

The Influence Mechanism of Abusive Supervision on Employee Innovative Behavior: A Self-Concept Perspective

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Abstract

Based on self-concept theory and employing scenario experimental and survey methods, this study examines the mechanism through which abusive supervision influences employee innovative behavior, clarifying the mediating effect of organization-based self-esteem and the boundary condition of leader-member exchange difference (LMXD). The results indicate that: 1) abusive supervision exerts a significant negative effect on both organization-based self-esteem and employee innovative behavior; 2) organization-based self-esteem partially mediates the relationship between abusive supervision and employee innovative behavior; 3) LMXD strengthens the negative effect of abusive supervision on organization-based self-esteem, such that the greater the LMXD, the stronger the negative relationship; 4) LMXD enhances the mediating role of organization-based self-esteem, such that the greater the LMXD, the more abusive supervision impacts employee innovative behavior through organization-based self-esteem, resulting in a stronger negative effect.

Full Text

Preamble

The Influence Mechanism of Abusive Supervision on Employee Innovative Behavior from the Perspective of Self-Concept

200-word summary: (1) This study empirically examines the mechanism through which abusive supervision negatively affects employee innovative behavior, enriching research in both abusive supervision and innovation domains. It responds to calls for investigating negative leadership effects on innovation outcomes and provides a new theoretical perspective for understanding the detrimental effects of abusive supervision. (2) From the perspective of organization-based self-esteem, this research clarifies its central role in the process through

which abusive supervision reduces employee innovative behavior. (3) By incorporating the context of relationship differentiation formed in organizations or teams—a characteristic feature of Chinese culture—this study investigates the effectiveness of abusive supervision in this context, thereby extending the boundary conditions for how abusive supervision operates in Chinese enterprises.

3. Non-experimental, non-intervention studies in management, clinical, personality, and social fields that rely solely on self-report (questionnaire) methods need to examine whether data exhibit common method bias. What methods did you use to control for or demonstrate that such bias would not affect the validity of your conclusions?

Answer: This study supplemented the questionnaire method with scenario experiments.

4. Did you report and analyze effect sizes? Did you report 95% confidence intervals for statistical analyses?

Answer: This study reported and analyzed effect sizes including independent samples t-tests (Cohen's d) and ANOVA. 95% CIs were also reported, as exemplified in the table below:

AS-OBSE-EIB 95% CI [-0.338, -0.172]

6. To ensure completeness of data reporting in the paper, if some data were excluded during statistical analysis, was this reported in the text? What were the reasons? How would the statistical results change if these data were included? How were missing data handled in statistical analysis? When using scales, were any individual items deleted? What were the reasons? How would statistical results change if these items were included? Were there any measured items or variables not reported? What were the reasons? Please indicate where in the paper this information appears.

Answer: (1) In Study 1, 12 samples that failed attention checks on the Jianshu platform were excluded. This is located in the “3.1 Participants and Procedure” section. (2) In Study 2, after time2, 25 employee questionnaires that could not be matched with leaders were excluded. This is located in the “4.1 Sample Selection and Data Collection” section. (3) All scales used were established measures from domestic and international sources; no items were deleted.

7. For experimental materials, scales, or questionnaires that have not undergone peer review and examination, are they attached at the end of the document for review? If not, please state the reason. If this article is published, would you be willing to share these materials with other researchers?

Answer: All experimental materials and scales used in this study were adapted from domestic and international scholars.

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The Influence Mechanism of Abusive Supervision on Employee Innovative Behavior from the Perspective of Self-Concept

Abstract: Based on self-concept theory, this study employs scenario experiments and questionnaire methods to examine the mechanism through which abusive supervision influences employee innovative behavior, clarifying the mediating role of organization-based self-esteem and the boundary condition of leader-member exchange differentiation (LMXD).

The results show that: (1) abusive supervision has significant negative effects on both organization-based self-esteem and employee innovative behavior; (2) organization-based self-esteem partially mediates the relationship between abusive supervision and employee innovative behavior; (3) LMXD strengthens the negative impact of abusive supervision on organization-based self-esteem—in other words, the larger the LMXD, the stronger the negative relationship; (4) LMXD strengthens the mediating effect of organization-based self-esteem, such that when LMXD is larger, abusive supervision produces a stronger negative effect on employee innovative behavior through the transmission of organization-based self-esteem.

Keywords: abusive supervision; leader-member exchange differentiation; organization-based self-esteem; employee innovative behavior

Classification Code: F202

1 Introduction

“Innovation is the soul of a nation’s progress, the inexhaustible driving force for a country’s prosperity, and the deepest endowment of the Chinese nation.” The 20th Party Congress report emphasizes that we must adhere to “innovation as the primary driving force” and “insist on innovation occupying the core position in China’s modernization drive.” In today’s increasingly competitive environment, innovation has become crucial for enhancing corporate competitiveness (Anderson et al., 2014). Employee innovative behavior, as the “four-wheel drive of a car and the twin wings of a bird” for corporate innovation, represents an important source of organizational innovation. How to stimulate and enhance employee innovative behavior has attracted close attention from both academia and practice. The employee innovation process requires substantial resources and support, all of which are controlled by organizational leaders (Qu et al., 2015). Consequently, the influence of leadership style on employee innovative behavior is of paramount significance.

Reviewing previous research on how leadership styles affect employee innovative behavior, most scholars have focused on positive leadership, such as simultaneous ambidextrous leadership (Ge et al., 2022), benevolent leadership (Shen et al., 2017), servant leadership (Wang et al., 2019), ethical leadership (Wen et al., 2021), and authentic leadership (Han and Yang, 2011). With the increasing prevalence of abusive leadership behaviors in the workplace, scholars have begun exploring the impact of negative leadership styles on employee innovation (Lee et al., 2013). Research has confirmed that abusive supervision produces significant negative effects on employees’ psychology, behavior, and attitudes (Zhang and Liao, 2015). However, compared to other employee outcome variables, few studies have examined the relationship between abusive supervision and employee innovative behavior, and there remains insufficient explanation for why and how abusive supervision affects employee innovative behavior.

Moreover, Confucianism has strengthened social hierarchy, making high power

distance particularly prevalent in Chinese society, which results in more frequent abusive leadership behaviors in Chinese workplaces (Liu and Liao, 2012). To comprehensively understand the effectiveness of abusive supervision in Chinese management contexts, exploring the “black box” of its influence process on employee innovative behavior is extremely important. Existing studies have primarily drawn on conservation of resources theory and social exchange theory to examine the explanatory roles of power distance (Sun et al., 2013), perceived insider status (Teng, 2020), and emotional exhaustion (Xi, 2016) in the relationship between abusive supervision and employee behavior, while neglecting to deeply explore the role of organization-based self-esteem from the perspective of self-concept theory.

Abusive supervision conveys negative information detrimental to employees' self-evaluation, reducing their perceived value in the organization, damaging their organizational self-esteem, and ultimately inhibiting innovative behavior. Based on this, this study adopts a self-concept perspective and incorporates organization-based self-esteem as a mediating variable to explain how abusive supervision affects employee innovative behavior. Furthermore, according to leader-member exchange theory, leaders' limited energy and resources cause them to form high-quality exchange relationships with only some employees, resulting in differentiated exchange relationships between leaders and different employees within an organization or team (Graen and Uhl-Bien, 1995). Influenced by relationalism and differential patterns (Liu et al., 2009), leaders often distinguish between insiders and outsiders based on “concentric circles,” meaning they adopt differential treatment approaches (Zhang and Yang, 2013). When leader-member exchange differentiation is high, leaders' abusive treatment of employees further intensifies employees' negative attribution of their self-concept, thereby generating negative attitudes toward innovation. Therefore, this study will explore the moderating role of leader-member exchange differentiation in the impact of abusive supervision.

In summary, based on self-concept theory, this study investigates the mechanism and boundary conditions of abusive supervision on employee innovative behavior through one scenario experiment and one supervisor-subordinate paired questionnaire survey. The potential marginal contributions of this research are mainly reflected in two aspects: First, this paper incorporates organization-based self-esteem into the theoretical framework of the relationship between abusive supervision and employee innovative behavior, providing a new perspective for understanding why and how abusive supervision affects employee innovative behavior and opening the “black box” of the specific influence mechanism. Second, by examining the moderating role of leader-member exchange differentiation, this study further clarifies the boundary conditions for the effectiveness of abusive supervision in Chinese enterprise contexts, offering theoretical and practical references for management to avoid the negative impact of abusive supervision on employee innovation from the team level.

2 Literature Review and Hypotheses

2.1 Abusive Supervision and Employee Innovative Behavior

Abusive supervision refers to leaders' sustained hostile verbal and nonverbal behaviors toward employees, excluding physical contact (Tepper, 2000). Employee innovative behavior refers to the entire process from generation and adoption to implementation of novel ideas (Scott and Bruce, 1994). Regarding research on the relationship between abusive supervision and innovative behavior, although previous studies have suggested an "inverted U-shaped" relationship and a "double-edged sword effect," the mainstream view remains that abusive supervision reduces employee creativity (Chu and Xiong, 2023), increases counterproductive behavior and moral disengagement (He et al., 2018), and other negative outcomes.

First, employee innovative behavior is characterized by high risk and uncertainty, requiring organizational support and a relaxed innovation climate. Leaders control important support resources for employee innovation, and abusive behaviors such as sarcasm, ridicule, and neglect deprive employees of these crucial resources, generating negative emotions and reducing innovation willingness (Zhao, 2020). Second, employees subjected to abusive supervision experience negative psychological emotions and may even conflict with leaders or colleagues, reducing their work efficacy and decreasing work engagement, thereby affecting subsequent innovative intentions and behaviors (Li et al., 2016). Moreover, after experiencing prolonged abuse, employees may choose to reduce behaviors that attract organizational attention, maintain the status quo, remain silent, and avoid initiating innovation. According to conservation of resources theory, employee innovative behavior requires sufficient resources (Gorgievski and Hobfoll, 2008), while abusive supervision causes substantial resource depletion and imbalance. Due to the severe problems and influences of high power distance in Chinese society, abusive supervision phenomena are more pronounced in the Chinese cultural context, requiring subordinates to expend more resources to cope with poor relationships with leaders (Liu et al., 2009). Additionally, there exists a reciprocal relationship between employees and organizations; when employees perceive care and support from leaders, they work hard to reciprocate the organization. Conversely, abusive supervision subjects employees to negative treatment such as neglect and ridicule, making them subjectively less willing to engage in innovative behaviors beneficial to the organization. Based on this, we propose Hypothesis H1:

H1: Abusive supervision negatively affects employee innovative behavior.

2.2 The Mediating Role of Organization-Based Self-Esteem

Organization-based self-esteem is defined as an individual's perception of their value within the organization as an organizational member (Pierce et al., 1989), indicating the extent to which individuals believe they are capable of achieving organizational goals and are competent as organizational members. Previ-

ous research has confirmed that, compared to individuals' overall self-esteem, organization-related self-esteem has stronger predictive power for organizational phenomena (Pierce et al., 1993). Abusive supervision reduces employees' perceived value in the organization. According to self-concept theory (Shamir et al., 1993), self-esteem is based on individuals' perceptions of their competence, power, and problem-solving abilities. In organizations, leaders are important sources of social information, and their evaluations of employees affect employees' perceptions of their own value (Pierce et al., 1989). We can therefore infer that leaders' abusive supervision behaviors convey to employees the message that "they are neither important nor valuable." Consequently, abused employees may internalize leaders' perceptions of their incompetence as an internal evaluation standard, incorporating it into their self-concept. Related research confirms (Ferris et al., 2012) that negative leadership behaviors make abused employees perceive that leaders do not support, trust, or respect them, thereby reducing employees' self-esteem.

Self-concept theory implicitly assumes an important premise (Shamir et al., 1993): people have a strong desire to maintain self-esteem, and possessing high self-esteem makes individuals more motivated and more satisfied. Previous research also supports this view. For example, Judge and Bono (2001) found that organization-based self-esteem can significantly and positively affect job satisfaction and job performance. Additionally, individuals tend to maintain self-consistency based on self-evaluation, which drives them to act in ways that strengthen their self-concept. We can infer that employees with high organization-based self-esteem believe they are capable and valuable to the organization and can contribute to it. This positive self-concept motivates high organization-based self-esteem employees to engage in behaviors beneficial to or that enhance organizational value (Chen et al., 2005). Conversely, employees with low organization-based self-esteem are more likely to reduce their work input and less likely to engage in behaviors beneficial to the organization (Farh and Chen, 2014; Chan et al., 2013) to maintain self-consistency. In other words, they will reduce their work investment and are unlikely to engage in extra-role behaviors.

In summary, leaders' abusive supervision conveys negative information detrimental to employees' self-evaluation, thereby reducing employees' organizational self-esteem. Employees with low organization-based self-esteem, to maintain self-consistency, often do not exhibit extra-role behaviors beneficial to the organization. However, considering that employee innovative behavior is a voluntary extra-role behavior (Liu, 2011) characterized by certain risk and uncertainty and demanding high capabilities from innovators, these are requirements that employees with low organization-based self-esteem cannot meet. Based on this, we propose:

H2: Abusive supervision has a negative effect on organization-based self-esteem.

H3: Organization-based self-esteem mediates the relationship between abusive supervision and employee innovative behavior.

2.3 The Moderating Role of Leader-Member Exchange Differentiation

Leaders are important sources of information for employees to evaluate their own value. Beyond direct interactions between supervisors and subordinates, leaders' interactions with other team members also convey information that affects employees' self-concept (Lind and Tyler, 1988). Specifically, due to limited resources and energy, leaders form differentiated exchange relationships with team members and correspondingly adopt differential management approaches toward different employees. However, differential treatment provides employees with opportunities for social comparison, thereby further strengthening or weakening employees' self-concept evaluation (Thau et al., 2013). In other words, the relationship between abusive supervision and organization-based self-esteem is influenced by the differentiation of leader-member exchange relationships within the team. Social comparison theory perfectly captures this process mechanism, positing that people actively evaluate their abilities, attitudes, and self-worth, and that these self-evaluations are driven by comparisons with similar others (Festinger, 1954). Therefore, employees' organization-based self-esteem is affected not only by leaders' abusive supervision behaviors but also by leader-member exchange differentiation within the team.

Leader-member exchange differentiation, as a team characteristic, serves as a "map" of power distribution within the team (Liu et al., 2009), providing team members with an environment and cues for social comparison. By comparing their relationship with the team leader to that of their colleagues, team members can understand their position in the team and form clearer self-evaluations. In teams with high LMXD, there are large differences in the exchange relationships between team leaders and different team members, making social comparison among team members more likely (Buunk et al., 2005). In this context, leaders' abusive treatment implies that, compared to other colleagues in the team, abused employees have poorer relationships with the leader, lower status in the team, and often do not receive the leader's trust and attention. This negative comparison result causes abused employees to make more negative attributions about their self-concept (Bowling and Beehr, 2006). Therefore, beyond the absolute impact of abusive supervision, when employees experience abusive treatment and leader-member exchange differentiation within the team is high, the negative impact of abusive supervision on employees' organization-based self-esteem will be stronger.

Conversely, in teams with low LMXD, team leaders treat every team member similarly, indicating little difference in the exchange relationships between leaders and each team member. Team members do not see leaders treating other colleagues better or worse than themselves and thus do not develop comparative advantages or disadvantages. In this context, even when employees perceive abusive treatment from leaders, they do not believe their status in the team is low, which can weaken the impact of leaders' abusive supervision behaviors on employees' organization-based self-esteem and subsequent behaviors. Based on this, we propose:

H4: LMXD moderates the relationship between abusive supervision and organization-based self-esteem. Compared to teams with low LMXD, when team LMXD is high, leaders' abusive supervision has a stronger negative effect on employees' organization-based self-esteem.

H5: LMXD moderates the mediating effect of organization-based self-esteem in the relationship between abusive supervision and employee innovative behavior. Compared to teams with low LMXD, when team LMXD is high, the negative indirect effect of abusive supervision on employee innovative behavior through organization-based self-esteem is stronger.

Based on the above theoretical derivation, this study's theoretical model is constructed as shown in Figure 1 [Figure 1: see original paper].

3 Study 1

3.1 Participants and Procedure

Study 1 used the domestic Jianshu platform as an online data collection platform, recruiting participants through advertisements—a method demonstrated by existing research to yield good reliability (Baer et al., 2021; Gerpott et al., 2019). Participants recruited through the platform needed to be employed workers who communicated with leaders in their work. Before the experiment, participants were informed of the ethical guidelines, such as that the study did not involve illegal or unethical matters and that confidentiality principles would be maintained. Through three screening questions in the questionnaire, 12 participants who failed attention checks were filtered out, resulting in a final sample of 188 valid participants. Among them, 103 were male and 85 were female, with an average age of 34.5 years ($SD = 0.99$) and an average work tenure of 8.9 years ($SD = 0.79$). Sixty-six participants were junior managers or above.

This study adopted a between-subjects scenario experimental design. First, participants reported their demographic information (including gender and age) and work status (work tenure, position, and industry type). They were then randomly assigned to two groups (high abusive supervision vs. low abusive supervision) and asked to carefully read the experimental materials, immersing themselves in the story scenario and imagining themselves as the “protagonist” in the story. Finally, after reading the scenario, participants reported other variable information based on the materials. Participants who completed the entire experiment received certain compensation.

3.2 Experimental Materials

The experimental materials were adapted from Caesens et al. (2019), with specific descriptions as follows.

3.2.1 High Abusive Supervision Condition:

As a human resources assistant, you have worked for one year at a software technology company. Your main job responsibilities relate to employee recruitment, such as screening job applicant resumes, arranging interviews, and helping new employees with onboarding procedures. Your direct supervisor, Director Zhao, is the HR Director (HRD) and shares your gender. Director Zhao works in the same department as you and interacts frequently in the workplace, but always appears very authoritative before you. For example, after making some mistakes at work, Director Zhao often blames you for the errors, even when you are innocent.

Once, before an important job interview, Director Zhao's computer malfunctioned and could not work properly. All applicants' resumes were saved on that computer. With the interview about to begin, the entire department was in chaos. Director Zhao stood there looking very angry, then shouted at you in front of other colleagues: "Why didn't you copy these things to your computer!!! This is all your fault, you should be punished! If you make the same mistake again, I will never forgive you!!"

3.2.2 Low Abusive Supervision Condition:

As a human resources assistant, you have worked for one year at a software technology company. Your main job responsibilities relate to employee recruitment, such as screening job applicant resumes, arranging interviews, and helping new employees with onboarding procedures. Your direct supervisor, Director Zhao, is the HR Director (HRD) and shares your gender. Director Zhao works in the same department as you and interacts frequently in the workplace, but rarely appears authoritative before you. For example, after making some mistakes at work, Director Zhao often takes active responsibility and finds solutions.

Once, before an important job interview, Director Zhao's computer malfunctioned and could not work properly. All applicants' resumes were saved on that computer. With the interview about to begin, the entire department was in chaos. Director Zhao came out of the office and apologized to the HR department members. Then, Director Zhao suggested that you provide blank forms for job applicants to fill out or ask them if they brought an extra copy of their resume. These tasks might increase your workload, so Director Zhao came to you and said thank you.

3.3 Measurement Instruments

All scales used in this study were established measures published in international journals and validated in empirical research. Following Brislin's (1980) translation-back-translation procedure, the scales were adapted for the Chinese organizational context. All scales in this study used a 7-point Likert scale, where 1 indicated "strongly disagree" and 7 indicated "strongly agree." Specific scale information is as follows:

Manipulation Check Instrument. The manipulation check for abusive su-

pervision used Mitchell and Ambrose's (2007) abusive supervision scale, which contains 5 items. Representative items include "Director Zhao would ridicule me in front of others" and "Director Zhao would think my ideas and feelings are stupid." The scale's Cronbach's α coefficient was 0.89.

Organization-Based Self-Esteem. Pierce et al.'s (1989) organization-based self-esteem scale was used, containing 10 items. Representative items include "The company values me highly" and "I am a valuable person in the company." The scale's Cronbach's α coefficient was 0.94.

Employee Innovative Behavior. Scott and Bruce's (1994) employee innovative behavior scale was used, containing 6 items. Representative items include "I actively implement innovative ideas and develop appropriate plans" and "I often propose creative ideas and thoughts." The scale's Cronbach's α coefficient was 0.901.

Control Variables. This study controlled for participants' basic information, including gender, age, position, work tenure, and industry. Additionally, considering emotional contagion effects (Hatfield et al., 1993), this study also controlled for participants' positive and negative emotions. Positive and negative emotions were measured using Thompson's (2007) scale, each containing 5 items. In this study, the Cronbach's α coefficient for positive emotions was 0.864, and for negative emotions was 0.875.

3.4 Results Analysis

3.4.1 Manipulation Check As shown in the table below, independent samples t-tests revealed no significant differences between the experimental and control groups on demographic variables (gender, age, position, work tenure, and industry). However, the experimental and control groups showed significant differences in abusive supervision, with the experimental group ($M = 3.990$, $SD = 0.641$) significantly higher than the control group ($M = 3.333$, $SD = 1.169$), $t(186) = 4.826$, $p < 0.001$, Cohen's $d = 0.657$, indicating that the manipulation of abusive supervision was successful.

Table 1 Manipulation Check

3.4.2 Hypothesis Testing Main Effect Test. As shown in Table 2, the experimental and control groups showed significant differences in employee innovative behavior, with the experimental group ($M = 3.412$, $SD = 0.885$) significantly lower than the control group ($M = 3.807$, $SD = 0.945$), $t(186) = -0.2966$, $p = 0.003$, Cohen's $d = 0.395$. Therefore, abusive supervision has a significant negative effect on employee innovative behavior, supporting Hypothesis 1.

Table 2 Main Effect Test

Mediation Effect Hypothesis Testing. By comparing results with all control variables deleted versus included, the significance of hypothesis testing did not change. Here we report results including control variables. This study used

Mplus 7.4 with the Bootstrapping method to test mediation hypotheses, with resampling set at 5,000 times. As shown in Table 3, the indirect effect of AS-OBSE-EIB was -0.252, with a standard error of 0.043, and the 95% confidence interval was -0.338 to -0.172, which does not include 0, indicating a significant indirect effect. Thus, Hypothesis 3 is supported.

Table 3 Mediation Test

AS-OBSE-EIB 95% Confidence Interval [-0.338, -0.172]

Study 1 used scenario experiments to examine the causal relationship between abusive supervision and employee innovative behavior and preliminarily tested the mediating effect of organization-based self-esteem, enhancing the study's internal validity. To further improve external validity and test the moderating role of leader-member exchange differentiation (LMXD), Study 2 employed multi-timepoint, multi-source questionnaire surveys to validate the overall model.

4 Study 2

4.1 Sample Selection and Data Collection

The sample for this study came from multiple enterprises in Guangdong, Zhejiang, and Fujian provinces, involving manufacturing and biopharmaceutical industries with large numbers of R&D personnel, making the data better reflect employee innovative behavior. Multi-timepoint, multi-source questionnaire distribution was used to minimize common method bias. At time1, employees evaluated their leaders' abusive supervision and their own exchange relationship quality with supervisors, with 381 employee questionnaires distributed and 308 returned. At time2, employees evaluated organization-based self-esteem, and leaders evaluated each team member's innovative behavior, with 308 employee questionnaires distributed and 290 returned, along with 46 leader questionnaires distributed and 43 returned. By matching the questionnaires received at both timepoints, the final valid sample included 265 employees and 43 leaders, with an average of 6.16 people per team, the largest team having 15 members and the smallest having 3 members.

In the final valid employee sample, 78.1% were male, 73.38% were over 30 years old, 16.18% had bachelor's degrees, 75.64% had worked for more than 3 years, and 56.16% had worked with their current supervisor for less than 3 years. In the leader sample, 81.4% were male, 88.37% were over 30 years old, 18.60% had bachelor's degrees, 88.37% had worked for more than 3 years, and 36.59% had been team leaders for less than 3 years.

4.2 Variable Measurement

Measurement tools for core variables (abusive supervision, organization-based self-esteem, employee innovative behavior, and leader-member exchange differentiation) came from established scales used in top-tier journals. All scales in

this study used a 5-point Likert scale, where “1” represented “strongly disagree” and “5” represented “strongly agree.” To ensure consistency with the original scales, professors and doctoral students in the team conducted standard translation-back-translation procedures (Brislin, 1980).

Abusive Supervision. Since this study examines abusive supervision in an environment where leaders differentially treat employees, theoretically, abusive supervision in this paper is an individual-level variable reflecting differences in employees’ perceived abusive supervision. Mitchell and Ambrose’ s (2007) scale was used, containing 5 items that have demonstrated good reliability and validity in the Chinese context. A sample item is “My supervisor ridicules me in front of others.” The scale’ s reliability was 0.88.

Organization-Based Self-Esteem. Pierce et al.’ s (1989) scale was used, containing 10 items. A sample item is “The company values me highly.” The scale’ s reliability was 0.94.

Leader-Member Exchange Differentiation. This variable reflects differentiated exchange relationships between leaders and employees within a team, obtained by calculating the standard deviation of employees’ leader-member exchange scores within each team. Leader-member exchange was measured using Graen and Uhl-Bien’ s (1995) 7-item scale. A sample item is “My leader understands my problems and needs on the job.” The scale’ s reliability was 0.96. Based on this, leader-member exchange differentiation for each team was calculated as the standard deviation of team members’ LMX scores.

Employee Innovative Behavior. Scott and Bruce’ s (1994) scale was used, containing 6 items. A sample item is “This employee often proposes innovative ideas.” The scale’ s reliability was 0.88.

Control Variables. To exclude alternative explanations for the results, at the individual level, we controlled for employees’ gender, age, education, tenure, and time working with the supervisor; at the leader level, we controlled for leaders’ gender, age, education, tenure, time as team leader, and team size. Previous research has shown these factors are related to innovative behavior in this study (Shen et al., 2017; Chen et al., 2007).

4.3 Statistical Analysis Methods

Considering the nested structure of the data collected in this study and the presence of multiple dependent variables in our model, we needed to determine whether cross-level analysis was appropriate. Therefore, we examined whether there was sufficient between-group variation in individual-level variables. Using organization-based self-esteem and employee innovative behavior as dependent variables, null model tests were conducted. Results showed that 11% of the variance in organization-based self-esteem came from between-group differences ($ICC1 = 0.11$), and the between-group variation reached significance ($F(42, 222) = 1.78, p < 0.01$). Eighteen percent of the variance in employee innovative

behavior came from between-group differences ($ICC1 = 0.18$), and the between-group variation reached significance ($F(42, 222) = 2.32, p < 0.001$). According to Hofmann's (2002) recommendations, these results satisfy the prerequisites for cross-level analysis.

Specifically, we used Edwards and Lambert's (2007) path analysis method and Mplus 7.0 software for cross-level analysis to test our hypotheses. When testing mediation hypotheses, we used the Monte Carlo resampling method to examine the significance of indirect effects, which can accurately reflect the non-normal distribution characteristics of indirect effect values and produce more accurate results (Preacher et al., 2010). When testing moderation effects, we group-mean centered individual-level control variables and independent variables to obtain unbiased estimates of individual-level relationships. Additionally, we grand-mean centered team-level control variables and moderators (Hofmann & Gavin, 1998).

4.4 Results

4.4.1 Confirmatory Factor Analysis Using Amos 22.0 software, confirmatory factor analysis was conducted on the four core variables: abusive supervision, leader-member exchange differentiation, organization-based self-esteem, and employee innovative behavior. The discriminant validity was assessed by comparing different factor models. Considering the small sample size in this study, to improve model fit, we used item parceling (Mathieu & Farr, 1991). First, factor loadings for each item on the latent variable were obtained through the measurement model. Then, items with the highest and lowest factor loadings were combined, followed by items with the second-highest and second-lowest loadings, and so on. Ultimately, organization-based self-esteem was reduced from 10 items to 5 parcels.

As shown in Table 4, the four-factor model ($\chi^2 = 642.02, df = 224, CFI = 0.92, TLI = 0.91, RMSEA = 0.08, SRMR = 0.05$) demonstrated significantly better fit than alternative models. This result also confirms that the four core variables—abusive supervision, leader-member exchange, organization-based self-esteem, and employee innovative behavior—have high discriminant validity and are suitable for subsequent empirical analysis.

Table 4 Confirmatory Factor Analysis Results

4.4.2 Descriptive Analysis Using SPSS 23.0 software, correlation analysis was conducted. Means, standard deviations, and correlation coefficients for all variables are shown in Table 5. Results indicate that abusive supervision is significantly negatively correlated with organization-based self-esteem ($r = -0.15, p < 0.05$) and employee innovative behavior ($r = -0.14, p < 0.05$). Organization-based self-esteem is significantly positively correlated with employee innovative behavior ($r = 0.37, p < 0.001$). These results are consistent with our theoretical predictions.

Table 5 Descriptive Analysis Results

4.4.3 Hypothesis Testing For testing H1 and H2, as shown in Table 3, abusive supervision has a significant negative effect on employee innovative behavior ($B = -0.22, p < 0.001$) and a significant negative effect on organization-based self-esteem ($B = -0.14, p < 0.01$). Organization-based self-esteem has a significant positive effect on employee innovative behavior ($B = 0.35, p < 0.001$). Thus, Hypotheses 1 and 2 are supported, and Hypothesis 3 receives preliminary support.

For testing H3, given the nested structure of our data, we used path analysis combined with the Monte Carlo method to examine the mediating effect of organization-based self-esteem. After 20,000 Monte Carlo resamples, results showed that abusive supervision can weaken employee innovative behavior by reducing organization-based self-esteem (indirect effect = $-0.11, 95\% \text{ CI} = [-0.175, -0.060]$). Therefore, H3 is supported.

For testing H4, as shown in Table 3, the interaction term between abusive supervision and LMXD has a significant negative effect on organization-based self-esteem ($B = -0.50, p < 0.01$). To more intuitively demonstrate the moderating effect of LMXD, we conducted simple slope analysis and plotted the moderation effect. As shown in Table 4 and Figure 2 [Figure 2: see original paper], when LMXD is high, abusive supervision has a significant negative effect on organization-based self-esteem (slope = $-0.38, p < 0.01$); when LMXD is low, abusive supervision has no significant effect on organization-based self-esteem (slope = $-0.08, p > 0.05$). Moreover, the slopes differ significantly between the two conditions (slope difference = $-0.29, p < 0.01$). Therefore, H4 is supported.

Table 3 Cross-Level Regression Analysis Results

Figure 2 [Figure 2: see original paper] Moderating Effect of LMXD on the Relationship Between Abusive Supervision and Organization-Based Self-Esteem

For testing H5, as shown in Table 4, when LMXD is high, abusive supervision can significantly inhibit employee innovative behavior by reducing employees' self-evaluation (indirect effect = $-0.13, 95\% \text{ CI} = [-0.204, -0.061]$); when LMXD is low, the negative indirect effect of abusive supervision on employee innovative behavior is not significant (indirect effect = $-0.03, 95\% \text{ CI} = [-0.089, 0.024]$). Moreover, the indirect effects differ significantly between the two conditions (indirect effect difference = $-0.10, 95\% \text{ CI} = [-0.195, -0.024]$). Therefore, H5 is supported.

Table 4 Moderated Mediation Test Results

5 Discussion

5.1 Research Conclusions

This study explores the mechanism through which abusive supervision affects employee innovative behavior from a self-concept perspective. Results show that: (1) Abusive supervision negatively affects employee innovative behavior. This management style with obvious negative connotations largely consumes subordinates' cognitive-psychological states and work-related resources, leading employees to inhibit innovative behavior to conserve resources. (2) Abusive supervision inhibits employees' innovative behavior by reducing their organization-based self-esteem. In the workplace, employees form clear self-evaluations by receiving information from leaders' interactions to judge their value and importance in the organization or team. This self-evaluation is an important mechanism that drives individuals to strive and self-regulate (Shamir et al., 1993). In abusive contexts, employees' organization-based self-esteem continuously declines, making them feel they are irrelevant and valueless to the organization, which further inhibits their innovative behavior. (3) LMXD not only strengthens the negative effect of abusive supervision on organization-based self-esteem but also strengthens the negative indirect effect of abusive supervision on employee innovative behavior through organization-based self-esteem. In other words, the higher the team's LMXD, the greater the difference in exchange relationships between team leaders and different team members, and the more leaders' abusive treatment makes other team members perceive that abused employees have poor relationships with the leader and low status in the team, leading abused employees to make more negative attributions about their self-concept and further harming their innovative behavior.

5.2 Theoretical Contributions

- (1) This study empirically examines the mechanism through which abusive supervision negatively affects employee innovative behavior, enriching research in both abusive supervision and innovation domains. It responds to calls for investigating negative leadership effects on innovation outcomes and provides a new theoretical perspective—self-concept theory—for exploring the detrimental effects of abusive supervision. (2) From the perspective of organization-based self-esteem, this research clarifies its central role in the process through which abusive supervision reduces employee innovative behavior. In China's "relationship-based society," people more often define themselves through social relationships and organizational characteristics. Therefore, in the workplace, employees tend to develop organization-based self-esteem to measure their value. Employees subjected to abusive supervision often cannot feel respect from leaders, reducing their contributions to the organization and losing innovation willingness. Thus, this study extends from the individual to the organization, exploring the important role of organization-based self-esteem in the leadership style-employee innovation process and extending the explana-

tory power of organization-based self-esteem in the employee innovation domain. (3) By incorporating the context of relationship differentiation formed in organizations or teams—a characteristic of Chinese culture—this study investigates the effectiveness of abusive supervision in this context, extending the boundary conditions for how abusive supervision operates in Chinese enterprises. Previous research has mostly selected individual factors as moderators to examine the mechanisms of abusive supervision, neglecting the important role of team factors. Considering the widespread phenomenon of differential patterns in Chinese society—where leaders form their relationship networks with themselves at the center, like ripples expanding outward, with insiders having better relationships with leaders and easier access to resources while outsiders have poorer relationships and difficulty receiving leaders' care (Yang, 1992)—this study examines the contingency effect of LMXD as a team characteristic in the abusive supervision \rightarrow organization-based self-esteem \rightarrow employee innovative behavior process. This helps understand the boundary conditions of abusive supervision and enriches research on team exchange relationships.

5.3 Managerial Implications

The conclusions of this study offer guidance for how enterprises can regulate managers' behaviors to enhance management effectiveness, specifically in the following aspects: (1) Abusive supervision not only reduces employees' self-evaluation but also hinders employee innovative behavior. This requires managers to minimize or avoid sustained hostile verbal or nonverbal behaviors toward employees in daily management. To this end, enterprises should strengthen behavioral norms for managers and encourage them to demonstrate more positive leadership styles. Additionally, managers should respect employees' ideas and opinions, provide them with sufficient support and encouragement, and create a safe and inclusive work environment. Finally, managers should provide employees with relevant training and development opportunities to enhance their professional capabilities and innovation awareness, helping them better cope with challenges and opportunities. (2) The degree of negative impact of leaders' abusive supervision on subordinates depends on team LMXD—the larger the team's LMXD, the stronger this negative effect. Based on this, managers should treat subordinates equally in daily work, especially when exhibiting negative leadership behaviors, as this can reduce negative impacts on subordinates. Meanwhile, managers should establish open communication mechanisms, encourage teamwork and knowledge sharing among employees, allow employees to freely express opinions and ideas, and provide timely feedback and guidance to help them better demonstrate innovative behavior.

5.4 Limitations and Future Directions

This study also has some limitations. (1) Although data were collected at different timepoints, it remains essentially cross-sectional research. Future studies

could verify the causal relationships among core variables through longitudinal research or experiments. (2) While this study confirms the negative effects of abusive supervision, consistent with most previous research on abusive supervision effectiveness, if leaders' abusive behaviors toward employees are triggered by employees' low performance, abusive supervision might have some positive effects on employees (Qin et al., 2018). From this perspective, future research could explore the double-edged sword effect of abusive supervision.

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