

# When Does Abusive Supervision Affect Job Performance Positively?

Fuda Li <sup>1</sup>, Bangzhe Tan<sup>1</sup>, Li Zhou<sup>1</sup>, Huaqian Huang<sup>2</sup>

<sup>1</sup>Business School, Hunan Normal University, Changsha, People's Republic of China; <sup>2</sup>College of Tourism and Sport Health, Hezhou University, Hezhou, People's Republic of China

Correspondence: Li Zhou, Business School, Hunan Normal University, Changsha, Hunan Province, 410000, People's Republic of China, Tel +86 13272456001, Email lizhou@hunnu.edu.cn

**Purpose:** By combining the Job Demand–Resources model with Arnold's action sequence as the overall logic, this study explores the connections between abusive supervision and job performance.

**Participants and Methods:** This study employed two-point surveys, with 474 valid responses, to reduce the risk of common method bias. On this basis, confirmatory factor analysis was used to test the reliability and validity of data, and Smart-PLS was used to test the hypotheses.

**Results:** Our findings suggest that abusive supervision has a significant positive impact on job performance. Furthermore, challenge stressors and innovative work behavior partially mediate the relationship between abusive supervision and job performance, and these two factors also form a chain mediating effect. Leader-member exchange moderates the relationship between abusive supervision and job performance, as higher levels of leader-member exchange are associated with a stronger positive effect of abusive supervision on job performance.

**Practical Implications:** This study provides insights to managers about the link between abusive supervision and employee performance. In addition, it recommends that leaders at all levels adopt abusive supervision when they can properly consider a specific employee's perception of the reasons for their behavior and must consider the previous inclusion in the manager's circle of members, as well as the link between the challenging pressures they face and innovative work behavior to deal with such management behaviors.

**Originality:** Most research on abusive management has focused on its negative effects on employee performance. This study, by contrast, explores whether there are positive impacts from abusive management and when such positive effects will occur.

**Keywords:** abusive supervision, challenge stressors, innovative work behavior, leader-member exchange, job performance

## Introduction

Abusive supervision refers to persistent verbal or non-verbal hostility shown by supervisors towards their subordinates.<sup>1</sup> The literature indicates that the specific characteristics of abusive supervision include ridicule, public criticism, loud outbursts, rudeness, indifference to subordinates, coercion, and use of contemptuous language.<sup>1,2</sup> Studies have shown that abusive supervision is subjective, continuous, hostile, and non-physical.<sup>1</sup> Research also suggests that abusive supervision often has a negative impact on subordinate employees in areas such as sharing knowledge,<sup>3</sup> work attitude,<sup>4</sup> job performance,<sup>5</sup> and job behaviors,<sup>6</sup> and there are even reductions in the company's performance.<sup>1</sup>

Abusive supervision has been recognized as negative leadership behavior. However, the influence of cultural background is rarely considered in relation to abusive supervision and employee performance. For example, in China, the corporate culture of forced overtime in internet companies is significant and widespread, and employees often experience abusive supervision from their superiors. Indeed, in 2019, there was even an incident where programmers in the “996 ICU” (a work schedule that expects employees to work from 9 am to 9 pm, six days a week without overtime pay) rebelled against forced overtime. Nevertheless, Chinese internet companies like Alibaba Group, Tencent, and ByteDance have flourished in recent years. This seems to contradict the mainstream research on abusive supervision, as there might

not be a negative correlation between abusive supervision and employee performance. Rather, the effects of abusive supervision on job performance might vary in different cultural backgrounds.

Some researchers have examined the positive effects of abusive supervision. Lee et al argued that appropriate abusive supervision depletes employee resources but it enhances other resources, such as creativity,<sup>7,8</sup> and this might improve team task performance in the long term. Conversely, in Western cultures, employees may be more sensitive to human rights and perceive abusive supervision as a violation of these rights, enhancing the negative impact of this type of supervision.<sup>4</sup> Therefore, Asian culture may have a moderating role in distinguishing between the negative and positive effects of abusive supervision.<sup>9</sup>

However, it is important to understand how abusive supervision can be used effectively to ensure it has positive rather than negative effects on employee performance. The intermediate variables in this process and any boundary conditions this too shall pass should be investigated. Indeed, researchers have not found direct links between these issues. In fact, in the Chinese context of management having high power and being paternalistic, leaders may consider being harsh towards their subordinates to motivate them to work hard.<sup>9</sup> However, pure fear does not provide a comprehensive explanation for the complex relationship between abusive supervision and job performance. There must be other influencing factors. Therefore, it is of great importance to help employees improve their job performance by ensuring that subordinates correctly perceive the value of abusive supervision and transform this pressure into motivation.

The Job Demand–Resources model<sup>10</sup> states that positive outcomes in the workplace are related to the appropriate balance of job requirements and resources, and that high job requirements and high job resources enable employees to invest greater energy in innovation<sup>11</sup> to increase work performance.<sup>12,13</sup> In addition, the central assumption of the JD–R model is that job strain develops—irrespective of the type of job or occupation—when job demands are high and when job resources are limited.<sup>10</sup> Thus, from the JD–R model, we can identify two variables that have some association with job performance: challenging stress and innovative work behavior. Challenge stressors are job demands that employees perceive as rewarding work experiences, such as workload, time pressure, job duties, and job complexity,<sup>14</sup> and these are mainly reflected in the initiative of the individual employees. Innovative work behavior refers to the generation, dissemination, and implementation of new ideas in the workplace,<sup>15</sup> arising mainly from the employees' knowledge or skill base.

The American psychologist Arnold, on the subject of emotion and motivation, suggested a sequence of “cognitive-evaluative-emotional-need-thoughts-act”.<sup>16</sup> Based on this, abusive supervision may first affect subordinates' perception of their superiors' behaviors, which is followed by social comparison and self-evaluation. Second, the effects of abusive supervision are also a reflection of the individual's emotional responses, which, to a certain extent, also represent the individual's emotions. In this context, challenge stressors and innovative work behavior represent the “need” and “thoughts” parts of the action sequence respectively. Finally, the individual's choice of behavior represents the “act”. JD–R suggests that high job demands can be emotionally debilitating, while the lack of job resources can have a decisive impact on individual motivation and behavior, ultimately leading to separation from the job and a decrease in self-efficacy.<sup>17</sup> As a result, individuals tend to be more motivated to innovate and change so they can alleviate the emotional drain of abusive management and ensure consistency between cognition and behavior.<sup>18</sup> Therefore, this paper uses a chain-mediated pathway based on the combination of the Job Demand–Resources model and Arnold's action sequence to investigate the mechanisms of the relationship between abusive supervision and employee job performance.

An individual's behavior can be significantly influenced by their interpersonal relationships.<sup>19</sup> Indeed, studies suggest that employees receive more resources when the quality of the leader–member exchange is higher.<sup>20</sup> Having access to more resources enables employees to manage the challenge stressors of the job better, and it increases the likelihood that the challenge will drive innovation. In terms of the JD–R model, employees who belong to the same social circle as their leader may have access to both sufficient work resources and psychosocial support to cope with the demands of the job.<sup>21</sup> This pattern is strongly linked to the circle culture in Chinese companies today, where it is easier to gain trust and support when there are closer personal relationships between employees and leaders. However, in Chinese companies, there is often paternalistic leadership situation. Leaders often perceive themselves as the parents or elders of their subordinates and, thus, criticize or even insult their subordinates' mistakes to motivate them to work hard. This is in line with the traditional Chinese family education rule of “spare the rod and spoil the child”.<sup>22,23</sup> Researchers have suggested that to

study the impact of abusive management, the quality of the leader–member exchange also should be considered and its marginal effects included in the study.<sup>24,25</sup>

In summary, this paper explores a mediation and moderation model of the effect of abusive supervision on job performance through challenge stressors and innovative work behavior. This approach is based on the Job Demand–Resources model in conjunction with Arnold’s action sequence. This study also analyses the influence of leader–member exchange as a boundary condition of the model. Using survey data from a Chinese context, this investigation provides important insights into the mechanisms underpinning the effect of abusive supervision on job performance, and it offers new ideas and practical guidance regarding the effective use of abusive supervision to improve employee job performance.

## Theory and Hypotheses

### Abusive Supervision and Job Performance

Since Tepper introduced the concept of abusive supervision in 2000,<sup>26</sup> research on this common negative leadership behavior has continued. Initially, examinations of the concept of abusive supervision focused on its essential features rather than its specific outcomes.<sup>27</sup> Conceptually, researchers have identified three main characteristics of abusive supervision: the subjective nature of its evaluation, the continuity of the behavior, and the purposeful nature of the abuse.<sup>2</sup>

In terms of the purpose of abusive supervision, researchers tend to support the perspective that leaders use it to motivate their subordinates to improve their performance or to indicate that mistakes will not be tolerated so they are not repeated. This suggests that the purpose of abusive supervision is at least positive, as opposed to the purpose of workplace aggression.<sup>2</sup> Many researchers have linked abusive supervision to negative outcomes such as reduced innovation, disruption of the organizational climate, and impediments to business development.<sup>1,4,5</sup> However, the effect of abusive supervision on employee performance remains controversial.<sup>9,28</sup>

The reasons for abusive supervision can also change its impact on employee performance. Individuals make attributions about the cause of abusive supervision, and abusive supervision is more likely to generate anger, further transgressive behavior, and less organizational citizenship behavior when individuals think abusive supervision is being used to cause harm. However, when subordinates perceive that the motivation for abusive supervision is to improve performance, they are more likely to have feelings of guilt leading to less deviant behavior and more involvement in organizational citizenship.<sup>18</sup> Especially in the Chinese context, the attitude of managers towards their employees is commonly paternalistic. Therefore, the purpose of abusive supervision is predominantly to motivate subordinates to work hard and to reduce mistakes in their work rather than to be abusive.<sup>5,28</sup> Therefore, we propose the following hypothesis:

Hypothesis 1: Abusive supervision is positively associated with employee performance in Chinese organizational contexts.

### The Mediating Role of Challenge Stressors

Abusive supervision is a continuous and complex process based on a sequence of cognitive-evaluative-emotional components. These represent three basic psychological aspects of the individual, and they create challenging stressors.

There are various aspects to abusive supervision. First, individuals become psychologically distressed and they become more willing to change to achieve their work goals. The aim is to avoid further psychological distress from such supervision and to reduce the likelihood of being abused.<sup>29</sup> Second, abusive supervision increases perceived workplace stress.<sup>1</sup> However, unlike workplace aggression, abusive supervision is not seen as unavoidable, so the individual may try to transform the stress of abusive supervision into creative motivation.<sup>18</sup> Finally, by managing the pressure of challenging work, the individual’s performance and competencies can be enhanced. Then, the leader becomes better able to perceive the individual’s contributions, and the individual may feel positive about the previous motivation and encouragement. The result is the development of a positive leader–member exchange relationship.<sup>30</sup> In summary, abusive supervision can give individuals challenging stressors that motivate them to work hard and that stimulate their desire for recognition. Based on this analysis, we propose the following hypothesis:

Hypothesis 2: Abusive supervision is positively associated with challenge stressors.

Stress at work is ubiquitous, but it can be differentiated based on whether it is beneficial to the individuals. Stressors that present a challenge and stimulate achievement, positive emotions, and good outcomes are known as challenge stressors. In contrast, stressors that hinder effective performance and the achievement of work objectives are known as hindrance stressors.<sup>14,31</sup> Resources conservation theory states that when individuals are aware of changes in resources this significantly influences their attitudes and behavior.<sup>32</sup> Specifically, when individuals perceive a certain level of stress at work, which indicates available resources have changed, this helps them concentrate on their work. They endeavor to acquire to acquire new resources to reduce the net loss of resources, and this enhances job performance.<sup>31</sup> There is a wealth of research on the relationship between challenge stressors and job performance, and there is consensus that challenge stressors motivate individuals to work hard, thus improving their job performance.<sup>14,31,33</sup> Based on this analysis, we propose the following hypotheses:

Hypothesis 3: Challenge stressors are positively associated with employee performance.

Hypothesis 4: Challenge stressors positively mediate the relationship between abusive supervision and job performance, such that abusive supervision enhances the challenge stressors on employees, leading to improved job performance.

## The Mediating Role of Innovative Work Behavior

With innovative work behavior, employees generate, disseminate, and implement new ideas in their work.<sup>15</sup> Abusive supervision is a destructive leadership behavior that represents a negative situational factor, and the impact of such negative factors on employees' attitudes and behaviors is of high research value. This is because they stimulate more responses from individuals than positive situational factors, meaning they have a greater impact on employees' attitudes and behaviors.<sup>34</sup> Most researchers believe that abusive supervision hurts employees' innovative work behavior.<sup>35</sup>

As innovation causes high levels of risk and uncertainty, it requires both leadership support and a supportive working environment.<sup>36</sup> When there are negative situational factors like abusive supervision in the workplace, supervisors may be indifferent to the ideas of their subordinates. Moreover, the dissemination or implementation of new ideas may even be perceived as a challenge to the authority of the supervisors.<sup>37</sup> However, by focusing on employee outcomes after they engage in innovative behavior rather than their reasons for these behaviors, researchers have overlooked several key issues.<sup>6</sup> Indeed, abusive supervision is not a singular event. It is ongoing, long-term, emotional, and psychologically non-benevolent treatment of subordinates.<sup>1</sup> Therefore, if a subordinate wishes to change from being managed with constant abuse, they must show a breakthrough in their work.<sup>29</sup> This explains why employees who are abusively managed still wish to be innovative in their work. Based on this analysis, we propose the following hypothesis:

Hypothesis 5: Abusive supervision is positively associated with innovative work behavior.

However, new ideas alone cannot entirely alter the evaluation and perception of subordinates by superiors, so they must also produce beneficial results. Studies have shown that employees' innovative work behavior is important for improving their job performance.<sup>38</sup> This means that individuals can change the way their leaders perceive them by using innovative work behavior to produce positive outcomes. In that case, abusive supervision may encourage employees to be innovative in the workplace, and employee job performance must improve for leaders to recognize the role of individual innovation and provide more leadership support. Based on this analysis, we propose the following hypotheses:

Hypothesis 6: Innovative work behavior is positively associated with employee performance.

Hypothesis 7: Innovative work behavior mediates the relationship between abusive supervision and job performance, such that abusive supervision reinforces innovative work behavior, improving employee performance.

## The Joint Mediating Role of Challenge Stressors and Innovative Work Behavior

Researchers have divided stress into challenge stressors and hindrance stressors, and these two types of stressors have different effects on innovative work behavior. There is consensus regarding the negative impact of hindrance stressors on innovation,<sup>39</sup> and most researchers are positive about the specific relationship between challenge stressors and employee innovation. They argue that challenge stressors may motivate employees to overcome challenges and work hard, and this is conducive to innovation.<sup>40</sup> However, challenge stressors do not always lead to positive outcomes. They can also deplete the cognitive resources of employees, thus diminishing their positive effect on innovation.<sup>41,42</sup>

Studies have shown that employees are most motivated and most engaged in the process of innovation when their access to resources and their job requirements both are at a high level.<sup>43</sup> This is because, according to the JD–R model, high levels of job resources counteract the resource-depleting effects of challenge stressors. This enhances the motivational power of challenge stressors and reinforces their positive effects.<sup>11,43</sup> Based on this above analysis, we propose the following hypothesis:

Hypothesis 8: Challenge stressors are positively associated with innovative work behavior.

Furthermore, the emotion-motivation-action sequence suggests that there are important interactions between individuals' perceptions and actions and that these factors have reciprocal influences on each other.<sup>16</sup> Therefore, when individuals form a perception of an event, they actively evaluate the situation to identify any gaps in their abilities. This process generates emotions, so the cognitive-evaluative-emotional sequence creates specific cognitions, evaluations, emotions, needs, thoughts, and behaviors.<sup>44</sup> This suggests that the cognitive-evaluative-emotional sequence may influence individual behavior both by satisfying certain psychological needs and through a process of continuous reflection.

Based on this logic, challenge stressors enhance basic work needs by motivating employees to work harder and belong to the need unit in the action sequence. Moreover, innovation requires continuous reflection, so employees innovate by thinking about how to change their current situation. This belongs to the thinking unit in the action sequence. Specifically, when an individual experiences persistent hostile behavior, either verbal or non-verbal, from their superiors, and especially when others are not treated in the same way, this can lead the person to think that they are less skilled than others, thus causing emotional distress. To alleviate such distress or prevent it from happening again, the individual may reflect on and change their previous behaviors.<sup>18</sup>

Taken together, abusive supervision, with its cognitive-evaluative-emotional aspects, may increase challenge stressors (need) on employees, encouraging them to think and formulate new ideas (innovative work behavior), and this may ultimately lead to changes in their behavioral outcomes (job performance). Based on the above analysis, we propose the following hypothesis:

Hypothesis 9: Challenge stressors and innovative work behavior together mediate the relationship between abusive supervision and job performance, such that abusive supervision enhances job performance by increasing individuals' challenge stressors and, thus, their innovative work behavior.

## The Moderating Role of Leader–Member Exchange

Leader–member exchange refers to the interpersonal relationship between leaders and subordinates that is established through their work. This creates two types of groups based on relationship affinity: the inner circle and the outer circle.<sup>45</sup> As leaders have limited resources of time and energy, they may not be particularly concerned about each of their subordinates. As a result, the subordinates who are recognized by the leader, known as insiders, receive extra care, attention, and social resources from the leader, including job information and career guidance. In contrast, the individuals who receive fewer resources from the leader are referred to as outsiders.<sup>20</sup> In the traditional Chinese interpersonal environment, being an insider means having a good social relationship with the leader and other individuals close to them, and this optimizes the atmosphere in the workplace.<sup>6</sup> The individual can even become the leader's assistant, supporting the leader to advance their own career. Moreover, insiders can satisfy their own needs and use their insider

status to gain access to the intentions and beliefs of senior leaders.<sup>21</sup> This enhances their own decisions to create valuable work and, ultimately, drive the organization's competitiveness.

In contrast, outsiders with low levels of leader–member exchange are easy targets for abusive supervision. However, subordinates who enjoy high levels of leader–member exchange also can be abused by their leaders.<sup>46</sup> Indeed, leadership is often paternalistic in the Chinese context. The managers in the company act as parents and educate and manage their employees as if they were children, but they also care for them in their lives and work, and they endeavor to support their growth and development through criticism and care.<sup>22,23</sup> From an attribution perspective, employees who see that their supervisors are abusively managing them for positive reasons may experience a sense of guilt that motivates them to work harder.<sup>18</sup> Therefore, the contributions of abusive supervision to job performance may be stronger when there is a higher level of leader–member exchange. Based on this analysis, we propose the following hypothesis:

Hypothesis 10: Leader–member exchange moderates the positive relationship between abusive supervision and job performance.

This paper provides an in-depth analysis of the interactions between the core variables of abusive supervision, challenge stressors, innovative work behavior, and job performance. This analysis is based on the Job Demand–Resources model, according to which increased job requirements and job resources relate to increased challenge stressors and innovative work behavior. Two separate mediation pathways were created to explore how abusive supervision may improve the performance of subordinates by increasing both job requirements and job resources. Concurrently, the Arnold action sequence was used as a guide to construct the “abusive supervision–challenge stressors–innovative work behavior–job performance” (AS–CS–IW–JP) chain of mediation pathways. It did this by using abusive supervision as the cognitive–evaluative–emotional unit, challenge stressors as a need unit, and innovative work behavior as a reflection unit. The research model is presented in Figure 1.

## Materials and Methods

### Measures

The following actions were taken to ensure that the measurement tools had good reliability and validity. First, we used international journals to identify reliable scales that were published by authoritative bodies and validated in the Chinese context. As the scales were developed in English-speaking contexts, we used a translation–back-translation process to develop the scales. For this, we invited two Ph.D. students from the United States and the United Kingdom to translate the English scales into Chinese. Following this, two Ph.D. students in the field of management were invited to translate the scales back into English. Finally, two professors of English were invited to compare the three versions of the scales and suggest any changes needed to avoid linguistic ambiguities.

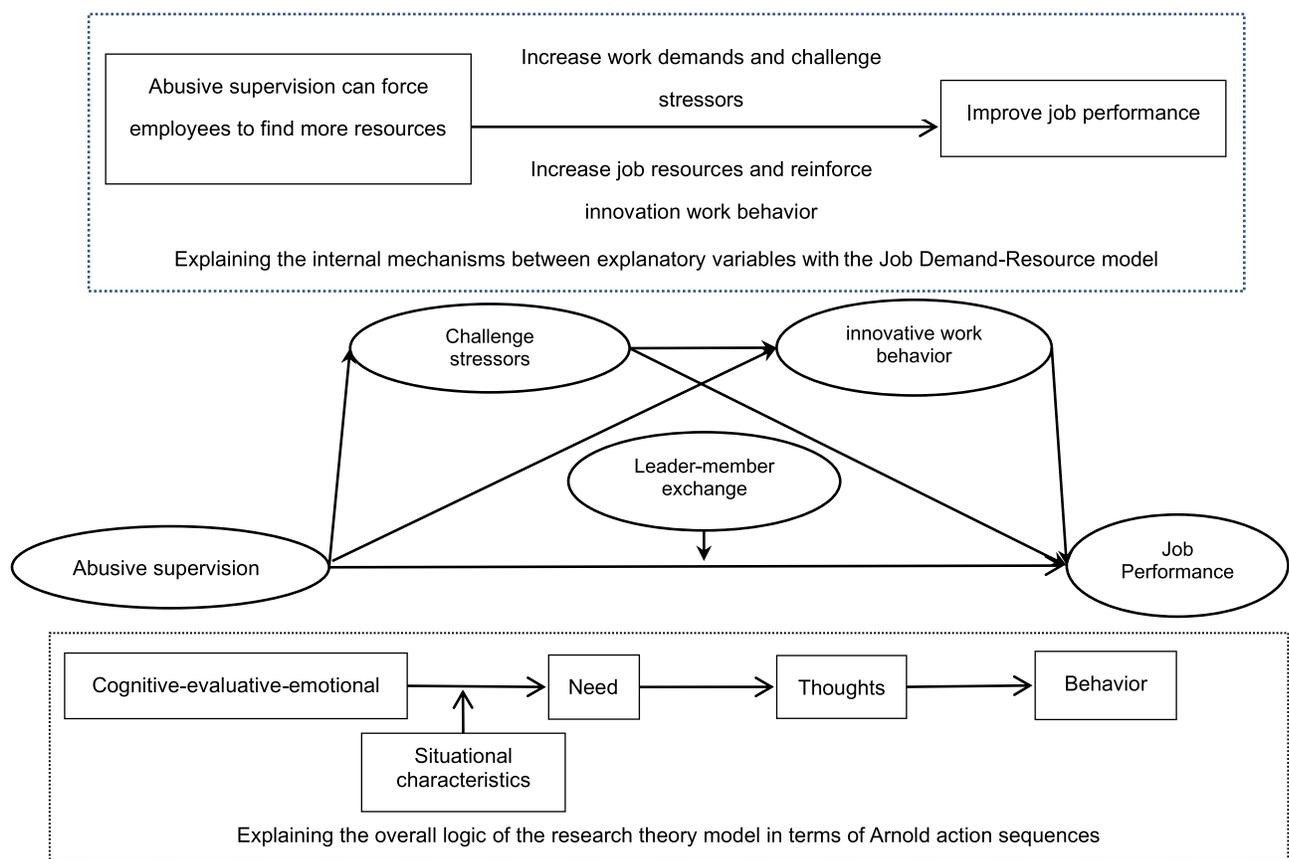
Abusive supervision is considered a negative form of leadership. Therefore, because of the sensitive and personal nature of the questions, the questionnaire was administered in an informal setting using anonymous self-assessment. Furthermore, to ensure the rigor of the survey process and the accuracy of the questionnaire, we invited 30 masters of business administration students from a university to conduct a simulation survey. The simulation showed a 100% valid return rate for the questionnaire and the students gave valuable feedback. In addition, we used a 5-point Likert scale to measure all responses (1 = *totally disagree*, 5 = *totally agree*). The sources of the scales are as follows:

### Abusive Supervision

Aryee et al's contextually appropriate 10-item scale, based on the Tepper scale,<sup>1,47</sup> was used to assess employees' feelings towards abusive supervision. Items included “My supervisor often says I am not competent” and “My supervisor often mentions my past mistakes or failures.”

### Challenge Stressors

Six items from the challenge stressors dimension of the Challenge–Hindrance Stressors Scale developed by Cavanaugh (2000) and Zhang (2014) were used. Challenge stressors relate to workload, time pressure, task complexity, and responsibility. One item was “The amount of work I have to complete within the time limit”.<sup>14,42</sup>



**Figure 1** Conceptual Model for this Research.

### Innovative Work Behavior

Scott and Bruce's (1994) five-item scale was used to measure employees' innovative work behavior.<sup>15</sup> Items included "I come up with new ideas" and "I search for new ideas on technology, processes, techniques, and products."

### Leader–Member Exchange

Six statements were based on the scale of leader–member exchange developed by Graen and Uhl-Bien (1995). They included "I have enough confidence in my leader to champion and defend his or her decisions if he or she is not present."<sup>20</sup>

### Job Performance

The job performance scale developed by Chen et al was used.<sup>48</sup> There were four statements, including "I have made a significant contribution to the overall performance of our unit," and "I am one of the best performers in our unit."

## Samples and Procedures

The participants came from several of China's most developed cities, including the first-tier cities of Beijing, Shanghai, Guangzhou, and Shenzhen, and the second-tier cities of Changsha and Foshan. In line with the purpose of this study and the meaning of the variables, industries with high-performance pressure, high prevalence of management behaviors such as heckling and ridicule, and high employee turnover were selected. They included finance, internet, insurance, and real estate transaction. Moreover, the companies had all been established for more than 5 years, and they had 200 or more employees. The online form of informed consent was received from all individuals involved in the study. The subjects willingly and voluntarily took part in the research. The Institutional Review Board of the Hunan Normal University approved the study design and data collection. All procedures involving human participants were conducted in accordance with the ethical standards of the institutional research committee, the ethical standards of the APA, and the 1964 Helsinki Declaration and its later amendments or comparable ethical standards.

To avoid the serious issue of homologation error,<sup>49</sup> including different Likert scale formats, we adopted two time points for collecting the questionnaires. We reminded the employees that the questionnaires were anonymous, and we included some interference in the items. At time point 1, data were collected regarding the respondents' basic personal information, contact details, perceptions of abusive supervision, leader–member exchange; 30 days later, at time point 2, information regarding challenge stressors, innovative work behavior, and job performance was collected again from the same group respondent.

The first step of the investigation process was to use social networking to find a research facilitator from the target company, provide them with brief training, invite them to participate in the entire pre-research process, and ensure they understood the procedures, contents, and considerations of the study. In the second step, blank questionnaires were placed in an envelope and given to the facilitator for direct distribution to the participants in a later stage of the study. The facilitator was asked to collect the questionnaire, seal it in the envelope, and number the envelope as soon as the subjects had given their responses. In the third step, each company office was asked to distribute one copy of the questionnaire to one participant to avoid any instances of cross-referencing or communication between subjects that may affect the results of the questionnaire. In the fourth step, before the formal survey, the facilitator informed the subjects that the questionnaire would be completed anonymously in an informal setting and the results would be used for academic research only. In the fifth step, the facilitator waited near the subject while they answered the questionnaire. If the subject had any questions, they could ask the facilitator at any time. In the sixth step, all the participants were given a bottle of shampoo prepared by the research team, and the facilitator was also given US\$5.

Initially, 550 questionnaires were distributed at the first time point, and 521 questionnaires were returned (a 94.7% response rate). Questionnaires with incomplete responses, obvious non-compliance, or irregular responses were excluded, leaving 481 responses. Then, the last 4 digits of the cell phone numbers filled in by the employees were matched with the employee address book provided by the company, so 474 valid responses remained, yielding an overall questionnaire efficiency of 86.18%.

As shown in Table 1, 41.77% of the respondents were male and 58.23% were female. In terms of age, 46.84% were 18–29 years old, 48.10% were 30–39 years old, 1.27% were 40–49 years old, and 3.80% were 50 years old and above. In

**Table 1** Background Characteristics of Participants (N=474)

Characteristics		Frequency	Percentage
Sex	Male	198	41.77
	Female	276	58.23
Age category	18—29	222	46.84
	30—39	228	48.10
	40—49	6	1.27
	50+	18	3.80
Highest education completed	Junior high school and below	6	1.27
	High school	18	3.80
	Bachelor's degrees	366	77.22
	Master's degrees or above	84	17.72
Working age	<1	72	15.19
	1—3	138	29.11
	3—5	78	16.46
	5—10	114	24.05
	10+	72	15.19

terms of education, 1.27% completed junior high School and below, 3.80% completed high school, 77.22% had bachelor's degrees, and 17.72% had master's degrees or above. In terms of working age, 15.19% were in their first year, 29.11% were there between 1 and 2 years, 16.46% were there between 3 and 4 years, 24.05% were there between 5 and 9 years, 15.19 were 10 years or more.

## Results

Partial least squares (PLS) was used because it is suitable for identifying causal relationships between the construct variables, and it can deal with both model constructs and measurement items.<sup>50</sup> In addition, PLS is suitable for handling relationships between variables in anomalous data distributions because of its relaxed requirements for normality and randomness of variables.<sup>51</sup>

## Measurement Model

We used structural equation modeling (SEM) with Smart-PLS and SPSS software to investigate our research hypotheses. The results of reliability and validity testing with Smart-PLS are presented in Table 2. Table 2 shows that all composite reliabilities of the constructs were greater than 0.7, indicating there was good internal consistency of the measures for each construct. Table 2 also shows that all average variance extracted (AVE) values were above 0.5,<sup>52</sup> and the square root of each construct's AVE was greater than the correlation of the construct with other latent variables. This indicated the convergent and discriminant validity of the constructs., Table 3 shows that each item loads more highly on its own construct than on other constructs, indicating good discriminant validity.

## Structural Model and Hypothesis Testing

We used bootstrapping (bootstrapping samples  $N = 5000$ ) to calculate  $t$ -statistics and standard errors.<sup>53</sup> Figure 2 presents the results of the structural model without the moderator variable of leader–member exchange, and Figure 3 shows the results of the structural model with the moderator variable for the relationship between abusive supervision and job performance. As shown in Figures 2 and 3, all paths were positive and significant ( $p < 0.01$ ). The structural model (Figure 2), omitting the moderation effect, explained 50.0% of the variance in challenge stressors, 53.1% of the variance in innovative work behavior, and 68.0% of the variance in job performance. In contrast, the moderated model with leader–member exchange (Figure 3) accounted for 70.7% of the variance in job performance. Therefore, based on the structural model with the moderator variable, we ran hypothesis testing. The results of hypothesis testing (Table 4) supported all 10 hypotheses.

There were high correlations between certain constructs; for example, the correlation between abusive supervision and innovative work behavior was 0.689. This may lead to collinearity, which can magnify or obscure the relationships between constructs.<sup>54</sup> Henseler suggested that the variance inflation factor (VIF) can be used to test for collinearity, and

**Table 2** Construct Reliability and Validity

Construct	$\alpha$	CR	AVE	Discriminant Validity (Fornell-Larcker Criterion)				
				(1)	(2)	(3)	(4)	(5)
(1) AS	0.966	0.971	0.767	<b>0.876</b>				
(2) CS	0.875	0.906	0.618	0.707	<b>0.786</b>			
(3) IWB	0.888	0.918	0.692	0.689	0.655	<b>0.832</b>		
(4) JP	0.909	0.936	0.785	0.703	0.656	0.790	<b>0.886</b>	
(5) LMX	0.930	0.945	0.740	−0.467	−0.341	−0.349	−0.478	<b>0.860</b>

**Notes:** Diagonal bold is the square root of average variance extracted (AVE). For adequate discriminant validity, the diagonal elements should be greater than the corresponding off-diagonal elements.

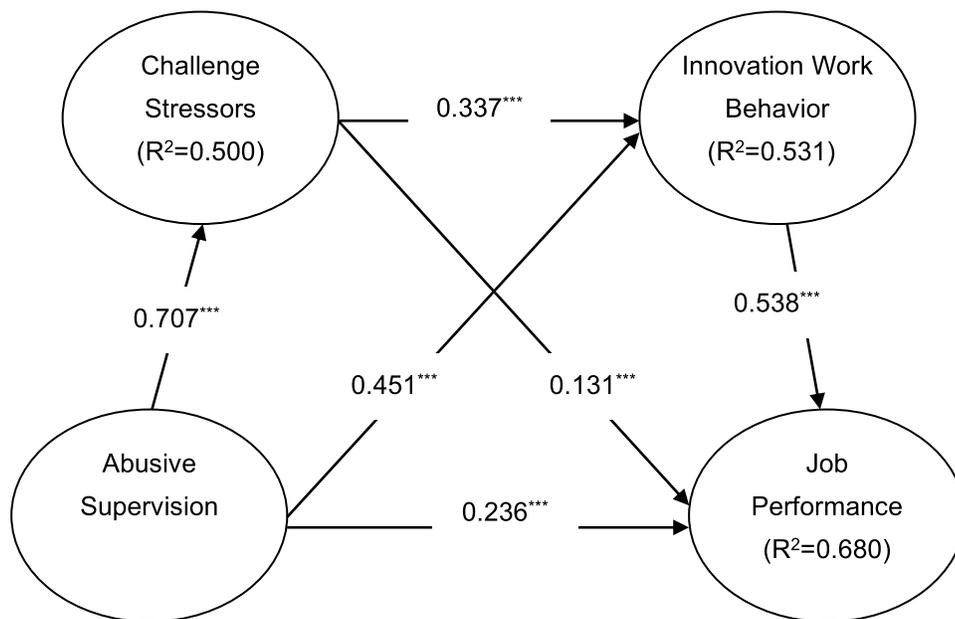
**Abbreviations:**  $\alpha$ , Cronbach's Alpha; CR, composite reliability; AVE, average variance extracted; AS, abusive supervision; CS, challenge stressors; IWB, innovative work behavior; JP, job performance; LMX, Leader-Member Exchange.

**Table 3** Factor Loadings and Cross Loadings for the Measurement Model

Items	AS	CS	IWB	JP	LMX
AS1	<b>0.858</b>	0.558	0.485	0.508	-0.334
AS2	<b>0.898</b>	0.562	0.519	0.535	-0.358
AS3	<b>0.871</b>	0.545	0.483	0.500	-0.333
AS4	<b>0.815</b>	0.586	0.538	0.562	-0.346
AS5	<b>0.899</b>	0.680	0.644	0.655	-0.440
AS6	<b>0.899</b>	0.692	0.669	0.704	-0.387
AS7	<b>0.868</b>	0.584	0.586	0.595	-0.457
AS8	<b>0.910</b>	0.628	0.639	0.649	-0.477
AS9	<b>0.861</b>	0.650	0.615	0.602	-0.460
AS10	<b>0.876</b>	0.659	0.761	0.762	-0.458
CS1	0.605	<b>0.810</b>	0.527	0.526	-0.302
CS2	0.522	<b>0.750</b>	0.478	0.477	-0.239
CS3	0.645	<b>0.870</b>	0.563	0.552	-0.348
CS4	0.613	<b>0.776</b>	0.525	0.512	-0.336
CS5	0.472	<b>0.730</b>	0.425	0.443	-0.224
CS6	0.455	<b>0.772</b>	0.558	0.574	-0.142
IWB1	0.500	0.508	<b>0.786</b>	0.584	-0.248
IWB2	0.598	0.566	<b>0.857</b>	0.674	-0.302
IWB3	0.588	0.551	<b>0.840</b>	0.650	-0.273
IWB4	0.610	0.581	<b>0.842</b>	0.693	-0.343
IWB5	0.560	0.515	<b>0.831</b>	0.676	-0.280
JP1	0.695	0.607	0.732	<b>0.916</b>	-0.578
JP2	0.605	0.574	0.713	<b>0.882</b>	-0.365
JP3	0.584	0.534	0.681	<b>0.880</b>	-0.350
JP4	0.601	0.607	0.670	<b>0.866</b>	-0.383
LMX1	-0.433	-0.304	-0.288	-0.432	<b>0.851</b>
LMX2	-0.424	-0.290	-0.305	-0.427	<b>0.873</b>
LMX3	-0.378	-0.270	-0.297	-0.391	<b>0.863</b>
LMX4	-0.383	-0.286	-0.306	-0.408	<b>0.850</b>
LMX5	-0.386	-0.302	-0.281	-0.405	<b>0.878</b>
LMX6	-0.402	-0.308	-0.325	-0.404	<b>0.846</b>

**Notes:** Boldface numbers are loadings for indicators to their own construct; other numbers are cross-loadings.

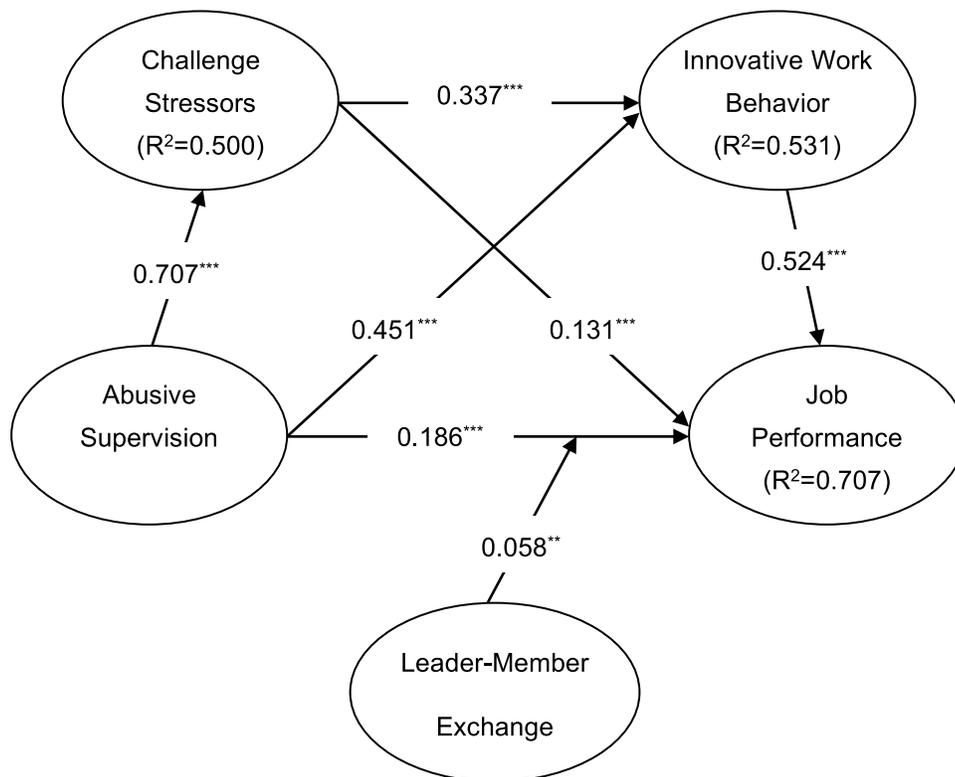
**Abbreviations:** AS, abusive supervision; CS, challenge stressors; IWB, innovative work behavior; JP, job performance; LMX, Leader-Member Exchange.



**Figure 2** Structural Model without Moderator Variable.

**Notes:** \*\*\* $P < 0.001$ .  $R^2 = SSR/SST = 1 - SSE/SST$ ;  $SST = SSR + SSE$ .

**Abbreviations:** SST, total sum of squares; SSR, regression sum of squares; SSE, error sum of squares.



**Figure 3** Structural Model with Moderator Variable.

**Notes:** \*\* $P < 0.01$ , \*\*\* $P < 0.001$ .  $R^2 = SSR/SST = 1 - SSE/SST$ ;  $SST = SSR + SSE$ .

**Abbreviations:** SST, total sum of squares; SSR, regression sum of squares; SSE, error sum of squares.

**Table 4** Results of Hypotheses Testing

Hypotheses	$\beta$	STDEV	t Value	Bias-Corrected BCI (95%)	Result
H1: AS→JP	0.186***	0.040	4.687	[0.108,0.265]	Supported
H2: AS→CS	0.707***	0.021	33.048	[0.664,0.784]	Supported
H3: CS→JP	0.131***	0.039	3.370	[0.057,0.210]	Supported
H4: AS→CS→JP	0.093***	0.028	3.329	[0.039,0.147]	Supported
H5: AS→IWB	0.451***	0.044	10.323	[0.365,0.535]	Supported
H6: IWB→JP	0.524***	0.040	13.125	[0.445,0.600]	Supported
H7: AS→IWB→JP	0.236***	0.027	8.640	[0.183,0.291]	Supported
H8: CS→IWB	0.337***	0.049	6.939	[0.238,0.431]	Supported
H9: AS→CS→IWB→JP	0.125***	0.022	5.645	[0.085,0.171]	Supported
H10: AS*LMX→JP	0.058**	0.021	2.833	[0.018,0.099]	Supported

**Notes:** \*\* $P < 0.01$ , \*\*\* $P < 0.001$ ; bootstrapping samples = 5000; AS\*LMX is interaction item.

**Abbreviations:**  $\beta$ , direct effect, or mediated effect, or moderated effect; Bias-corrected BCI, Bias-corrected bootstrapping confidence intervals; AS, abusive supervision; CS, challenge stressors; IWB, innovative work behavior; JB, job performance; LMX, Leader-Member Exchange.

a VIF greater than 10 indicates harmful collinearity.<sup>55</sup> Table 5 presents the VIFs for the constructs in the model with the moderator variable. These VIFs did not exceed 3, showing that collinearity did not influence the results.

## Discussion

Much research into human resources has been focused on how to transform management behaviors that are negative for individuals into positive behaviors that can improve their job performance. This paper explored the mechanisms underpinning the effects of abusive supervision on job performance, using the Job Demand–Resources model and Arnold’s action sequence. There were several key findings. First, abusive supervision has a significant positive impact on job performance. In terms of its purpose, superior managers may use abusive supervision to motivate subordinates to work hard and reduce mistakes in their work. This is different from abusive behavior itself. Individuals who are aware of the supervisor’s purpose may feel a sense of guilt, adopt various methods to reduce this guilt, and thus improve their job performance.

Second, there is positive mediation from both challenge stressors and innovative work behavior on the relationship between abusive supervision and job performance. (1) Abusive supervision has a positive impact on job performance by reinforcing challenge stressors. Individuals perceive that abusive supervision increases challenge stressors, and they

**Table 5** The Variable Inflation Factor (VIF) for Constructs

Construct	CS	IWB	JP
AS	1.000	2.000	2.799
CS		2.000	2.246
IWB			2.140
LMX			1.295
AS*LMX			1.120

**Note:** AS\*LMX is interaction item.

**Abbreviations:** AS, abusive supervision; CS, challenge stressors; IWB, innovative work behavior; JB, job performance; LMX, Leader-Member Exchange.

may transform the resulting stress into motivation to avoid continuous abusive supervision. This would lead them to work harder to improve their performance. (2) Abusive supervision also positively affects job performance by reinforcing innovative work behavior. As mentioned above, to avoid the psychological pain of continuous abusive supervision, employees may use active learning and innovative behavior to change the current supervision situation, and this ultimately improves their job performance. (3) Together, challenge stressors and innovative work behavior mediate the connection between abusive supervision and job performance. Abusive supervision stimulates the psychological pain arising from cognitive and behavioral inconsistencies, and it reinforces individuals' challenge stressors. The challenge stressors provide motivation for innovative work behavior, which in turn translates to improved job performance.

Third, positive leader–member exchange relationships strengthen the connection between abusive supervision and job performance. China is a humane society in which subordinates belong to the same circle as their superiors. Even if subordinates are abused by their superiors, they may feel that their superiors are helping and educating them. Therefore, they may continue to work harder to repay the care of their leaders with practical actions.

## Theoretical Implications

The Job Demand–Resources model helps to explain the positive effect of abusive supervision on individual job performance. Most previous research on abusive supervision has considered it a negative leadership behavior, thus ignoring the purpose of abusive supervision by leaders and underestimating the ability of individuals to adapt at work. This has resulted in insufficient research on abusive supervision as a facilitator of individual job performance.<sup>5,9</sup>

The framework of this study was based on the first half of Arnold's action sequence. It was applied to the psychological purpose of abusive supervision in the traditional Chinese interpersonal environment. Based on this, individuals experience the whole cognitive-evaluative-emotional sequence in response to abusive supervision. In addition, this study used the Job Demand–Resources model to analyze the internal mechanisms underpinning the ability of abusive supervision to enhance individual job performance through inconsistencies between cognition and behavior. For example, the individual feels guilty so they work harder to counteract that feeling.

Understanding the internal mechanism of this relationship has deepened the understanding of the positive effects of abusive supervision in the workplace. Furthermore, the findings of this paper support the work of Zhang et al, who reported that the relationship between abusive supervision and job performance was indeed controversial, and abusive supervision had inconsistent roles across different team culture.<sup>5,9</sup> In addition, our study deepens previous findings by investigating the Chinese cultural context, in which abusive supervision has positive effects on individual job performance, even when there are high levels of leader–member exchange.

Arnold's action sequence of cognitive-evaluative-emotional-need-thoughts-act helps to explain the logical relationships between the variables in this study. This reveals the mechanisms underpinning the relationship between abusive supervision and job performance more systematically and profoundly. To a certain extent, this also extends the application of Arnold's action sequence from psychology to human resource management. In the past, studies have mainly focused on the first or second half of the action sequence, and they have analyzed single meanings of the variables.<sup>18,56</sup> This paper has verified the discrete mediating roles of challenge stressors and innovative work behavior on the relationship between abusive supervision and job performance, using the Job Demand–Resources model. Moreover, the validity of the cognitive- evaluative-emotional-need-thoughts-act action sequence to explain the chain of mediating factors between abusive supervision and job performance also has been confirmed.

Referring to the need unit in terms of challenge stressors and the thinking unit in terms of innovative work behavior, different meanings of the same variable can be identified from different theories. Through this, a rational integration of the discrete mechanisms and the entire model can provide clear insight into how abusive supervision improves job performance.

In summary, this paper enriches the research regarding the mechanisms underpinning the effect of abusive supervision on enhancing job performance, and it uses Arnold's action sequence as a new theoretical basis for exploring the consequential variables related to abusive supervision. It also broadens the scope of its application to the field of human resources.

## Practical Implications

Organizations should recognize the positive effects of abusive supervision and use it to increase motivation through various methods. First, creating a Chinese paternalistic team culture and enhancing the level of the leader–member exchange may represent an interpersonal method for motivating staff. Second, it may be beneficial to organize regular mental health counseling or training to guide staff to understand the purpose of abusive supervision (negative management behavior) and to reduce individual emotional resistance.

Leaders also should address the extent and purpose of abusive supervision and actively guide their employees to use it to improve their job performance. Primarily, leaders should examine their own levels of abusive supervision and the resilience of their team members, use varying levels of abusive supervision with different individuals, and endeavor to treat team members equally. Furthermore, they should reduce the levels of abusive supervision or publicly recognize and reward team members once they have achieved certain goals or levels of job performance. Second, to enhance job performance, leaders should provide their employees with the necessary opportunities and motivation to be innovative and encourage them to change their current situations through innovation.

As far as possible, individuals should also perceive abusive supervision as positive leadership behavior with goodwill and confront and manage the stresses that exist in the workplace. Indeed, actively participating in mental health training may be helpful for employees to understand the intent of certain leadership management behaviors better and to recognize their own resilience under stress. In addition, actively communicating and learning from other team members to acquire new knowledge, skills, and other resources can provide a solid foundation for improving job performance.

## Limitations and Recommendations for Future Research

Although this paper has reported important findings regarding the relationship between abusive supervision and job performance, there are still some limitations that should be noted. First, all variables were measured only once, but abusive supervision is an ongoing negative leadership behavior that may be influenced by the respondent's mood and other factors. People have different levels of self-esteem and tolerance for abusive supervision, so these survey findings may be affected by bias. Second, we have discussed the relationship between abusive supervision and job performance only from a linear perspective, and there is already research that shows that the relationship between abusive supervision and job performance is not always linear. Therefore, adding multiple survey time points may also lead to further understanding of this subject. Third, the survey respondents were only from companies with a Chinese cultural background, and the paternalistic leadership culture may lead to increased tolerance of abusive supervision by employees. Therefore, the cultural backgrounds of the respondents should be expanded in future research.

## Conclusion

By combining the Job Demand–Resources model with Arnold's action sequence as the overall logic, this study explores the connections between abusive supervision and job performance. Our findings suggest that abusive supervision has a significant positive impact on job performance. Furthermore, challenge stressors and innovative work behavior partially mediate the relationship between abusive supervision and job performance, and these two factors also form a chain mediating effect. Leader-member exchange moderates the relationship between abusive supervision and job performance, as higher levels of leader-member exchange are associated with a stronger positive effect of abusive supervision on job performance.

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## Disclosure

The authors report no conflicts of interest in this work.

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