

Is Abusive Supervision Always “Toxic” to Work Engagement? – A Moderated Nonlinear Mediation Model

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Abstract: Abusive supervision is often regarded as a “toxic” factor, which has a negative impact. However, latest research has shown that it has a positive side. Based on the regulatory focus and conservation of resources (COR) theory, this paper discusses the double-edged sword effect of abusive supervision on work engagement. The results of hierarchical regression and bootstrapping on 331 samples showed that there is an inverted U-shaped curve relationship between abusive supervision and work engagement, in which situational regulatory focus plays a differential mediating role between them; that is, abusive supervision through inverted U-shaped stimulation on promotion-focus and positive induction on prevention-focus affects work engagement; proactive personality moderates the inverted U-shaped effect of abusive supervision on work engagement, meanwhile it moderates the inverted U-shaped mediating role of promotion-focus and the linear mediating role of prevention-focus. This study provides a new reference for organization on how to control abusive management in practice.

Keywords: Abusive supervision; Promotion-focus; Prevention-focus; Work engagement; Proactive personality

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1. Research background

Faced with the highly fuzzy and uncertain environment, knowledge workers, as the human resources with the most creative potential, are the key for organizations to break through the crisis and gain sustainable competitive advantages in the dynamic environment. However, according to China’s enterprise engagement report from 2018 to 2019, the overall work engagement level of Chinese employees born in the 1990s is only 53.36%. As the post-90s generation with innovative thinking and creativity, this survey is worrying, but the underlying reasons for the negative employee engagement have not been proven yet.

Leadership, as an important factor affecting employee engagement in organizational context, has been widely concerned, especially about positive leadership in promoting employees’ work engagement ^[1]. However, there is a lack of research on how toxic traits affect employees’ work engagement. Studies have proven that abusive supervision is more likely to induce negative attitudes and behaviors, such as turnover tendency and feedback avoidance ^[2, 3]. Does abusive supervision only have a negative impact on work engagement or will play a certain positive effect? How does abusive supervision affect work engagement? The emphasis on these issues is insufficient ^[4]. Although relevant studies have indirectly verified the negative correlation between abusive supervision and work engagement ^[5], Tepper and other researchers specifically pointed out that abusive supervision can be regarded as a stressor in the organizational context,

which may not only lead to “damage induction” but also play a role of “performance promotion”^[6]. Recent studies have found that abusive supervision exerts an inverted U-shaped influence on employee performance and creativity under certain conditions^[7, 8], while work engagement is positively correlated with creativity^[9]. Therefore, there may be an inverted U-shaped relationship between abusive supervision and employees’ work engagement.

Regulatory focus theory reveals the motivation of individuals in seeking benefits and avoiding harm, in which promotion focus positively regulates reward acquisition behavior, while prevention focus positively regulates punishment avoidance behavior. Studies have shown that regulatory focus has an explanatory effect on work engagement^[10]. The challenging stressor of abusive supervision can provide employees with opportunities for growth and development, easily induce individual growth and self-realization, stimulate their promotion focus, as well as encourage employees to actively engage in work. On the other hand, the hindering stressor of abusive supervision leads to job insecurities and potential losses, leading to an urgent need for job security, inducing their prevention focus, and inhibiting employees’ work engagement^[11]. Therefore, abusive supervision may have differentiated effects on work engagement through the stimulation of different regulatory focus, which can reveal the internal triggering mechanism of abusive management on employees’ work engagement.

If abusive supervision has a differentiated effect on job engagement, under what circumstances will it enhance its positive effect and weaken its negative effect? According to the conservation of resources theory, individual resources (positive personality) are important factors affecting employees to withstand stress and bear losses^[12]. Proactive personality is an important individual resource^[13]. The higher the proactive personality, the more resources it has, the stronger willingness to actively transform the environment, and the more likely to actively interpret information in stressful situations. Studies have shown that proactive personality positively predicts employees’ work engagement and moderates the impact of abusive supervision on employees’ work engagement^[9, 14].

2. Theoretical basis and research hypothesis

2.1. Curvilinear relationship between abusive supervision and work engagement

Work engagement refers to the state in which individuals integrate their physical ability, cognition, and emotion into their work roles and show their vitality, concentration, and dedication to work^[4]. Research has shown that leadership plays a key role in work engagement, in which positive leadership styles are mostly focused on^[1]. Relatively few studies have explored about how abusive supervision affects employees’ “positive” attitudes toward work engagement. Relevant studies have indirectly verified the negative correlation between them^[5]. However, according to the definition of abusive supervision by Tepper^[15], there is no such thing as abusive supervision from the perspective of leaders, but only “strict” measures to complete tasks with high quality. However, the criticism from leaders will easily create tension, resulting in pressure. Therefore, this paper defines abusive supervision as a stressor to explore its impact.

Studies have shown that there is an inverted U-shaped relationship between stressors and innovation^[16]. Recent studies have confirmed that abusive supervision has certain positive effects on employee performance and motivation under certain conditions^[7, 17]. Lee and other researchers from South Korea confirmed that “moderate” abusive supervision has a certain activation effect on employees’ creativity^[8]. Similarly, in China, with high power distance, if the level of abusive supervision is too low, subordinates will tend to think that the leaders are too lax, unambitious, and only dealing with routine work to save individual resources, so their work motivation and investment level are low. On the other hand, when the level is too high, it will cause tension and anxiety among employees, consume excessive resources, and then reduce their work engagement. When abusive supervision is moderate, it will help individuals to reach

an optimal activation of devotion to work, so moderate abusive supervision will help to promote subordinates' work engagement. Therefore, a hypothesis has been put forward.

H1: Abusive supervision has an inverted U-shaped impact on employees' work engagement; low or high level of abusive supervision is negative, but moderate abusive supervision can effectively stimulate work engagement.

2.2. Mediating effect of regulatory focus on the relationship between abusive supervision and employees' work engagement

The theory of regulatory focus was proposed by Higgins^[18], which holds that individuals have two different sets of self-regulation systems: promotion focus and prevention focus. Promotion focus originates from individual's "profit-seeking" behavior, strong ideal, and growth need; it positively regulates the reward-acquisition behavior, making individuals focus on ideal, growth, and potential benefits as well as tend to adopt aggressive strategies to pursue positive goals. Prevention focus originates from individual's "avoidance of harm," strong obligation, and safety need; it positively regulates punishment avoidance behavior, encouraging individuals to focus on safety, obligation, and potential losses as well as to adopt avoidance strategies to prevent negative outcomes^[11]. The regulatory focus is further divided into trait and situational regulatory focus. The former is not easily influenced, while the latter is a state variable easily stimulated by external factors^[18]. Abusive supervision will induce situational regulatory focus^[11].

Abusive supervision, as a stressor, has dual characteristics, as a challenging stressor and a hindering stressor^[16]. As challenging stressor has the potential of ideal realization, individual growth, and performance benefits, it will stimulate employees' promotion focus; hindering stressor, on the other hand, has the potential loss of obligation, safety, and hazard, which will induce employees' prevention focus^[19]. Specifically, when faced with criticism or accusation in abusive supervision, according to the cognitive activation theory of stress^[20], employees will make cognitive judgments based on the job requirements and their own resources. If the level of abusive supervision is too low, employees will tend to think that the leaders operate perfunctorily, so their work motivation is low. When abusive supervision gradually improves to a moderate nature, the harsh work requirements have potential growth and development opportunities, which will arouse their strong growth needs and sensitivity to future benefits, thus inducing their promotion focus. On the other hand, the harsh work requirements of abusive supervision may cause hindering pressure among employees, such as job insecurity and role conflict^[16], which will lead to threat assessment and arouse their strong safety needs as well as sensitivity to potential punishment, thus stimulating their prevention focus. When abusive supervision exceeds a certain degree, employees will feel severe exhaustion, the promotion focus decreases rapidly, and prevention focus further strengthens. Therefore, abusive supervision may have an inverted U-shaped effect on promotion focus, while it has a positive effect on prevention focus. Therefore, a hypothesis has been put forward.

H2a: Abusive supervision has an inverted U-shaped effect on employees' promotion focus.

H2b: Abusive supervision has a positive impact on employees' prevention focus.

Individuals with different regulatory focus show significant differences in attitude and behavior^[18]. Promotion-focused individuals tend to adopt aggressive strategies to achieve positive goals, whereas prevention-focused individuals tend to adopt defensive strategies to avoid negative outcomes. When the challenging stressor of "moderate" abusive supervision stimulates employees' promotion focus, they pay more attention to personal growth and the realization of "ideal self," focus on positive goals, such as hope, opportunity, and development, as well as tend to challenge the status quo with aggressive strategies, so as

to actively mobilize resources to work with enthusiasm ^[19]. On the contrary, the hindering pressure of abusive supervision stimulates the prevention focus, in which employees will pay more attention to work safety and the realization of “ought to be,” focusing on responsibility and obligation, inclined to avoid the loss of resources, to show no commitment to work. Therefore, a hypothesis has been put forward.

H3a: Promotion focus is significantly positively correlated with work engagement.

H3b: Prevention focus is significantly negatively correlated with work engagement.

Based on H2 and H3, this paper argues that the challenging stressor of moderate abusive supervision stimulates employees to focus on positive goals, such as opportunity, growth, and potential benefits by arousing promotion focus, and then encouraging them to gather individual resources and actively engage in work with aggressive strategies. The hindering stressor of abusive supervision induces the individual to focus on defense and causes employees to pay attention to negative consequences, such as safety, obligation, and potential loss, so as to save individual resources and reduce work engagement by avoiding strategies. Therefore, a hypothesis has been put forward.

H4a: Promotion focus moderates the inverted U-shaped relationship between abusive supervision and employees’ work engagement.

H4b: Prevention focus moderates the negative correlation between abusive supervision and employees’ work engagement.

2.3. The moderating role of proactive personality

Proactive personality refers to the characteristics of employees who are proactive, actively acquire knowledge, and spontaneously improve the environment ^[13]. According to the definition of the COR theory, individual resources are important factors affecting the ability of employees to bear losses and withstand pressure ^[12]. As an important personality trait, proactive personality is an essential individual resource. When an employee’s proactive personality is high, individual resources is abundant and the employee has a strong will to change, able to make positive interpretations of information in stressful situations, focus on opportunities, harvest behind challenges and pressure, enlarge the positive side of challenging stressor, as well as enhance the promotion focus; at the same time, the negative interpretation of abusive supervision can be reduced along with the induction of prevention focus. Studies have shown that proactive personality positively predicts employees’ work engagement and has a contingency effect on the influence of leadership on employees’ attitudes and behaviors ^[9, 14].

According to the COR theory, the more resources an individual has, the less likely the occurrence of the sense of resource loss in the face of pressure and risk, but instead, there is a higher possibility to obtain more resources ^[12]. Different proactive personalities will affect the subjective cognitive judgment of abusive supervision and moderate the relationship between abusive supervision and work engagement ^[9]. To be specific, employees with higher proactive personality have more sufficient individual resources to cope with stress, and they are more likely to reflect on, revise, and improve moderate abusive supervision; in addition, they are more inclined to regard abusive supervision as a challenge, so as to actively acquire and allocate resources as well as devote themselves to work. Therefore, abusive supervision has a more significant inverted U-shaped effect on work engagement of employees with high proactive personality. On the contrary, employees with low proactive personality, who have insufficient resources to cope with situational stress, tend to amplify the negative interpretation of abusive supervision and have stronger pessimism in face of abusive supervision, thus reducing their work engagement. Therefore, a hypothesis has been put forward.

H5: Proactive personality moderates the inverted U-shaped relationship between abusive supervision and employees' work engagement.

Employees with high proactive personality have a strong sense of self-efficacy in overcoming the challenging stressor of abusive supervision, which will stimulate their growth needs and ideal fulfillment as well as enhance their enthusiasm in constructing resources to cope with the pressure. When abusive supervision is kept in a certain range, promotion-focused individuals with high proactive personality is more stimulated. However, when abusive supervision exceeds a certain value and breaks through the range, it will lead to a sharp decline in promotion focus. Therefore, there is a turning point between abusive supervision and promotion focus when proactive personality is high. On the contrary, there is no turning point between abusive supervision and promotion focus when proactive personality is low. Therefore, another hypothesis has been put forward.

H6a: Proactive personality moderates the inverted U-shaped effect of abusive supervision on promotion focus.

Employees with high proactive personality have strong ability for emotion regulation and reflection; they have more positive expectations to control work objectives, which can help them alleviate the sense of resource deprivation caused by abusive supervision and weaken the positive induction of prevention focus^[12]. On the contrary, individuals with low proactive personality and lacking individual resources to cope with pressure and risk tend to amplify negative expectations brought by abusive supervision, further aggravate their negative feelings of resource deprivation, and enhance their prevention focus^[12]. Therefore, a hypothesis has been put forward.

H6b: Proactive personality moderates the positive effect of abusive supervision on prevention focus.

Based on H5, H6a, and H6a, proactive personality moderates the mediating role of promotion focus and prevention focus between abusive supervision and employees' work engagement. For employees with high proactive personality, promotion focus has a significant nonlinear mediating effect between abusive supervision and work engagement; on the other hand, for employees with low proactive personality, prevention focus has a significant negative mediating effect. Therefore, a hypothesis has been put forward.

H7a: Proactive personality moderates the inverted U-shaped mediating effect of promotion focus on abusive supervision and work engagement.

H7b: Proactive personality moderates the linear mediating effect of prevention focus on abusive supervision and work engagement.

In summary, the research framework is shown in **Figure 1**.

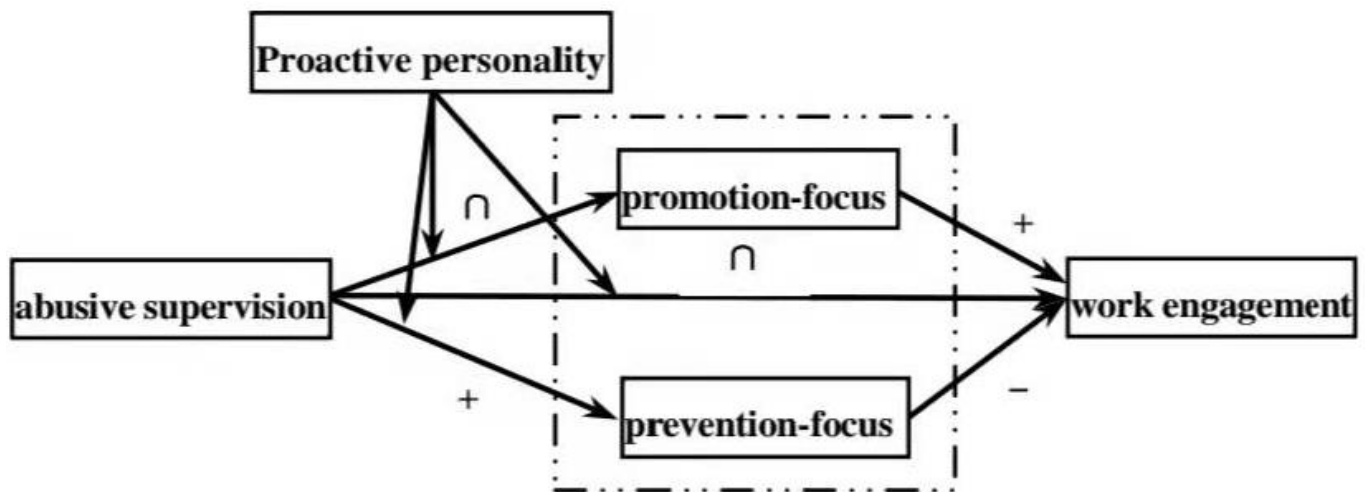


Figure 1. Research framework

3. Research methods

3.1. Data collection

Data were collected from the research and development (R&D) departments of 15 high-tech enterprises in Shenzhen, Beijing, Xi'an, and Zhengzhou. Questionnaires were collected through on-site release and recovery, and the human resource department was entrusted to send and receive the questionnaires at two time points. In the first period, questionnaires of control variables, abusive supervision, proactive personality, and situational regulatory focus were distributed to the employees; in the second period (four weeks later), work engagement questionnaires were distributed to the same subjects.

During the survey period from December 2020 to March 2021, 430 questionnaires were distributed. Upon excluding invalid questionnaires (regular or continuous answers), 331 valid matching questionnaires were obtained, with an effective rate of 76.98%. The general data of the respondents were as follows: female, 42.60%, male, 57.40%; those aged 20-30, 42.60%, those aged 30-40, 44.11%, and those aged over 40, 13.29%; 26.28% with a bachelor's degree or lower, 68.28% with a master's degree, 5.44% with a doctoral degree or above; those who have worked less than 1 year, 10.88%, 1~3 years, 41.39%, and more than 3 years, 47.73%.

3.2. Variable measurement

The selected scales were all matured scales from top international journals and were scored by 7-point Likert scale. The Utrecht Work Engagement Scale (UWES)-9 questionnaire developed by Schaufeli was used for work engagement, with three items (vitality, focus, and dedication), and a consistency coefficient of 0.891^[21]. For abusive supervision, the revised version of Harris was adopted, with a total of six items; its reliability and validity were well verified, with a consistency coefficient of 0.866^[22]. The situational regulatory focus questionnaire developed by Zhou has a total of seven items, including 4 items for promotion focus and 3 items for prevention focus, such as "I can always focus on achieving personal ideal work" and "I am always careful in the prevention of failure and potential losses"; it has a consistency coefficient of 0.824 for promotion focus, and 0.812 for prevention focus, with a total consistency coefficient of 0.836^[23]. For proactive personality, a 6-item scale adapted by Parker was adopted. It includes items such as "If I encounter something I don't like, I will change it" and "I always look for a better way to do things," with a consistency coefficient of 0.825^[24]. Working years, education, gender, and age were controlled.

4. Data analysis and results

4.1. Validity and common method bias

Although the data were collected in two periods, the variables were all evaluated subjectively by employees, so it is inevitable that there may be common method bias. Harman factor analysis showed that there are six factors, in which the explanatory value of the first factor is 26.03%. Therefore, the common method bias is well-controlled. Using AMOS 22.0 for confirmatory factor analysis (CFA), the result showed the fit of the four factors model ($\chi^2 = 142.232$, $df = 84$, $\chi^2 / df = 1.693$, $CFI = 0.961$, $TLI = 0.944$, $IFI = 0.907$, $RMSEA = 0.047$). There is high discriminative validity among the variables.

4.2. Descriptive statistics and correlation analysis

Correlation coefficients between the variables are shown in **Table 1**. Abusive supervision is significantly correlated with promotion focus, prevention focus, and work engagement ($r = -0.231$, $p < 0.05$; $r = 0.382$, $p < 0.01$; $r = -0.226$, $p < 0.05$). Promotion focus and prevention focus are significantly correlated with work engagement ($r = 0.426$, $p < 0.001$; $r = -0.401$, $p < 0.01$).

Table 1. Descriptive statistics and correlation analysis (N = 331)

Variables	<i>M</i>	<i>SD</i>	1	2	3	4	5	6	7	8	9
1 Gender	0.426	0.406	—								
2 Age	32.094	5.241	-0.012	—							
3 Education	1.761	0.476	0.092	0.201**	—						
4 Years	5.936	3.543	-0.052	0.854**	-0.015	—					
5 As	2.611	0.879	0.141	-0.112	-0.072	-0.131	(0.866)				
6 Pf	3.962	0.588	0.132	-0.025	0.022*	-0.021	-0.231*	(0.824)			
7 Pef	4.089	0.501	-0.091	0.021	-0.083	0.032*	0.382**	-0.315*	(0.812)		
8 We	4.322	0.625	0.102	-0.044	0.032*	-0.059	-0.226*	0.426***	-0.401**	(0.891)	
9 Prop	4.209	0.835	0.011	-0.081	0.036*	0.028*	0.236	0.311**	-0.217**	0.379**	(0.825)

Note. * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$ (the same below). Parentheses for consistency coefficients: abusive supervision (As); work engagement (We); promotion focus (Pf); prevention focus (Pef); proactive personality (Prop).

4.3. Curvilinear effects of abusive supervision on employees' work engagement

4.3.1. Main effect and mediating effect test

SPSS 20.0 was used for multilevel regression analysis, and the curve relationship was verified by the method described by Edwards^[25]. The results are shown in **Table 2**. According to *Model6a* and *Model7a*, abusive supervision is significantly negatively correlated with work engagement ($\beta = -0.292$, $p < 0.05$). When abusive supervision square was added, the correlation coefficient decreased, a significant negative correlation was noted between abusive supervision and work engagement ($\beta = -0.152$, $p < 0.05$), and the fitting index increased significantly ($\Delta R^2 = 0.063$, $p < 0.01$); the results showed that there is an inverted U-shaped relationship between abusive supervision and work engagement, thus verifying H1. According to *Model1a* and *Model2a*, abusive supervision is significantly negatively correlated with promotion focus ($\beta = -0.223$, $p < 0.01$). Upon adding abusive supervision square, the correlation coefficient decreased, a significant negative correlation was noted between abusive supervision and promotion focus ($\beta = -0.206$, $p < 0.01$), and the fitting index increased significantly ($\Delta R^2 = 0.043$, $p < 0.01$); the results showed that there is an inverted U-shaped relationship between abusive supervision and promotion focus, thus verifying H2a. According to *Model8a*, upon the addition of promotion focus into the model, a

significant positive correlation was noted between promotion focus and work engagement ($\beta = 0.247$, $p < 0.01$), thus verifying H3a. In terms of abusive supervision, abusive supervision square, and work engagement ($\beta = -0.148$, $p < 0.05$), ($\beta = -0.161$, $p < 0.05$), the correlation coefficient decreased but remained significant, indicating that promotion focus partially mediates the relationship, thus verifying H4a.

4.3.2. Moderating effect test

The moderating effect was tested after centralizing the variables. According to *Model10a* and *Model11a* in **Table 2**, the interaction of abusive supervision and proactive personality affects work engagement ($\beta = -0.139$, $p < 0.01$). The effect of abusive supervision square and proactive personality interaction on work engagement ($\beta = -0.153$, $p < 0.01$) was significant. The results showed that proactive personality moderates the inverted U-shaped effect between abusive supervision and work engagement, thus verifying H5. According to the method described by Aiken [26], the moderating effect map was drawn, as shown in **Figure 2**. According to *Model4a* and *Model5a*, the interaction of abusive supervision and proactive personality affects promotion focus ($\beta = -0.203$, $p < 0.01$); the effect of abusive supervision square and proactive personality interaction on promotion focus ($\beta = -0.283$, $p < 0.01$) was significant. The results showed that proactive personality moderates the inverted U-shaped effect between abusive supervision and promotion focus, thus verifying H6a. The moderating effect map was drawn, as shown in **Figure 3**.

Table 2. Curvilinear relationship between abusive supervision and work engagement, and the moderating effect of proactive personality

Variables	Promotion focus (Pf)						Work engagement (We)				
	<i>Model1a</i>	<i>Model2a</i>	<i>Model3a</i>	<i>Model4a</i>	<i>Model5a</i>	<i>Model6a</i>	<i>Model7a</i>	<i>Model8a</i>	<i>Model9a</i>	<i>Model10a</i>	<i>Model11a</i>
Gender	0.136	0.117	0.113	0.114	0.116	0.101	0.097	0.087	0.099	0.093	0.093
Age	0.024	0.019	0.021	0.018	0.020	-0.038	-0.036	-0.025	-0.031	-0.028	-0.028
Education	0.021*	0.018*	0.021*	0.017*	0.019*	0.029	0.030	0.029	0.028	0.027	0.027
Years	-0.037	-0.031	-0.028	-0.029	-0.030	0.062	0.059	0.047	0.055	0.051	0.051
As	-0.223**	-0.168**				-0.292*	-0.182*	0.148*			
As ²		-0.206**					-0.152*	-0.161*			
Pf								0.247**			
Prop			0.316**						0.230**		
As×Prop				-0.203**						-0.139**	
As ² ×Prop					-0.283**						-0.153**
F	6.316	4.832	5.713	6.232	5.931	3.672	4.741	6.044	5.235	5.911	6.012
R ²	0.092	0.121	0.126	0.131	0.129	0.152	0.187	0.285	0.191	0.203	0.210
ΔR ²	0.112	0.043**	0.045**	0.042**	0.046**	0.128**	0.063**	0.059**	0.060**	0.021**	0.032**

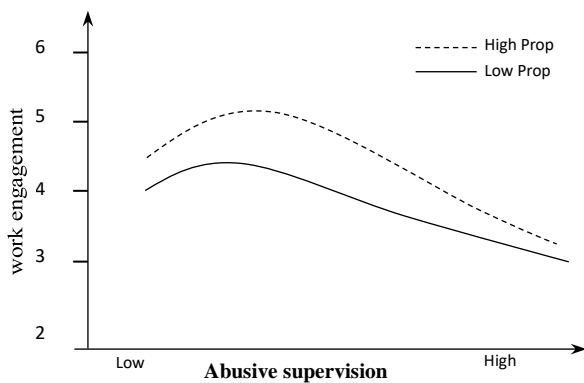


Figure 2. The moderating effect of proactive personality on abusive supervision and work engagement

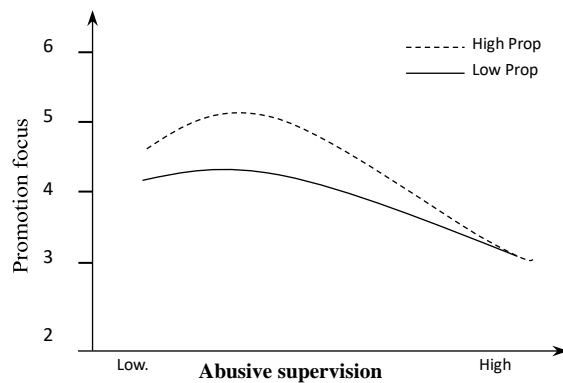


Figure 3. The moderating effect of proactive personality on abusive supervision and promotion focus

4.3.3. Test of mediated mediating effects

The bootstrap method was used to verify the moderating effect of proactive personality on promotion focus. Data were randomly selected for 5,000 times, and the confidence interval of the difference in the mediating effect value was calculated when the mean value of proactive personality increased or decreased by *1SD*. The results are shown in **Table 3**. With high proactive personality, the mediating effect value of promotion focus is 0.037, and the 95% confidence interval is [0.037, 0.274], excluding 0, indicating significant mediating effect. With low proactive personality, the effect value is 0.022, and the 95% confidence interval is [-0.048, 0.054], including 0, indicating that the mediating effect is not significant. The value difference is 0.015, and the 95% confidence interval is [0.001, 0.013], excluding 0, indicating a significant difference. Proactive personality positively moderates the mediating effect of promotion focus, thus verifying H7a.

Table 3. Mediating effect of promotion focus at different levels of proactive personality

Prop	Effect	SE	<i>p</i>	[LLCI, ULCI]
Mean+1SD	0.037	0.024	0.047	[0.037,0.274]
Mean-1SD	0.022	0.012	0.011	[-0.048,0.054]
Differences	0.015	0.034	0.036	[0.001,0.013]

4.4.1. A linear relationship test between abusive supervision and employees' work engagement

4.4.1. Main effect and mediating effect test

The linear relationship was verified by the method described by Baron ^[27], and the results are shown in **Table 4**. *Model2b* shows that abusive supervision is significantly positively correlated with prevention focus ($\beta = -0.271$, $p < 0.05$), thus supporting H2b. *Model6b* shows that abusive supervision is negatively correlated with work engagement; there is a significant negative correlation between prevention focus and work engagement ($\beta = -0.218$, $p < 0.01$), thus supporting H3b; the correlation between abusive supervision and work engagement is no longer significant ($\beta = -0.204$, *n. s.*), indicating that prevention focus completely mediates the relationship between the two, thus supporting H4b.

4.4.2. Moderating effect test

Model3b and *Model4b* in **Table 4** show that proactive personality is significantly negatively correlated with

prevention focus ($\beta = -0.215$, $p < 0.01$), abusive supervision and proactive personality interaction are significantly correlated with prevention focus ($\beta = -0.187$, $p < 0.01$), and proactive personality moderates the relationship between abusive supervision and prevention focus, thus supporting H6b. The moderating effect is shown in **Figure 4**. Abusive supervision has stronger stimulation on the prevention focus of employees with low proactive personality.

Table 4. The linear relationship between abusive supervision and work engagement, and the moderating effect of proactive personality

Variables	Prevention focus (Pef)				Work engagement (We)		
	<i>Model1b</i>	<i>Model1b</i>	<i>Model2b</i>	<i>Model3b</i>	<i>Model4b</i>	<i>Model5b</i>	<i>Model6b</i>
Gender	-0.102	-0.098	-0.096	-0.089	0.113	0.101	0.101
Age	0.019	0.026	0.019	0.023	-0.041	-0.038	-0.028
Education	-0.062	-0.071	-0.068	-0.072	0.034	0.029	0.032
Years	0.042	0.039	0.035	0.040	0.076	0.062	0.043
As		0.343**				-0.292*	-0.204
Pef							-0.218**
Prop			-0.215**				
As×Prop				0.187**			
<i>F</i>	4.436	7.136	5.934	6.811	1.451	3.302	4.083
<i>R</i> ²	0.039	0.075	0.083	0.094	0.013	0.034	0.057
ΔR^2		0.047**	0.036***	0.028***		0.035***	0.042***

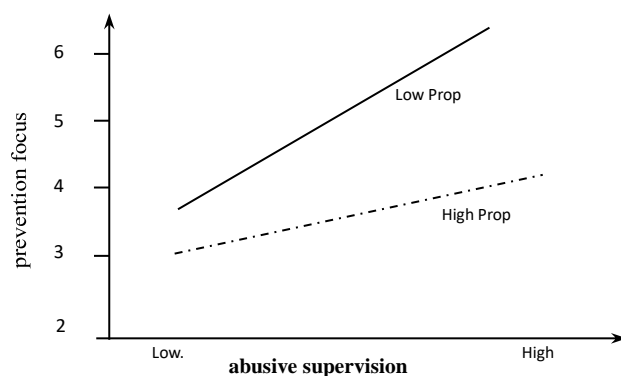


Figure 4. The moderating effect of proactive personality on abusive supervision and prevention focus

4.4.3. Test of mediated mediating effects

The bootstrap method was used to verify the moderating effect of proactive personality on the mediating effect of prevention focus. Data were randomly selected for 5,000 times, and the mean value of proactive personality with an increased or decreased by *1SD* level was tested. The results are shown in **Table 5**. With high proactive personality, the effect value of prevention focus is -0.023, and the 95% confidence interval is [-0.034, 0.059], including 0, indicating that the mediating effect is not significant. With low proactive personality, the effect value is -0.012, and the 95% confidence interval is [-0.047, -0.286], excluding 0, indicating significant mediating effect. The value difference is -0.015, and the 95% confidence interval is [0.001, 0.012], excluding 0, indicating a significant difference. Proactive personality moderates the mediating effect of proactive personality, thus verifying H7b.

Table 5: Mediating effect of prevention focus at different levels of proactive personality

Prop	Effect	SE	<i>p</i>	[LLCI, ULCI]
Mean+1SD	-0.023	0.025	0.031	[-0.034, 0.059]
Mean-1SD	-0.012	0.012	0.000	[-0.047, -0.286]
differences	-0.015	0.031	0.002	[0.001, 0.012]

5. Conclusion and prospect

5.1. Research conclusion and contribution

Firstly, there is an inverted U-shaped relationship between abusive supervision and work engagement; abusive supervision has an inverted U-shaped effect on employee promotion focus and a positive effect on employee prevention focus. This conclusion makes up for the deficiency of existing studies that only focus on the negative impact of abusive supervision on work engagement, proves the positive side of abusive supervision from an empirical perspective, deepens the theoretical cognition of the positive effect of abusive supervision, and responds to the call of scholars for studying the curve relationship between complex management variables [17, 28].

Secondly, promotion focus partially mediates the inverted U-shaped relationship between abusive supervision and work engagement, while prevention focus completely mediates the negative relationship between abusive supervision and work engagement. This conclusion enriches the research on the mechanism of abusive supervision and verifies the appropriate mediating effect of situational regulatory focus on the connection between organizational context and individual work engagement.

Thirdly, proactive personality moderates the inverted U-shaped relationship between abusive supervision and work engagement as well as promotion focus; it also moderates the mediating role of promotion focus and prevention focus. This conclusion is helpful to accurately understand the effect and mechanism of abusive supervision on employees' work engagement as well as to some extent expand the scope of application of proactive personality to play a boundary effect.

5.2. Practical inspiration

Firstly, there is an inverted U-shaped relationship between abusive supervision and work engagement. Abusive supervision has a "double-edged sword" effect on work engagement, which is not only a negative impact, reflecting a "blade of injury," but also a positive one, reflecting a "blade of benefit." Therefore, to the dialectical view of abusive supervision in stressful situations, if it is inevitable, managers should try to practice abusive supervision control at a reasonable level, carefully grasp the degree of abusive supervision, reduce the abuse of shame for staffs, make good use of the "blade of benefit" of abusive supervision.

Secondly, abusive supervision has a differentiated mechanism of action on work engagement through promotion focus and prevention focus. Abusive supervision may either have an inverted U-shaped effect on work engagement by stimulating employees' promotion focus or a negative effect on work engagement by inducing employees' prevention focus. This conclusion provides a new perspective for managers to reflect on the current situation of the insufficient work engagement among employees, as their own abusive supervision may be one of the inducements to inhibit or stimulate their employees' perception of challenging and hindering stressors. Organizations should build a positive and progressive cultural atmosphere and implement developmental feedback, constantly guide employees to promote promotion focus, reduce the awakening of prevention focus, and improve their work engagement altogether.

Thirdly, proactive personality moderates the effect of abusive supervision on work engagement, and at the same time, it moderates the mediating effect of promotion focus and prevention focus. Therefore,

organizations should evaluate the level of proactive personality in personnel selection and deployment, carry out targeted human resource management, as well as accord appropriate abusive supervision and challenging tasks to employees with high proactive personality, so as to promote their work engagement; meanwhile, for employees with low proactive personality, abusive supervision should be reduced as far as possible and routine tasks should be assigned to avoid inhibiting their work engagement.

5.3. Research limitations and prospects

First of all, although the data were collected from two time points, the cross-sectional data had limited effect on the explanation of causality; therefore, the longitudinal multi-time point or diary method can be adopted to collect data in the future. Secondly, the boundary of the model is only discussed at the individual level; hence, team safety atmosphere and mutual help behavior among colleagues at the team level can be discussed in the future. Finally, only the situational regulatory focus was selected as the mediating variable; the trait regulatory focus is equally important to individual attitude and behavior, which can be combined into the model in future research.

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