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Upstream, Fault Tolerance Innovative: Research on the Influence of Inclusive Leadership on Employee Innovative Behavior

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Abstract

How to help enterprises develop "upstream" and improve employee innovative behavior has become an important challenge faced by leaders. For researchers, their innovative behavior comes not only from their own internal drive, but also from the climate of inclusive leadership. In the face of dynamic and complex environment, employee resilience to "going upstream" is particularly precious. Therefore, based on self-determination theory and dynamic ability theory, this paper discusses the influence of inclusive leadership on innovative behavior through employee resilience and the moderation of prosocial motivation. Through the analysis and processing of 398 effective questionnaires of leader-employee matching in 20 Chinese science and technology enterprises, the results show that inclusive leadership has a significant positive impact on employee innovative behavior; employee resilience plays a mediating role in the effects of inclusive leadership on employee innovative behavior; prosocial motivation can moderate the indirect effect of inclusive leadership on employee resilience, and further moderates the intermediary role of employee resilience. The research conclusion reveals the "black box" of the effects of inclusive leadership on employee innovative behavior, and it provides suggestions on strengthening the inclusiveness of leadership, improving employee resilience and how to manage employees with different levels of prosocial motivation.

Keywords

Inclusive Leadership, Employee Resilience, Prosocial Motivation, Innovative Behavior

1. Introduction

Social needs and environment are changing with each passing day. It is difficult for enterprises to survive, and it is even more difficult to go upstream. In the face of the increasing downward pressure on the economy and the severe situation of the epidemic, enterprises can seize the opportunity to go against the current only by "non-stop" scientific and technological innovation, making new breakthroughs in key core technologies and establishing new advantages in development. As the main power source of scientific and technological innovation (Amabile, 1998), employees have a positive impact on the innovative ability, performance and growth of enterprises (Atuahenegima, 2006; Song et al., 2019). However, the fault-tolerant and error correction mechanism of encouraging scientific and technological innovation and tolerating failure in enterprises is not perfect, resulting in the lack of work attitude of scientific researchers who are brave in innovation, responsibility and overcoming difficulties. Scientific and technological innovation is a process of constant trial and error and repeated exploration. There can be no innovation without trial and error. It is necessary to include those employees who are inexperienced. Only when they continue to grow in the failure of innovation, can they better summarize their experience and avoid making the same mistakes again. Therefore, finding a turning point in the crisis and dilemma, encouraging more researchers to carry out scientific and technological innovation enthusiasm and initiative, and the inclusiveness in the organization plays a key role (Bos-Nehles & Veenendaal, 2019).

As an inclusive leadership style that allows employees to try and tolerate failure, its close relationship with employee innovative behavior has attracted the attention of the academic circles (Fang et al., 2019). However, most scholars think inclusive leadership only focuses on the meaning of "package" harmony but not uniformity, and ignores the value of "tolerance", that is, tolerance and tolerance of wrong behavior. Therefore, this paper combines "package" and "tolerance" to explain the significance of inclusive leadership. According to the self-determination theory, employees are born with the potential and need for self-realization and self-growth. Inclusive leadership gives researchers enough trust, allows them to take responsibility for trial and error and tolerate failure, and formulate practical countermeasures for possible problems in the innovative process, so as to promote them to support the realization of employee self-growth on the basis of realizing their personal values, fully explore and release its great potential and innovative creativity (Zabielske et al., 2015). Based on the above analysis, this paper deeply analyzes the effects of inclusive leadership on employee innovative behavior from the perspective of self-determination theory.

For enterprises, the biggest risk is that they have no sense of crisis and suffering. Then, for employees, crisis awareness and suffering awareness are equally important. This paper holds that employee resilience as a positive psychological ability can actively respond to and quickly adapt to changes in the external environment (Baron et al., 2018), take innovation as the focus, learn and grow in difficulties, and go against the current, so as to continuously stimulate individual

innovative thinking and ideas. According to the dynamic capability theory, the inclusiveness of leaders will drive employees to exercise their skills of integrating diverse perspectives, which has a positive psychological impact on employee attitudes and behaviors in a dynamic environment, so that they can adjust their psychological perceptions based on the cognitive response of leaderships and promote them to produce innovation ideas (Lau & Liden, 2008). Other studies have investigated the mediating effect of employee resilience on individual variables (such as authentic leadership) and employee innovation behavior, but there is no study to test the mediating effect of employee resilience on the effects of inclusive leadership on employee innovation behavior from the perspective of impact mechanism. Therefore, this paper introduces employee resilience as an intermediary variable to analyze the effects of inclusive leadership on employee innovation behavior.

According to self-determination theory, employee intrinsic motivation is an important driving force to promote individual innovation (Deci & Ryan, 1980). As a willingness of employees to actively change their self-awareness and jump out of their own limitations, prosocial motivation has become an important internal motivation for organizational members to implement innovative behaviors. Relevant empirical studies show that prosocial motivation can promote innovative behavior. However, previous studies have explored the boundary conditions of the effects of inclusive leadership on employee innovative behavior from the organizational level such as organizational innovative atmosphere and error management atmosphere, and from the individual level such as self-efficacy and job complexity, ignoring the boundary impact of employee intrinsic motivation on innovative behavior. Therefore, this paper takes prosocial motivation as the boundary condition to supplement and improve the relationship between inclusive leadership and employee resilience and innovative behavior. In view of this, based on the technology-based enterprises, this paper integrates employee resilience and prosocial motivation into the same theoretical framework by combining self-determination theory and dynamic capability theory, in order to deeply analyze the effects of inclusive leadership on employee innovative behavior. Figure 1 shows the conceptual model and the proposed relationships.

2. Literature Review and Hypotheses Development

2.1. Relationship between Inclusive Leadership and Employee Innovative Behavior

Inclusive leadership recognize and encourage employees to put forward innovative ideas, and are good at listening to and accepting the views of others, so as to create a better fault-tolerant innovative environment for employees (Nembhard & Edmondson, 2006). Different from other leadership styles, inclusive leadership has a higher tolerance for innovation and trial and error of organization members, and actively establishes good interpersonal relationships and identifies needs with subordinates (Mayer, 2009).

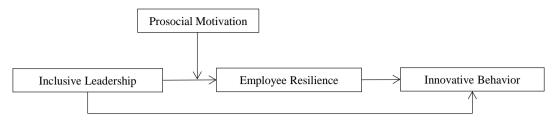


Figure 1. Conceptual model.

According to the self-determination theory, employee innovative behavior is formed on the basis that the internal psychological needs of individuals are met. Through the three characteristics of openness, accessibility and availability (Carmeli et al., 2010), inclusive leadership reflects the self-work value of subordinates and actively participates in scientific and technological innovative activities to solve the difficulties encountered in the innovative process (Yu & Frenkel, 2013).

Specifically, the openness of inclusive leadership lies in that they create a positive, open and trusted fault-tolerant innovative atmosphere, respect, support and encourage employees to think positively, and give them more decision-making power and scientific research autonomy in innovative activities. Employees think they can speak freely psychologically, and are willing to discuss new methods to achieve work goals and pay attention to new opportunities, so as to give full play to their personality and innovative ability (Wang et al., 2018). The accessibility of inclusive leadership is employee centered. In the face of employee innovative failure, they release positive signals, put forward suggestions and help them carry out technological innovation, so that employees can feel the recognition and support of the organization for their innovative behavior (Chen & Cheng, 2021), and promote them to more actively seek resources in their work and stimulate active innovative behavior. The availability of inclusive leadership shows that leaders are willing to listen and accept to employee opinions or contributions (Dwertmann & Boehm, 2016). Leaders provide guidance and help for subordinates' innovation, reduce red tape in the management process, and avoid spending time on unnecessary things. Individuals will work hard and actively put forward constructive ideas to enhance their awareness of independent innovation and make practical actions for the transformation of innovative scientific and technological achievements (Wu & Parker, 2017). Therefore, on the basis of the discussion above, the following hypothesis is proposed.

H1: Inclusive leadership is positively related to innovative behavior.

2.2. Mediating Role of Employee Resilience between Inclusive Leadership and Innovative Behavior

Employee resilience is a kind of psychological adaptability that individuals can quickly adapt to changes in the external environment and actively respond to crisis events in the face of crises and challenges. It is embodied in three aspects of recovery, response and growth (Luthans et al., 2008), which is conducive to their own and the organization's continuous and stable response to unknown

challenges (Naswall et al., 2019). According to the dynamic capability theory, leaders play an important role in the organization. The characteristics of inclusive leadership in a dynamic changing environment play a key role in the adjustment of employee psychological state, effectively helping subordinates grow from innovative failure and make adaptive adjustment.

On the one hand, inclusive leadership creates an open and shared innovative atmosphere for organization members through openness, so that employees can adapt to changes in work faster (Kraus et al., 2020), and help employees get out of difficulties and recover from adversity; Reduce the individual perception of uncertainty through accessibility, respect and encourage employees to think more in combination with the current situation (Luthans et al., 2006), actively seek ways and methods to solve the problems encountered (Bardoel et al., 2014; Watkins et al., 2015), and effectively deal with the difficulties and challenges caused by the crisis; Help individuals overcome difficulties in work through availability (Kim, 2018), encourage collaboration among employees, regard setbacks or failures as valuable learning experience, and strive for breakthroughs through scientific and technological innovation, so as to enhance employee resilience (Kuntz et al., 2017).

On the other hand, empirical evidence has shown that employee resilience has an important impact on individual work attitude and behavior (Li et al., 2021), and more resilient individuals have the positive psychological ability to overcome difficulties "upstream". The higher the resilience of an individual employee, the more helpful it is to effectively adapt to the changing complex situation, promote its own growth in setbacks and difficulties, show its passion for innovation and the spirit of flexible change, and help to improve employee innovative behavior. Compared with individuals with low employee resilience, individuals with high employee resilience have a more positive understanding of themselves, which will bring more energy. They can respond to work challenges with a positive and optimistic attitude and actively display their own innovative behavior (Masten, 2018). In addition, when employees have higher resilience and can timely and actively exchange and share knowledge and experience with others in the innovative process, it is more likely to stimulate employee innovative behavior. To sum up, employee resilience can promote innovative behavior.

Then, this paper believes that inclusive leadership is conducive to employees' adjustment of their psychological state, easier for subordinates to actively reflect and flexibly respond to various pressures and challenges in work, and improve employee resilience, so as to encourage employees to use creative thinking and methods to solve problems in work and improve innovative behavior. Consequently, on the basis of the discussion above, the following hypothesis is proposed.

H2: Employee resilience mediates the relationship between inclusive leadership and innovative behavior.

2.3. Maintaining the Integrity of the Specifications

Prosocial motivation refers to employee willingness to be altruistic through the interaction between themselves and the external environment in the process of socialization (Grant, 2008). They can promote themselves to complete tasks and achieve goals by thinking for others and promote the generation of positive emotions (Carmeli et al., 2014; Hoever et al., 2012). In a dynamic environment, prosocial motivation helps individuals and members of the organization, work together to face organizational crises and challenges, and make rational and objective judgments to get out of adversity (Lazauskaite-Zabielske et al., 2015). According to the self-determination theory, employees with a higher level of prosocial motivation are more likely to have a strong desire for work, making individuals better at finding problems and seizing opportunities, more inclined to find solutions to problems, and get rid of the limitations of their own perspective (Ryan & Deci, 2000). Therefore, this paper believes that although inclusive leadership has a certain positive impact on employee coping with crises, challenges and obstacles, different levels of prosocial motivation make individuals have different attitudes towards setbacks and difficulties at work, and there will be differences in employee resilience (Daniel, 2022).

Specifically, subordinates with high-level prosocial motivation are encouraged by inclusive leaders to be tolerant of their innovative failures, so that they can think from many aspects and integrate important ideas, so as to effectively improve their ability to learn from mistakes and failures and produce stronger employee resilience (Baron et al., 2018). In addition, employees with high prosocial motivation will have more active sharing and interaction (Zabielske et al., 2015), and have more empathic thinking ability, which helps their subordinates grow in adversity and recover from failure in case of innovative failure (Rabenu & Tziner, 2016), so as to strengthen the positive impact of inclusive leadership on employee resilience. On the contrary, for subordinates with low level of prosocial motivation, inclusive leadership has little impact on employee resilience. Employees are not willing to communicate and learn from other members for their own interests. Organizational interests will be abandoned by organizational members and show negative psychology and behavior in dealing with external environmental crises and challenges. Inclusive leadership is difficult to coordinate and transfer. Negative behavior makes the organization unable to quickly respond to changes in the external environment and make timely adjustments to internal and external resources, weakening the resilience of employees. In addition, subordinates with low level of prosocial motivation will also avoid challenging tasks, pay less attention to the external world, despise the interests of others, and inclusive leadership will timely put forward friendly criticism and correction of their behavior, which will not be recognized and accepted by subordinates, so they can't effectively deal with and solve the problems existing in their work in a timely manner, thus inhibiting the role of inclusive leadership on employee resilience. Therefore, this paper puts forward the following assumptions.

H3: Prosocial motivation positively moderates the relationship between inclusive leadership and employee resilience that is high-level prosocial motivation has a stronger positive impact on employee resilience, while low-level prosocial motivation weakens the relationship between them.

This paper further argues that prosocial motivation also has a moderated mediation effect of employee resilience between inclusive leadership and innovative behavior. As the intrinsic motivation of self-regulation, prosocial motivation is the main driving factor of individual participation and performance in creative activities. When employees have a high level of prosocial motivation, "altruism" will reduce negative perceptions, and inclusive leadership makes them calmly deal with changing environments through openness, accessibility and usability. At this time, employees will invest more time and energy to solve the problems encountered in the innovative process and improve their innovative behavior (Wang et al., 2016). Therefore, the interaction effect of inclusive leadership and prosocial motivation will further affect employee innovative behavior by stimulating employee resilience. Accordingly, the following assumptions are put forward in this paper.

H4: Prosocial motivation positively moderates the indirect effect of inclusive leadership on innovative behavior through employee resilience that is the higher the employee prosocial motivation, the stronger the indirect relationship.

2.4. Hypothesis Testing Method

This paper uses SPSS 22.0 and Amos 23.0 to statistically analyze the survey data. The specific statistical analysis process is as follows: first, Amos 23.0 is used to conduct confirmatory factor analysis on the four variables involved in the study. Secondly, SPSS 22.0 was used for descriptive statistical analysis and correlation analysis. Finally, hierarchical regression analysis is used to test the hypothesis of main effect, mediating effect and moderating effect.

3. Method

3.1. Sample and Data Collection

Based on the school enterprise cooperation units and alumni resources, this paper collects data from 20 Chinese science and technology enterprises in Beijing, Shanghai, Shenzhen, Xi'an and so on. In order to ensure the quality of the questionnaire, contact the alumni, enterprise leaders and human resources departments in advance, inform the purpose and purpose of the survey, and promise that the survey results will be confidential and only used for academic research, so as to eliminate the concerns of the subjects. In order to avoid the common method deviation, this paper uses the leader-employee matching to issue and collect the questionnaire. In the process of questionnaire distribution, randomly select the team of the target enterprise to distribute the questionnaire, and each team randomly selects 2 - 5 members. Each questionnaire is packed in an envelope before it is distributed, and the leader or member number is marked in an inconspicuous place on the envelope, so that it can be checked and matched

when it is recycled. The questionnaire consists of two categories. Category A is the employee questionnaire, which is the measurement questionnaire of inclusive leadership, prosocial motivation and control variables, and is filled in by employees. Category B is the leadership questionnaire, which is the measurement questionnaire of employee resilience and employee innovative behavior, and is filled in by leaders. This questionnaire survey was distributed to 502 employees and 138 leaders. After excluding invalid questionnaires and unmatched questionnaires, 398 employee questionnaires and 119 valid leadership questionnaires were finally obtained. The effective recovery rate of leadership questionnaires was 86.23%, and the effective recovery rate of employee questionnaires was 79.28%, and the matching ratio between leaders and employees was 1:3.34.

The structure of effective samples with males accounting for 51.26% and females for 48.74%; 38.94% were aged 25 and below, 38.44% were aged 26 - 35, 19.60% were aged 36 - 45, and 3.02% were aged 46 and above; In terms of education, junior college and below accounted for 16.33% of the total sample, undergraduate accounted for 48.24% and master's degree and above accounted for 35.43%; The number of years of service in the enterprise less than 3 years accounted for 49.75%, 3 - 5 years accounted for 33.92%, and more than 5 years accounted for 16.33%. Table 1 shows the sample distribution.

3.2. Measurements

This paper selects the management maturity scale for the four core variables of inclusive leadership, employee resilience, prosocial motivation and employee innovative behavior. All scales were measured by Likert 5-point scoring scale.

Inclusive leadership. Referring to the scale developed by Carmeli et al. (2010), it includes three dimensions: openness, accessibility and usability, with a total of 10 items. Representative topics such as "leaders always encourage me to report to him/her when I encounter unexpected problems", "when I encounter difficulties in work, I can always ask the leader for advice" and "leaders are willing to listen to my demands". The value of Cronbach's alpha for was inclusive leadership 0.916 in current study.

Table 1. The sample distribution.

Variable	Question	Number of samples	Proportion/%	Variable	Question	Number of samples	Proportion/%
gender	males	204	51.26%	education	junior college and below	65	16.33%
	females	194	48.74%		undergraduate	192	48.24%
	25 and below	155	38.94%	master's degree and above		141	35.43%
	26 - 35	153	38.44%	years	less than 3 years	198	49.75%
age	36 - 45	78	19.60%		3 - 5	135	33.92%
	46 and above	12	3.02%		more than 5 years	65	16.33%

Employee resilience. The measurement scale prepared by Naswall et al. (2019) developed 9 items in total, with representative topics such as "subordinates can effectively cooperate with others to cope with unexpected challenges in work". The study found 0.889 Cronbach's alpha value for employee resilience.

Prosocial motivation. The measurement scale developed by Grant (2008) consists of 4 items, with representative topics such as "I hope to help others through my work". Cronbach's alpha value for this scale was 0.912 in current research.

Innovative behavior. The measurement scale developed by Scott and Bruce (1994) has 7 items, such as "subordinates often produce some creative ideas and innovative ideas" and "subordinates strive to overcome difficulties encountered in the process of innovative". The value of Cronbach's alpha for innovative behavior was 0.796 in current study.

Control variables. According to previous studies, gender shows different willingness to innovation; The innovative ability of individuals changes with the increase of age; The level of education affects innovative behavior by changing people's knowledge structure; The length of working years reflects the employees' familiarity with and mastery of enterprise resources, thus showing differences in innovative behavior. Therefore, we incorporated the following four control variables into our study: gender, age, education and years.

4. Regression Results

4.1. Measurement Model

To confirm measurement model, we used Confirmatory Factor Analysis (CFA; Anderson & Gerbing, 1988) which comprised of four latent variables (inclusive leadership, employee resilience, prosocial motivation, and innovative behavior). Table 2 shows the results of CFA which also confirm the discriminant validity among the variables. To assess model fit, we used Model Chi-square, Incremental Fit Index (IFI), Confirmatory Fit Index (CFI), Tucker-Lewis Index (TLI), and Root Mean Square Error of Approximation (RMSEA). The values of these thresholds: $\chi^2/df = 992.767/371 = 2.673$, IFI = 0.912; TLI = 0.902; CFI = 0.907; RMSEA = 0.078 indicate that measurement model provides an excellent fit to the data. Table 3 shows the correlation among the study variables. Inclusive leadership was positively correlated with employee innovative behavior (r = 0.448, p < 0.01) and employee resilience (r = 0.456, p < 0.01). At the same time, there was also a significant positive correlation between employee resilience and innovative behavior (r = 0.472, p < 0.01), which provided preliminary support for the subsequent hypothesis testing.

Table 2. Measurement model.

Model	Factors	χ^2	df	χ²/df	RMSEA	IFI	TLI	CFI
Baseline model	Four factors	992.767	371	2.673	0.078	0.912	0.902	0.907

Notes: CFI = comparative fit index; IFI = incremental fit index; RMSEA = root mean square error of approximation; TLI = Tucker-Lewis index.

Table 3. Means, standard deviations, and intercorrelations.

Variables	M	S.D.	1	2	3	4	5	6	7	8
1 gender	1.487	0.500	1							
2 age	1.867	0.831	-0.098	1						
3 education	2.191	0.695	-0.008	0.210**	1					
4 years	1.666	0.742	-0.055	0.655**	0.178**	1				
5 Inclusive Leadership	3.547	0.608	-0.017	-0.025	0.053	-0.047	1			
6 Employee Resilience	3.437	0.618	-0.035	-0.073	0.058	-0.061	0.456**	1		
7 Prosocial Motivation	3.475	0.679	-0.087	-0.036	0.066	-0.009	0.610**	0.555**	1	
8 Innovative Behavior	3.554	0.694	-0.027	-0.043	0.092	-0.066	0.448**	0.472**	0.404**	1

Note: N = 398, *p < 0.05, **p < 0.01.

4.2. Test of Hypotheses

- 1) Main effect test. **Table 3** shows the values of regression coefficients along with their significant level. This paper uses IBM SPSS to test the impact of inclusive leadership on employee innovative behavior under the control of gender, age, education level and years of service. Results as shown in **Table 4**, inclusive leadership has a significant positive impact on employee innovative behavior (model 3, b = 0.503, p < 0.001), and H1 is tested.
- 2) Mediating effect test. To test the mediating effect of employee resilience between inclusive leadership and innovative behavior, **Table 3** shows that inclusive leadership has a positive impact on employee resilience (model 1, b = 0.459, p < 0.001), and employee resilience has a positive impact on innovative behavior (model 4, b = 0.466, p < 0.001). When controlling variables such as gender, age, education and years were added to the regression model, inclusive leadership still has a significant positive impact on employee innovative behavior (model 5, b = 0.331, p < 0.001), but the regression coefficient decreases from 0.503 to 0.331. This result shows that employee resilience partially mediates the relationship between inclusive leadership and innovative behavior, indicating that H2 is established.

In addition, the bootstrap resampling technique is used to further test the mediating effect to verify the robustness and reliability of the results. As shown in **Table 5**, the mediating effect of employee resilience is 0.173 and the 95% confidence interval of bootstrap is [0.116, 0.244], excluding 0. It once again shows that employee resilience plays a part of mediating role in the influence of inclusive leadership on innovative behavior, which further verifies the validity of H2.

3) Moderating effect test. This paper uses the macro program PROCESS to test the moderating effect of employee resilience in the influence of inclusive leadership on employee innovative behavior. From the empirical data in **Table 4**, it can be seen that the interaction between inclusive leadership and prosocial motivation has a significant positive impact on employee resilience (model 2, b = 0.119, p < 0.01), indicating that prosocial motivation positively regulates the influence of inclusive leadership on employee resilience, and H3 is supported.

Table 4. Regression coefficients.

	Employee	Resilience		Innovative Behavior			
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	
Control variables							
gender	-0.044	0.007	-0.033	-0.011	-0.016	-0.027	
age	-0.059	-0.032	-0.016	0.018	0.006	-0.012	
education	0.036	0.001	-0.083	0.079	0.069	0.006	
years	-0.017	-0.011	-0.043	-0.048	-0.037	0.029	
independent variable							
Inclusive Leadership	0.459***	0.220***	0.503***	0.466***	0.331***	0.230***	
Mediating variable							
Employee Resilience					0.375***	0.326***	
Moderating variable							
Prosocial Motivation		0.405***				0.056	
Inclusive Leadership \times Prosocial Motivation		0.119**				0.008	
\mathbb{R}^2	0. 218	0.348	0.209	0.231	0.297	0.308	
F	18.179***	25.971***	17.307***	19.588***	23.572***	19.190**	

Note: N = 398, *p < 0.05; **p < 0.01; ***p < 0.001.

Table 5. Results on the mediating roles of employee resilience with inclusive leadership and Innovative behavior.

Bootstraping	Indirect effect	Boot se	BC(95% CI)	Total effect
Inclusive leadership → Employee Resilience → Innovative Behavior	0.173***	0.032	(0.116, 0.244)	0.503***

Note: *p < 0.05, **p < 0.01, ***p < 0.001, SE standard error, BC means bias corrected, 5000-bootstrap samples, CI confidence interval.

Further, in order to make the moderating effect of prosocial motivation between inclusive leadership and employee resilience more intuitively, **Figure 2** depicts the difference in the impact of inclusive leadership on employee resilience under different levels of prosocial motivation. It can be seen from **Figure 2** that when the prosocial level is high, inclusive leadership has a strong positive effect on employee resilience, with a slope of 0.338. When the level of prosocial motivation is low, the positive effect of inclusive leadership on employee resilience is weak, and the slope is 0.102. Through the above methods, it further shows that H3 is established.

4) Moderated mediation effect test. In order to test the moderated mediation effect, this paper uses the bootstrap method to test. It can be seen from **Table 6** that when employees have low level of prosocial motivation, the indirect effect value of employee resilience is 0.052 (CI = [0.007, 0.106], excluding 0); When employees have a high level of prosocial motivation, the indirect effect value of employee resilience is 0.113 (CI = [0.056, 0.186], excluding 0), indicating that the moderated mediation effect exists.



Figure 2. Moderating effect.

Table 6. Merated mediating effect and its 95% confidence interval.

Effect type	Effect value	Boot SE	95% Confidence Interval		
			Boot LLCI	Boot ULCI	
Low-level prosocial motivation (M – SD)	0.052***	0.025	0.007	0.106	
Prosocial motivation (M)	0.083***	0.028	0.041	0.142	
High-level prosocial motivation (M + SD)	0.113***	0.033	0.056	0.186	

At the same time, the test parameter index = 0.045, its bootstrap 95% confidence interval is [0.011, 0.101], and does not include 0, which meets the requirements of the adjusted mediation effect test proposed by Hayes (2015). Therefore, the mediating effect of employee resilience is positively regulated by prosocial motivation, resulting in the regulated mediating effect. H4 is also supported by empirical evidence.

5. Discussion

5.1. Theoretical Implications

First, although previous scholars have studied the impact mechanism of inclusive leadership on employee innovative behavior, few scholars have conducted empirical research based on leaders' fault-tolerant innovation, and are still vague in explaining its mechanism and boundary conditions. According to the self-determination theory, inclusive leadership has an inclusive heart, tolerant and innovative attitude and behavior, meet the needs of employees to obtain care, understanding and recognition from others, and show innovative behavior in order to realize self-worth. This study focuses on technology-based enterprises. From the perspective of self-determination theory and dynamic capability theory, it expounds the internal mechanism and boundary conditions of the impact of inclusive leadership on employee innovative behavior, which helps to further deepen the theoretical relationship between inclusive leadership and employee innovative behavior.

Secondly, based on the dynamic capability theory, this paper reveals the mediating of employee resilience in the impact of inclusive leadership on employee innovative behavior. Although existing studies have explored the intermediary mechanism between inclusive leadership and employee innovative behavior

based on such psychological factors as emotional labor, psychological safety, and psychological availability from the perspectives of optimal differentiation theory, social cognition theory, contingency theory, etc. (Javed et al., 2019), there is a lack of research on the impact mechanism of employee positive psychological ability on innovative behavior. This paper discusses the internal mechanism of the influence of inclusive leadership on employee innovative behavior from the positive psychological ability factor of employee resilience, and further reveals the "dark box" between them, which provides a certain theoretical value for the study of employee resilience.

Thirdly, taking prosocial motivation as the starting point, it reveals the boundary conditions that inclusive leadership affects employee resilience and innovative behavior. Previous studies have paid more attention to the impact of the interactive relationship between inclusive leadership and organizational situational factors and employee personality traits on innovative behavior, ignoring the regulatory role of employee intrinsic motivation. Just as Qiao & Liu (2018) believe that prosocial motivation is an important internal motivation to show employee active innovative behavior, which expands the boundary role of prosocial motivation. Specifically, compared with low-level prosocial motivated employees, high-level prosocial motivated employees are easier to think from the perspective of others with the help and encouragement of inclusive leadership. They also have more positive work motivation and dedication, take the initiative to break the "comfort zone" and strive to adapt to various challenges, so as to improve employee innovative behavior.

5.2. Practical Implications

First, pay attention to the inclusive characteristics of leadership when selecting and promoting. Inclusive leadership has a positive impact on employee innovative behavior, which means that the more inclusive the leadership is, the more employees will fully inspire their courage and responsibility to go upstream and lead the team to innovate continuously. In order to effectively improve employee innovative behavior, leaders should have magnanimous leadership quality, establish an innovative culture that tolerates failure, improve the fault-tolerant mechanism of enterprise scientific and technological innovation, and show more inclusive characteristics and behaviors. On the one hand, we will encourage and support employee scientific research and exploration, tolerate innovative failures and other innovative behaviors to improve employee innovation within the functional scope, smooth the innovative path of employee needs and feedback, and promote employees to seek new development in technological innovation. On the other hand, it advocates resource sharing, creates a relaxed and fault-tolerant innovative atmosphere, allows employees to participate more in decision-making, views deficiencies in work with a more open and inclusive attitude, and gives more tolerance, understanding and support, carefully summarizes the causes of innovative failure with subordinates, and fully stimulates employee innovative behavior.

Secondly, we are committed to cultivating and strengthening employee resilience. Employee resilience plays a positive intermediary role in the internal impact of inclusive leadership on employee innovative behavior. Therefore, leaders should cultivate employee resilience by means of pressure resistance, emotion management and empathy, so as to enable more researchers to invest in scientific and technological innovation. Leaders should always pay attention to the changes of employee psychological state, strengthen the simulation training of subordinates' crisis and psychological pressure resistance, so as to evaluate their anti-risk ability, so as to make employees have a strong sense of suffering and stimulate their innovative motivation. At the same time, leaders strengthen communication with employees, help them identify and overcome difficulties, give them care and a certain degree of independent choice, freely choose research and development fields according to their personality characteristics, and strengthen their awareness of innovation and change. In addition, for employees, they should abandon the concept of "being prepared for danger in times of peace", break the inherent thinking mode, and seek learning opportunities and innovative opportunities in accidents and failures to improve their innovative awareness

Thirdly, identify and guide employee prosocial motivation. As one of the important factors influencing employee attitudes and behaviors, prosocial motivation has been proved to play a reinforcing role between inclusive leadership and innovative behavior. Therefore, enterprise leaders should actively identify the level of employee prosocial motivation, and take different ways to motivate, communicate and guide different levels of prosocial motivation. Leaders encourage and reward dedicated, conscientious and responsible employees, conduct technical training, meet material and spiritual needs, reflect employee self-worth, and drive employees to resonate with organizational goals and missions, make contributions to the organization, and constantly improve organizational identity, so as to have a strong sense of mission and responsibility in the enterprise. On the contrary, for low-level prosocial motivated employees, leaders should establish and improve the employee incentive system, use the leadership style and trait of inclusive leadership to eliminate the barriers to communication with employees, guide and cultivate employee willingness to contribute to the organization and the spirit of "sacrificing the small and serving the big", so as to guide employees to establish a strong sense of dedication and a high sense of responsibility, so as to strengthen employee altruism, constantly strive to improve their creativity.

5.3. Research Deficiencies and Prospects

The research object selected in this paper is only limited to the regions where Chinese scientific and technological enterprises are more developed. It involves less employees of scientific and technological enterprises in other regions, and the scope of research is limited. Future research can expand the scope of research and enhance the universality of conclusions. In addition, part of the mediating effect of employee resilience has been confirmed, which indicates that inclusive leadership has a more complex impact mechanism on employee innovative behavior. Future research can explore the impact mechanism of inclusive leadership on employee innovative behavior from a cross level, multi angle and multi-path perspective, such as employee cognition, emotion and organizational climate, based on person environment matching theory and ternary interactive determinism. At the same time, this paper analyzes the boundary conditions that stimulate employee innovative behavior from the intrinsic motivation. In the future, we can further study the boundary conditions that employee extrinsic motivation affects creativity, such as innovative performance, organizational justice and so on.

6. Conclusion

Based on self-determination theory and dynamic capability theory, this paper was conducted to examine the relationship between inclusive leadership on employee innovative behavior through the investigation of scientific researchers in science and technology enterprises. The findings depicted that inclusive leadership was positively related to employee innovative behavior, this relationship was significantly mediated by employee resilience. Prosocial motivation plays a positive regulatory role in the impact of inclusive leadership on employee resilience, and also plays a positive regulatory role in the intermediary effect of employee resilience.

Conflicts of Interest

The authors declare no conflicts of interest regarding the publication of this paper.

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