

# The Relationship Between Financial Stress and Job Performance in China: The Role of Work Engagement and Emotional Exhaustion

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**Purpose:** Economic pressure has become an important source of stress for employees. However, the conclusions regarding the relationship between financial stress and employees' work behavior are not consistent. The present study explored the relationship between financial stress and employee job performance with a Chinese sample and further explored how and when financial stress influenced job performance.

**Samples and Methods:** The present study investigated five distinct companies operating in diverse sectors using a convenience sampling technique. Three hundred and twenty-one employees were recruited. Financial Stress, Job Performance, Work Engagement, and Emotional Exhaustion were measured for this investigation. The mediation effect was tested using a four-step procedure. The analysis of the moderated mediation model was performed using Hayes's PROCESS macro for SPSS.

**Results:** The results found financial stress was positively related to job performance, and work engagement mediated the positive relationship between financial stress and job performance. In addition, emotional exhaustion moderated the mediating process between financial stress, work engagement, and job performance. Specifically, the beneficial effect of financial stress on work engagement disappeared when emotional exhaustion was high. Besides, a high level of emotional exhaustion weakened the positive relationship between work engagement and job performance.

**Conclusion:** Financial stress plays a motivating role in employees' job performance in China. Work engagement is a key factor between financial stress and job performance. Notably, the positive effect of financial stress and work engagement on job performance is contingent upon the individual's level of emotional exhaustion. These results might explain the inconsistency of the effect of financial stress in previous research. Moreover, this finding suggests that emotional factors may not only be the result of stress but can also influence its effects.

**Keywords:** financial stress, job performance, work engagement, emotional exhaustion, moderated mediation model

## Introduction

The relationship between employees' stress and individual well-being and work behaviors has long been a focus in psychology.<sup>1,2</sup> With the slowdown in global economic growth, financial stress is getting more and more attention recently.<sup>3,4</sup> The national surveys consistently list money, work, and the economy as the top three stressors over each of the past several years.<sup>5</sup> Nearly 72% of adults report feeling stressed about money at least some of the time.<sup>5</sup> In China, researchers also found that financial stress has become the second major stress for Chinese employees.<sup>6,7</sup>

Financial stress is defined as an individual's perception of financial inadequacy and her/his financial concerns and worries.<sup>8</sup> It plays a pivotal role in individuals' lives.<sup>9</sup> In addition to psychological well-being, financial stress can also affect behaviour in the workplace.<sup>10,11</sup> However, findings regarding the relationships between financial stress and outcomes in the workplace are less conclusive in the previous literature. On the one hand, some research has found that financial stress is linked with less work productivity,<sup>12,13</sup> less pay satisfaction, and weaker organizational commitment.<sup>9</sup> On the other hand, some research found

a positive relationship between financial stress and job performance. For instance, Wei et al concluded that financial stress is the pushing force that puts Chinese employees to work and even causes employees to overwork.<sup>14</sup> Studies also found that financial stress was positively related to both task performance and contextual performance of Chinese employees.<sup>15,16</sup> The mixed findings in the literature may be attributed to variations in research times, dependent variables, and cultural differences among the studied populations. Therefore, further research is warranted to gain an accurate understanding of the complex relationship between financial stress and work outcomes.

In addition, previous research has primarily examined the direct relationship between financial stress and work outcomes.<sup>9</sup> However, the underlying mechanisms, including the pathways (mediating processes) through which financial stress affects job performance and the conditions (moderating factors) under which this relationship is observed, are not fully understood. Recently, studies have begun to examine these mechanisms, but the focus has largely been on moderating factors. For example, Ma et al explored the moderating role of mental toughness between financial stress and job performance.<sup>15</sup> Similarly, Zhao et al explored how family supportive supervisor behavior moderates the relationship between family financial pressure and job crafting.<sup>17</sup>

While previous studies have largely examined the moderating role of individual traits such as mental toughness and work values, there has been limited exploration of the influence of emotional factors. Unlike other personality traits, emotional states are not only more closely associated with job-related aspects of individual behavior but also have a significant impact on how individuals cope with stress.<sup>18,19</sup> Therefore, the present study aims to clarify the relationship between financial stress and job performance and contribute to a deeper understanding of the mechanisms underlying the relationship by introducing a moderated mediation model.

## The Relationship Between Financial Stress and Job Performance

Cavanaugh et al have divided work stress into challenge-related stress (challenge stressor) and hindrance-related stress (hindrance stressor).<sup>20</sup> The results of existing empirical studies support that when a stressor is perceived as a challenging stressor such as work stress associated with challenging job demands, it will serve as a motivating factor, and individuals are more likely to use problem-focused strategies to cope with the stressor.<sup>15,16,21</sup> When a stressor is perceived as a hindrance stressor, it is more likely to be a risk factor, and individuals are more likely to use emotion-focused strategies to cope with it.<sup>22</sup> That is, challenge stressors yield positive outcomes and gains for individuals, while hindrance stressors do not contribute to such gains.

As for financial stress, it is a source of work stress and scholars have argued that financial stress is more likely a challenge stressor for employees, which elicit active problem-focused coping style.<sup>23,24</sup> There has been evidence that people who have financially stressful experiences are more likely to engage in problem-focused strategies. For example, consumers with financial stress, such as having high-cost debt, trouble with financial management, or bad credit card behavior, were more likely to use problem-focused strategies.<sup>25</sup> In line with this, Heo et al found that adults make use of financial technology, such as mobile payment to cope with financial stress.<sup>26</sup> Zhao et al found that family financial pressure promoted employees' active coping and further encouraged job crafting.<sup>17</sup>

In addition, improving job performance might be a coping strategy when employees deal with financial stress. Previous study has indicated that employees see their jobs as a means to gain financial support for their family.<sup>27</sup> Job performance in the present study refers to in-role job performance based on activities related to formal tasks, duties, and responsibilities.<sup>28</sup> The job performance in this study might be a way to increase employee income, therefore, it might alleviate financial stress to a certain extent.

Based on the above reasoning, we proposed the following hypothesis.

Hypothesis 1: Financial stress is positively related to employees' job performance.

## The Mediating Role of Work Engagement

Some studies have shown that financial stress was positively related to employees' job performance. However, a more important question is why financial stress could have shown a positive effect on employees. Therefore, the second aim of our study is to explore the mechanism between financial stress and job performance.

According to the Job Demands-Resources model, challenge stressors can not only trigger the energy exhaustion process but also stimulate a motivation-driven process.<sup>29</sup> From this perspective, financial stress appraised as a challenge stressor, will trigger a person to enter a state of motivation to utilize all the resources available to them. Work engagement was defined as a positive, fulfilling, affective-motivational state, and is characterized by vigor (employees feel full of physical energy), dedication (employees are enthusiastic about the content of their work and the things they do), and absorption (employees are so immersed in their work activities that time seems to fly).<sup>23</sup> It reflects a state of investment and motivation in work. Existing research suggests that employees can cope well with a certain level of work pressure, which is expected to lead to more effort and thus increased work engagement.<sup>30</sup> According to Mitchell et al, employees who focus on attributes of performance pressure that are beneficial (ie challenge appraisal) fuel their internal self-resources (ie energy), which, in turn, enhances their engagement.<sup>31</sup> In line with this, Kundi et al found that performance pressure appraised as challenge stressor enhanced employees' work engagement.<sup>32</sup> According to these perspectives, financial stress might also promote employees' work engagement.

A huge amount of research has examined the positive role of work engagement in job performance. For example, a quantitative review about work engagement showed that work engagement was positively related to task and contextual performance.<sup>33</sup> Li et al examined the theoretical model to explain work engagement's effect on job performance in a sample of 198 R&D staff in China.<sup>34</sup> The results showed that work engagement was positively related to R&D staff's job performance in high-tech enterprises. Lee et al examined the mediating role of work engagement in the relationship between self-reported person-job fit and job performance and found that high levels of work engagement positively related to job performance for employees from the service sectors.<sup>35</sup>

Based on the above reasoning, we proposed the following hypothesis.

Hypothesis 2: Work engagement mediates the relationship between financial stress and job performance.

## The Moderating Role of Emotional Exhaustion

Although financial stress might be positively related to job performance via work engagement, individuals who are financially stressed might not always experience a higher level of work engagement and ultimately achieve high job performance. Thus, it is important to explore the factors that may moderate the mediating mechanism among financial stress, work engagement, and job performance. The Job Demands-Resources (JD-R) model indicates that job demands and job resources activate two different underlying psychological processes.<sup>36</sup> Specifically, demanding jobs exhaust employees' mental and physical resources and may therefore lead to the depletion of energy (ie a state of exhaustion). While, job resources have motivational potential and lead to high work engagement. According to job demands-resources model of employee engagement and burnout, challenge stressors are assumed to activate two process including engagement and exhaustion.<sup>24</sup> The JD-R model further proposes that the Interactions between these two process is important for the development of work outcomes. As for financial stress, it might evoke work engagement and exhaustion, we will examine the interaction effect between them. Specifically, when emotional strain reaches a high level, the individual becomes emotionally exhausted, whether the promoting mechanism among financial stress, work engagement, and job performance can be maintained.

Emotional exhaustion refers to feelings of being overextended and exhausted by one's work,<sup>37</sup> which is associated with several concurrent or resultant symptoms of anxiety, fatigue, psychosomatic complaints, and work-related depression.<sup>38</sup> It is a state of being that has a profound tendency to alter how an individual responds to certain environmental demands and constraints. When an individual is emotionally exhausted, his or her performance and work engagement will suffer.<sup>24,39,40</sup> Regarding the moderating role of emotional exhaustion, empirical studies found that emotional exhaustion is a risk factor. For instance, Baba et al found that when individuals experience high emotional exhaustion, the positive effect of proactive personality on performance disappears.<sup>38</sup> Additionally, recent research has suggested that employees' emotional exhaustion weakened the positive relationship between goal-focused leadership and leader-member exchange and ultimately reduced task performance.<sup>41</sup> However, to the best of our knowledge, no previous studies have examined whether emotional exhaustion damages the positive effects of financial stress on work engagement and job performance.

As argued, emotional exhaustion is a loss of resources.<sup>41</sup> According to the resource investment principle of COR theory, people invest resources to protect against resource loss.<sup>42</sup> In other words, to reduce emotional exhaustion, people actively engage in coping efforts, thus investing further resources. Therefore, individuals with high emotional exhaustion might not have enough energy and effort to invest when encountering financial stress. From this perspective, emotional exhaustion seemed likely to damage the positive effect of financial stress on work engagement and job performance. In addition, the Burnout Theory along with some empirical corroboration suggested that emotional exhaustion can indeed influence the efforts that an individual makes toward improving his or her performance.<sup>43,44</sup> Consequently, the present study suggested that when individuals experience a high level of emotional exhaustion, they will not have sufficient resources to stay engaged, thereby reducing job performance. Based on the above reasoning, we proposed the following hypothesis.

Hypothesis 3: Emotional exhaustion would moderate the association between financial stress and job performance, financial stress and work engagement as well as work engagement and job performance. Specifically, the positive relationships among financial stress, work engagement, and job performance will become weaker when emotional exhaustion is high.

## The Present Study

Taken together, the aims of the current study are threefold. First, the study examined the relationship between financial stress and Chinese employees' job performance. Second, the current study tested whether work engagement would mediate the relationship between financial stress and job performance. Third, the present study tested whether emotional exhaustion would moderate the effect of financial stress on work engagement and job performance, and the effect of work engagement on job performance. A moderated mediation model is presented in Figure 1.

## Methods

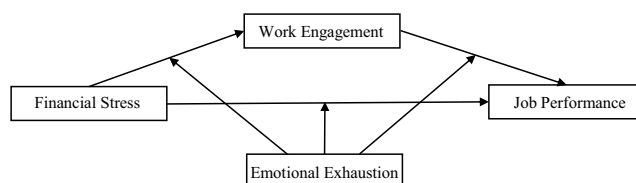
### Participants

Three hundred and twenty-one employees were recruited from five companies in Qingdao, Mainland China. The present study investigates five distinct companies operating in diverse sectors, namely, an information technology company, a rubber service company, a robotics company, a property management company, and an investment management company. These selected companies represent a range of industries, providing a relatively comprehensive basis for examining various organizational characteristics, performance metrics, and management practices. The survey returned a total of 309 valid questionnaire participants, the effective response rate of the questionnaire reached 96.2%. Among the total sample, 58.58% were males. The average age was 33.8 (SD = 9.1), ranging from 18 to 63. The average working years was 10.8 (SD = 9.3), ranging from 0.5 to 42. For education, 15.5% had a master's degree or higher, 51% had a bachelor's degree, 22.9% had an associate degree, and 10.6% had a high school degree. To ensure proper translation, the translation work followed the International Test Commission.<sup>45</sup> The questionnaire was first translated into Chinese and then translated back into English. Before issuing questionnaires, the questionnaire was first reviewed and confirmed by the directors of the human resource departments of the organizations.

### Measures

#### Financial Stress

The financial stress scales for this study were developed and compiled based on existing studies.<sup>20,46</sup> Recent studies have confirmed its good reliability and validity.<sup>47</sup> Representative items were: "Comparing positions and salaries with others



**Figure 1** The proposed moderated mediation model.

can make me pressured” and “The house price is too high and it puts a lot of pressure on me”. Each item is scored from 1 (extremely uncharacteristic) to 5 (extremely characteristic). Responses across the four items were averaged, with higher scores indicating a greater tendency to perceive financial stress. In this research, its Cronbach’s  $\alpha$  coefficient was 0.83.

### Job Performance

The Job Performance Scale developed by Farh and Cheng is a 4-item questionnaire.<sup>48</sup> Representative items were: “My performance always meets the expectations of the leader” and “I always complete job assignments on time”. Items are rated from 1 (extremely uncharacteristic) to 5 (extremely characteristic). Responses across the 5 items were averaged. High scores indicate greater job performance. In this research, its Cronbach’s  $\alpha$  coefficient was 0.68.

### Work Engagement

The Work Engagement Scale developed by Schaufeli et al consists of 17 items.<sup>49</sup> It consisted of three dimensions including vigor, dedication, and absorption. Items are rated from 1 (extremely uncharacteristic) to 5 (extremely characteristic). Responses across the 17 items were averaged, with higher scores indicating higher levels of work engagement. A representative item was: “When I work, time always flies quickly”. The scale has shown good validity and reliability in the Chinese population.<sup>50</sup> In this research, its Cronbach’s  $\alpha$  coefficient was 0.89.

### Emotional Exhaustion

The MBI-GS (Maslach Burnout Inventory-General Survey) consisted of three dimensions including emotional exhaustion, depersonalization, and personal accomplishment.<sup>37,50</sup> In this research, the emotional exhaustion subscale was used. Items are rated from 1 (never) to 7 (every day). Responses across all items were averaged, with high scores indicating high levels of emotional exhaustion. In this research, its Cronbach’s  $\alpha$  coefficient was 0.94.

## Procedure

This study was conducted in 2019 at five companies in Qingdao, China. Self-report questionnaires were completed in a quiet office after obtaining informed consent. Participants filled out questionnaires regarding financial stress, job performance, emotional exhaustion, and work engagement. Participants remained anonymous throughout the study, and their responses were treated with strict confidentiality. The completion of all questionnaires took approximately 25 minutes.

## Data Analysis

In analyzing the collected data, we followed a two-step preliminary analysis procedure.<sup>51,52</sup> First, we examined the construct validity of the proposed measurement model by assessing convergent validity and discriminant validity. Second, multivariate multiple regression analysis was performed to examine whether there were any statistically significant associations between demographic characteristics (including age, gender, working years, and company type) and job performance to decide whether covariates were needed.

After preliminary analysis, the current study first calculated descriptive statistics for the variables of interest, followed by bivariate relations among these variables. Then, the mediation effect was tested using a four-step procedure.<sup>51</sup> Finally, the analysis of the moderated mediation model was performed using Hayes’s PROCESS macro.<sup>52</sup>

## Results

### Descriptive Statistics

Preliminary analyses indicated all the measurements have good construct validity. Convergent validity assessed the factor loadings (loadings > 0.4), average variance extracted (AVE > 0.7), and the composite reliability (CR > 0.5) for each construct. The results showed that all the measurement items fulfill the minimum requirements of the needed values. For discriminant validity, four-factor and one-factor models have been tested, and the results revealed that the goodness of fit of four-factor model is better than one-factor model. Moreover, the multivariate multiple regression analysis showed no significant associations between demographic characteristics and job performance; thus, no covariates were included in the following analysis.

The means, standard deviations, and correlations among the research variables are presented in Table 1. Financial stress showed significant positive correlations with job performance ( $r = 0.11, p < 0.05$ ), work engagement ( $r = 0.17, p < 0.01$ ), and

**Table 1** Means, Standard Deviations and Correlations for the Main Study Variables

Variables	M	SD	1	2	3	4
Financial stress	3.53	0.76	1			
Job performance	3.70	0.57	0.11*	1		
Work Engagement	3.67	0.62	0.17**	0.40**	1	
Emotion Exhaustion	2.58	0.83	0.19**	-0.08	-0.25**	1

Notes: N=309. \* $p < 0.05$ , \*\* $p < 0.01$ , \*\*\* $p < 0.001$ .

emotional exhaustion ( $r = 0.19$ ,  $p < 0.01$ ). Given that financial stress was positively correlated to job performance, Hypothesis 1 was supported.

Job performance showed significant positive correlations with work engagement ( $r = 0.40$ ,  $p < 0.01$ ) but showed non-significant negative correlations with emotional exhaustion ( $r = -0.08$ ,  $p > 0.05$ ). Work engagement showed significant negative correlations with emotional exhaustion ( $r = -0.25$ ,  $p < 0.01$ ). Thus, hierarchical regressions were conducted to test the proposed hypotheses.

## Mediating Effect Analysis

In Hypothesis 2, we anticipated that work engagement would mediate the relationship between financial stress and job performance. To examine this hypothesis, we followed the four-step procedure to establish the mediation effect,<sup>51</sup> which demands (a) a significant association between financial stress and job performance; (b) a significant association between financial stress and work engagement; (c) a significant association between work engagement and job performance after controlling for financial stress; (d) a significant coefficient for the indirect path between financial stress and job performance through work engagement. The bias-corrected percentile bootstrap method determines whether the last condition is satisfied.

Regression analysis revealed that, in the first step, financial stress positively predicted job performance,  $\beta = 0.11$ ,  $p = 0.05$ , which explained 1.2% of the variance (see Model 1 of Table 2). In the second step, financial stress positively predicted work engagement,  $\beta = 0.17$ ,  $p < 0.01$ , which explained 2.8% of the variance (see Model 2 of Table 2). In the third step, after controlling for financial stress, work engagement positively predicted job performance,  $\beta = 0.39$ ,  $p < 0.001$ , which explained 15.8% of the variance (see Model 3 of Table 2). At last, the bias-corrected percentile bootstrap method showed that the indirect effect of financial stress on job performance via work engagement was significant ( $ab = 0.17 \times 0.39 = 0.07$ ,  $SE = 0.03$ , 95% CI = [0.008, 0.134]). The mediation effect accounted for 62.67% of the total effect. Overall, the above four criteria for establishing a mediation effect were satisfied, thus supporting Hypothesis 2.

**Table 2** Testing the Mediation Effect of Financial Stress on Job Performance

Predictors	Model 1 (JP)			Model 2 (WE)			Model 3 (JP)		
	$\beta$	SE	t	$\beta$	SE	t	$\beta$	SE	t
FS	0.11	0.06	1.97*	0.17	0.06	2.95**	0.05	0.04	0.89
WE							0.39	0.05	7.28***
$R^2$	0.01			0.03			0.15		
F	3.88*			8.71**			28.75***		

Note: N=309. Each column is a regression model that predicts the criterion at the top of the column.

\* $p < 0.05$ , \*\* $p < 0.01$ , \*\*\* $p < 0.001$ .

Abbreviations: FS, financial stress; EE, emotional exhaustion; JP, job performance; WE, work engagement.



## Moderated Mediation Analysis

In Hypothesis 3, the present study assumed that emotional exhaustion would moderate the association between financial stress and job performance, financial stress and work engagement as well as work engagement and job performance. To examine the moderated mediation hypothesis, the current study estimated parameters for three regression models with PROCESS 3.3 macro (model 59) by Hayes.<sup>52</sup> The present study estimated the moderating effect of emotional exhaustion on the relationship between financial stress and job performance (Model 1); the relation between financial stress and work engagement (Model 2); and the relation between work engagement and job performance (Model 3). The specifications of the three models are summarized in Table 3.

Moderated mediation was established if either or both of two patterns existed:<sup>52</sup> the path between financial stress and work engagement was moderated by emotional exhaustion, and/or the path between work engagement and job performance was moderated by emotional exhaustion.

As shown in Table 3, in Model 1 there was a significant main effect of financial stress on job performance,  $b = 0.09$ ,  $p < 0.05$ , but this effect was not moderated by emotional exhaustion, 95% CI =  $[-0.13, 0.06]$ . This suggested that the relationship between financial stress and work performance was not moderated by emotional exhaustion. Model 2 showed that the effect of financial stress on work engagement was significant,  $b = 0.12$ ,  $p < 0.01$ , and this association was moderated by emotion exhaustion,  $p < 0.001$ , 95% CI =  $[-0.36, -0.17]$ . That is, emotional exhaustion moderated the relationship between financial stress and work engagement. For the descriptive purpose, we plotted predicted work engagement against financial stress, separately for low and high levels of emotional exhaustion (Figure 2a). Simple slope tests indicated that for high emotional exhaustion individuals, financial stress has a non-significant and negative correlation with work engagement,  $b_{simple} = -0.11$ ,  $p > 0.05$ , 95% CI =  $[-0.24, 0.03]$ . However, for low emotion exhaustion individuals, financial stress has a positive and significant prediction for work engagement,  $b_{simple} = 0.34$ ,  $p < 0.001$ , 95% CI =  $[0.24, 0.44]$ . To sum up, among high emotion exhaustion individuals, financial stress was not associated with work engagement. In contrast, at low levels of emotional exhaustion, this association became significant.

Furthermore, using the Johnson-Neyman technique for ascertaining significance regions of the moderator variable,<sup>53,54</sup> the results showed that the positive impact of financial stress on work engagement became significant when emotional exhaustion score was  $\leq 0.10$  and the negative impact of financial stress on work engagement became significant when emotional exhaustion score was  $\geq 0.96$  (Figure 2b).

Finally, model 3 indicated that there was a main effect of work engagement on job performance,  $b = 0.42$ ,  $p < 0.001$ , and more importantly, the effect was moderated by emotional exhaustion,  $b_{simple} = -0.11$ ,  $p < 0.01$ , 95% CI =  $[-0.22, -0.03]$ . For the descriptive purpose, we plotted predicted job performance against work engagement, separately for low and high levels of emotional exhaustion (Figure 3a). Simple slope tests indicated that for low emotion exhaustion individuals, higher work engagement was associated with higher job performance,  $b_{simple} = 0.49$ ,  $p < 0.001$ , 95% CI =

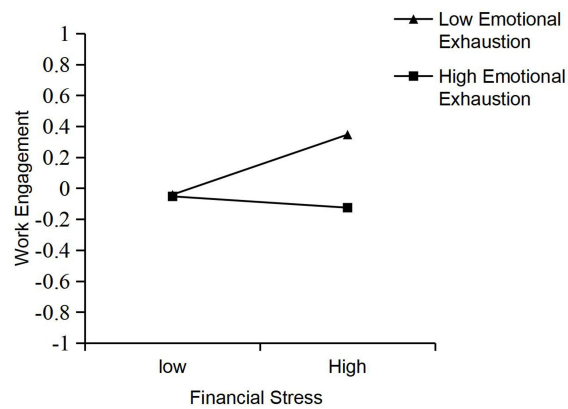
**Table 3** Testing the Moderated Mediation Effect of Financial Stress on Job Performance

Predictors	Model 1(JP)			Model 2(WE)			Model 3(JP)		
	$\beta$	SE	t	$\beta$	SE	t	$\beta$	SE	t
FS	0.09	0.04	2.03*	0.12	0.04	2.61**	0.03	0.06	0.44
EE	-0.07	0.04	-1.69	-0.19	0.04	-4.82***	-0.004	0.06	-0.07
FS $\times$ EE	-0.03	0.05	-0.65	-0.27	0.05	-5.57***	0.10	0.05	1.88
WE							0.42	0.06	7.26***
WE $\times$ EE							-0.11	0.04	-2.52**
R <sup>2</sup>	0.02			0.19			0.18		
F	2.50			24.12***			6.34***		

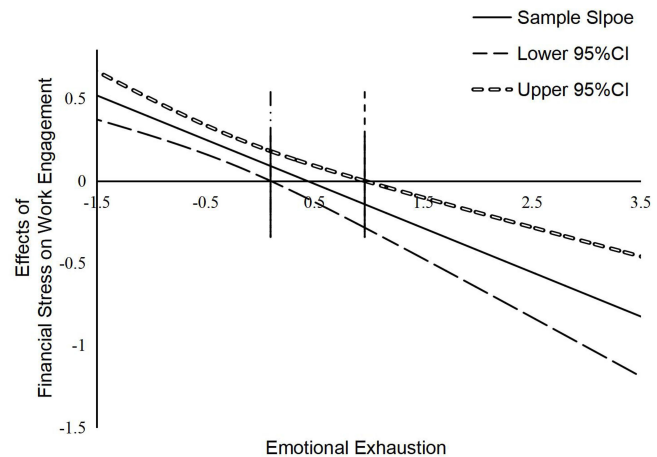
Notes: N=309. \*  $p < 0.05$ , \*\* $p < 0.01$ , \*\*\* $p < 0.001$ .

Abbreviations: FS, financial stress; EE, emotional exhaustion; JP, job performance; WE, work engagement.

2a

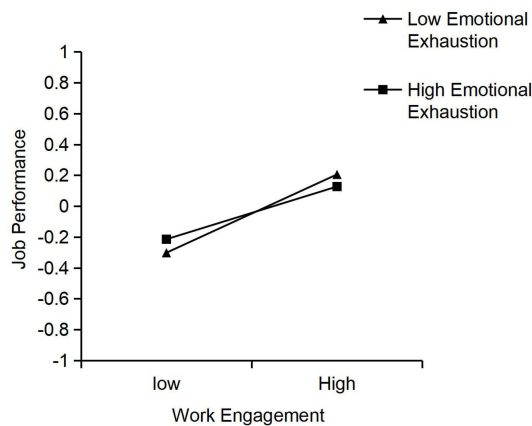


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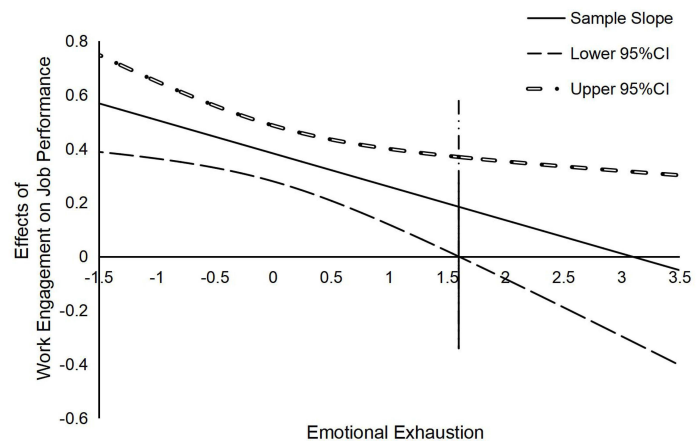


**Figure 2** Interaction between financial stress and emotional exhaustion on work engagement. (a) Simple slope of financial stress on work engagement (b) Effect of financial stress on work engagement with Johnson-Neyman confidence bands.

3a



3b



**Figure 3** Interaction between work engagement and emotion exhaustion on job performance. (a) Simple slope of work engagement on job performance. (b) Effect of work engagement on job performance with Johnson-Neyman confidence bands.

[0.35, 0.62]. For high emotion exhaustion individuals, the relationship between work engagement and job performance became weaker but significant still,  $b_{simple} = 0.28$ ,  $p < 0.001$ , 95% CI = [0.15, 0.41].

The results of the Johnson-Neyman analysis showed that the positive impact of work engagement on job performance became significant when emotional exhaustion score was  $\leq 1.60$ , but when emotional exhaustion score was  $\geq 1.60$ , work engagement had non-significant effects on job performance (Figure 3b).

The bias-corrected percentile bootstrap results further indicated that the indirect effect of financial stress on work performance via work engagement was moderated by emotional exhaustion. Specifically, for individuals with low emotion exhaustion, the indirect effect of financial stress on work engagement was significant,  $b = 0.17$ ,  $SE = 0.04$ , 95% CI = [0.10, 0.24]. But the indirect effect was not significant for individuals high in emotional exhaustion,  $b = -0.03$ ,  $SE = 0.02$ , 95% CI = [-0.08, 0.01]. Collectively, the indirect relation between financial stress and work performance via work engagement was moderated by emotional exhaustion. Therefore, Hypothesis 3 was supported.



## Discussion

This study explored the relationship and the underlying mechanisms between financial stress and job performance in China. The results showed financial stress was positively related to Chinese employees' job performance (H1). Work engagement played a mediating role between financial stress and job performance (H2), and emotional exhaustion moderated the mediating effect (H3). These findings will be discussed in detail below.

Consistent with the hypothesis, our result showed that financial stress in China is positively related to employees' job performance. This result was in line with the findings of previous studies in China. Financial stress which is treated as a challenge stressor for Chinese employees might trigger active or problem-solving styles of coping.<sup>24</sup> For example, when coping with financial stress, Chinese employees will work harder to increase their income and rely on long hours of work to compensate for their low wages.<sup>55</sup> From this perspective, improving job performance is a way to cope with financial stress. Therefore, financial stress played a motivating role in Chinese employees' job performance.

Although we found the positive effect of financial stress on job performance, the more important question is why financial stress has shown a positive effect on employees. Our study found that financial stress promoted employees' work engagement and then enhanced their job performance. This result supported the argument of COR theory and the differentiated Job Demands-Resources model that stress stimulates a motivation-driven process. Financial stress turns into a driving force that motivates employees to engage in their work. Engaged employees can create their resources and therefore are more likely to reach their work-related goals. Revealing the mechanism is beneficial for us to have a clearer understanding of the relationship between financial stress and job performance. This result suggests that work engagement is the key point that financial stress shows a positive effect on job performance.

In addition, the present study found that emotional exhaustion played a moderating role in the mediating mechanism. Specifically, emotional exhaustion damages the positive effect of financial stress on work engagement and the positive effect of work engagement on job performance. These results supported the statement that emotional exhaustion is a risk factor in the organization. First, emotional exhaustion moderated the relationship between financial stress and work engagement, the relationship became non-significant for individuals when experiencing high-level emotional exhaustion. This result suggested that emotional exhaustion might prevent employees from coping with a stressful situation even a challenging one. Employees with emotional exhaustion experienced fatigue, irritability, frustration, and feeling overextended and depleted of their resources.<sup>37,55</sup> The analysis results of ERP and brain network show that EN (Extremely Negative) emotions are prioritized for processing and EN emotion consumed a mass of cognitive resources.<sup>56</sup> According to these evidence, when emotional exhaustion reaches a high level, employees might not have enough energy and effort to deal with financial stress. Previous studies also indicated emotionally exhausted workers cannot perform their job tasks properly as they do not have sufficient energy.<sup>57–59</sup> Thus, the relationship between financial stress and work engagement became non-significant for high emotional exhaustion individuals.

Second, we found that emotional exhaustion moderated the relationship between work engagement and job performance. The relationship between work engagement and job performance became weaker for high emotional exhaustion individuals. This result suggested that emotional exhaustion might decrease the utilization of personal resources (eg, work engagement). Based on the COR theory, for highly emotionally exhausted individuals, due to the occupation of a certain amount of resources, the positive effect of work engagement toward job performance is reduced.<sup>60,61</sup> This leads to a decline in job performance. Accordingly, the relation between work engagement and job performance became weaker for high emotional exhaustion individuals.

However, emotional exhaustion did not moderate the positive relationship between financial stress and work performance, and more importantly, the relationship between financial stress and job performance is no longer significant and their relationship is fully mediated by work engagement in the final model. These non-significant results deserve some consideration. Firstly, this indicates that the mediating variables selected for this study are valid and that work engagement is an essential factor in explaining the relationship between financial stress and job performance. Secondly, when the moderated mediating model is employed, the moderating effect occurs mainly in the indirect rather than the direct relationship, indicating that when interpreting how economic stress affects performance through work engagement, it is necessary to take into account the employee's emotional exhaustion.

## Limitations and Future Research

Several limitations should be addressed. First, this study used a cross-sectional design to explore the relationship between financial stress and job performance. Because of the cross-sectional nature of the data, there may be doubts regarding the causal inferences. Thus, longitudinal research is needed to examine the causal relationship between variables. Second, retrospective self-report measures were vulnerable to biases. Replication is required with other types of measures (eg, peer-reported job performance or payroll). Third, our study examined the mediating role of work engagement and the moderating role of emotional exhaustion. Future research might explore other mediating or moderating variables that relate financial stress to job performance. Fourth, given that the relationship between financial stress and job performance is different in the West and China, there are differences in its mechanism. Therefore, the findings of this study cannot be applied to other cultural contexts. Future research might examine the relationship between financial stress and job performance using samples from other cultural backgrounds.

## Implications and Conclusion

Although previous studies in China have found a positive relationship between financial stress and job performance, we should be cautious about the implications of this finding. The present study replicated the relationship between financial stress and job performance and further explored how and when financial stress influenced job performance, which provided us with better practical implications. First, this study showed that financial stress was positively related to employees' job performance. It suggested that job performance might be an effective way for employees to deal with their financial problems. Therefore, managers may assign work tasks according to employees' financial stress. Notably, our results indicated that work engagement played an important mediating role in the relationship between financial stress and job performance. Thus, managers should be aware of their employees' work engagement when they face financial stress. Meanwhile, organizations could conduct training programs to promote stressed employees' work engagement thereby triggering their positive emotions and active coping strategies. To this end, some specific approaches could be implemented, such as job design, coaching, and social support.<sup>62</sup> More importantly, our findings showed that emotional exhaustion damages the mechanism between financial stress and job performance. Therefore, emotional exhaustion is a key factor that influences the effect of financial stress. Managers could track employees' emotional state with convenient measurement tools, to screen out employees with high emotional exhaustion and provide them with psychological interventions and emotional management training to support them. Besides, regular courses that aim to reduce and, more importantly, prevent high-level emotional exhaustion are needed.

In conclusion, the present study found financial stress plays a motivating role in employees' job performance in China. Work engagement explained why financial stress is positively related to Chinese employees' job performance. However, the positive effect of financial stress depended on the level of emotional exhaustion. Specifically, the positive effect of financial stress on work engagement disappeared and the positive effect of work engagement on job performance became weaker when emotional exhaustion is at a high level. This result might explain the inconsistency of the effect of financial stress in previous research. Moreover, this finding suggests that emotional factors may not only be the result of stress but can also influence its effects.

## Data Sharing Statement

The datasets generated during and/or analyzed during the current study are available from the corresponding author upon reasonable request.

## Ethics Statement

The studies involving human participants were reviewed and approved by the Experimental Ethics Committee of the Department of Psychology of Qingdao University and have been executed consistent with ethical standards laid down in the 1964 Declaration of Helsinki and its later amendments. The participants provided their written informed consent to participate in this study.

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## Disclosure

The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

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