring. *Journal of Applied Sport Psychology*, 1996, 8(1), 60-75. doi 10.1080/10413209608406308
- Zu, W., Long, L., Zhao, H. & He, W. (2010). An empirical study on the impact of performance pay intensity on employee pay satisfaction. *Chinese Journal of Management*, 2010, 7(9), 1321-1328.

9. Appendix 1

Project Load and Cross Load Table

	WA	PP	PRP	RP	TP	EE
JP8	0.135	0.107	0.015	0.342	0.725	0.08
JP9	0.132	0.199	0.009	0.286	0.866	0.062
JP10	0.096	0.183	0.08	0.377	0.918	0.084
JP11	0.118	0.211	0.057	0.422	0.91	0.055

JP12	0.098	0.179	0.025	0.554	0.831	0.045
JP13	0.114	0.15	0.048	0.85	0.488	0.011
JP14	0.061	0.091	0.001	0.826	0.51	0.06
JP15	0.075	0.094	0.054	0.903	0.383	0.024
JP16	0.114	0.046	0.015	0.874	0.285	0.033
JP17	0.061	0.051	0.018	0.804	0.317	0.008
JP18	0.053	0.017	0.008	0.82	0.281	0.066
EE1	0.398	0.436	0.014	0.004	0.017	0.875
EE2	0.394	0.385	0.079	0.008	0.103	0.915
EE3	0.465	0.407	0.023	0.016	0.096	0.9
EE4	0.473	0.445	0.017	0.003	0.017	0.908
EE5	0.474	0.444	0.038	0.037	0.101	0.892
PP1	0.518	0.828	0.002	0.052	0.2	0.452
PP2	0.667	0.882	0.052	0.124	0.169	0.423
PP3	0.661	0.892	0.014	0.039	0.153	0.445
PP4	0.48	0.739	0.04	0.132	0.199	0.232
WA1	0.78	0.632	0.006	0.147	0.094	0.358
WA2	0.837	0.511	0.074	0.03	0.054	0.353
WA3	0.882	0.632	0.029	0.066	0.111	0.405
WA4	0.829	0.642	0.082	0.057	0.141	0.428
WA5	0.851	0.614	0.098	0.093	0.094	0.485
WA6	0.792	0.518	0.047	0.055	0.161	0.381
WA7	0.858	0.56	0.025	0.106	0.133	0.408
WA8	0.846	0.557	0.044	0.091	0.096	0.46

Note: The loads corresponding to latent variables are marked in bold.

10. Appendix 2

Data Collection Tools and Measurement Items		
Variables	Items	Source or basis
PP	The pressures for performance in my workplace have been high.	Mitchell et al. (2018)
	I feel that if I don't produce at high levels, my job will be at risk.	
	I feel tremendous pressure to produce results.	
	My workplace has felt like a results-driven environment.	

	<p>I am overwhelmed by thoughts of doing poorly at work.</p> <p>I'm worried that my work performance will be lower than that of others at work.</p> <p>I feel nervous and apprehensive about not being able to meet performance targets.</p> <p>I'm worried about not receiving a positive job performance evaluation.</p> <p>I often feel anxious that I will not be able to perform my job duties in the time allotted.</p> <p>I'm worried about whether others consider me to be a good employee for the job.</p> <p>I'm worried that I will not be able to successfully manage the demands of my job.</p> <p>Even when I try as hard as I can, I still feel worried about whether my job performance will be good enough.</p>	<p>McCarthy, Trogakos, & Cheng (2016)</p>
WA	<p>Work makes me feel exhausted.</p> <p>When I get up in the morning and have to face the work of the day, I feel very tired.</p> <p>Working all day is really stressful for me.</p> <p>Work makes me feel like I'm about to break down.</p> <p>I felt exhausted by the time I left work.</p>	
EE	<p>I always actively use teaching methods that can develop students' thinking ability and teach students the skills to distinguish the key points of the textbook.</p> <p>I always well prepare for class, and give the students sufficient homework and correct them carefully.</p>	
TP	<p>I always stake the initiative to enrich the content of the course, with a large amount of information of practical connection and appropriate examples, using advanced textbooks.</p> <p>I can fully mobilize the students' enthusiasm for the course learning, and the students have strong ability to solve practical problems.</p> <p>I am good at identifying the direction in the new information of the subject, and actively carry out the construction of new courses</p>	
	<p>I take the initiative to carry out scientific research exchange activities and often participate in academic conferences at home and abroad.</p> <p>I strive to make the scientific research results have good application prospects and can create social wealth and economic</p>	<p>Hu & Mo (2005)</p>

RP I always actively carry out research work and have a considerable number of high-level papers or treatises

I always put a lot of energy into scientific research and won a high level reward for my scientific research achievements.

I always take the initiative to take part in social work, have high-level social part-time jobs, and have social visibility.

I always take the initiative to participate in scientific research projects, and the number and level of scientific research projects were much higher than the average.

PRP What percentage of your total income is your performance-related pay last year?

Du (2009)