

# The Study on the Relationship Between Spiritual Leadership and Employees' Innovative Behavior A Dual Stage Multilevel Moderated Mediation Model

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**Abstract.** In this study, building on job demand resource model, we proposed and tested a theoretical model on spiritual leadership's effect on employees' innovative behavior via thriving at work, and how empowering leadership and team fault tolerance could act as moderators. We tested the conceptual model using lagged data comprised of 248 Chinese employees nested in 75 teams, and the results showed that spiritual leadership is positively related to innovative behavior, and the relationship was mediated by thriving at work. Specifically, the positive relationship between spiritual leadership and thriving at work is stronger for employees with higher (vs. lower) empowering leadership. Moreover, we found cross-level moderating effect of team fault tolerance on the relationship between thriving at work and innovative behavior. Findings of the study offer managerial implications to organizations trying to enhance leadership effectiveness and increase innovative behavior.

**Keywords:** spiritual leadership  $\cdot$  thriving at work  $\cdot$  innovative behavior  $\cdot$  empowering leadership  $\cdot$  team fault tolerance

## 1 Introduction

In a competitive business environment, innovation is the core for companies to maintain their competitive advantage and be invincible in the long run. Employees, as main implementers of corporate innovation, are crucial to the innovation performance within companies. However, employees can be overstressed and under-energized in the workplace, which will hinder their motivation and thus make them hard to engage in innovative behavior. At this point, organizations and leaders need to motivate their employees with reasonable means to help them turn around their difficulties and thus enhance their ability to innovate. Against this backdrop, the academy has begun to focus on spiritual leadership, a style of leadership that emphasizes vision, hope/belief, and altruistic love. Leaders create a sense of belonging for their employees through vision communication, a strong belief in vision fulfillment, and selfless support and care for their employees, which in turn motivates subordinates, satisfy their spiritual level needs, and further inspire them to innovate.

However, current research has mainly analyzed the relationship between spiritual leadership and employee innovation behavior at the individual level, and there is lack of cross-level research. Multilevel linear model theory states that teams are the basic units for performing tasks and that teams and individuals may have uniquely and differentially influences on employee attitudes as well as behaviors (Choi and Sy, 2010), but few current studies have explored the relationship between team-level spiritual leadership and employees' innovation behaviors yet. Thus, this paper considers both team-and individual-level factors, i.e., we are prepared to explore whether and how spiritual leadership at the team level influences employees' innovative behavior at the individual level.

The academic community has mainly used componential theory of organizational innovation and intrinsic motivation theory to investigate the relationship between spiritual leadership and employees' innovative behaviors (Liu, Pingqing et al., 2021; Jeon and Choi, 2022), but the reason why spiritual leadership will influence organizational outcomes is still incomplete. This paper attempts to choose a new theoretical perspective, namely the job demand resource model, to explain why spiritual leadership promotes employees' innovative behavior. Specifically, we introduce employees' thriving at work as a mediating variable. The job demand resource model suggests that it will stimulates employees' positive work emotions and thriving at work when they are given job resources they need within organizations, which in turn, influences employees' behavioral outcomes (Kim and Beehr, 2022).

In addition, scholars have suggested that other leadership styles such as empowering leadership and transformational leadership may influence the relationship between spiritual leadership and employee behavior (Cui Zunkang et al., 2021). This study responds to the call of Cui Zunkang et al. (2021) to introduce empowering leadership to analyze its differences with spiritual leadership and to explore whether empowering leadership will affect the relationship between spiritual leadership and employees' thriving at work. Besides, employees are more likely to engage in innovative behavior in teams with a high fault-tolerant climate, and thus, this study will also examine whether team fault tolerance climate will moderate the relationship between thriving at work and employees' innovative behavior. In summary, this study proposes a cross-level dual-stage moderated mediated model to investigate our Hypothesis.

In sum, the present study offers several contributions. First, by drawing on job demand resource model, we offer a theoretical explanation that can account for the influence of spiritual leadership on innovative behavior which not found in previous findings. Second, in examining the moderating role of empowering leadership, we advance a contextual factor that can strengthen individuals' thriving at work under the excessively spiritual leaders. Third, most of previous literature about spiritual leadership has been studied at the individual level, our study offer some of the first view of how team empowering leadership will influence the effect of team-level spiritual leadership and followers' thriving at work. Fourth, there is little studies on team fault tolerance climate have been conducted as a moderator, we provide evidence verifying the high level of team fault tolerance climate could enhance the positive impact of thriving at work on innovative behavior (Fig. 1).

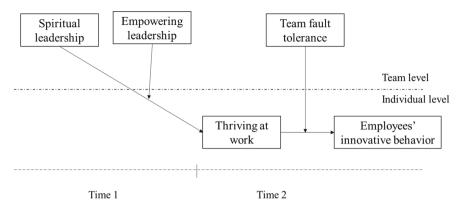


Fig. 1. Theoretical Model

# 2 Theoretical Framework and Hypotheses

## 2.1 Spiritual Leadership and Employees' Innovation Behavior

Spiritual leadership is defined as a combination of values, behaviors and attitudes, whose purpose is to meet the spiritual needs of themselves and others based on calling and membership via inner motivation (Fry, 2003). Based on the job demand resource model, if organizations and supervisors give job resources such as organizational support to employees for their jobs, employees will be motivated to engage in work-related behavior proactively. It is worth mentioning that these job resources include both material and spiritual resources. Therefore, we suggest that spiritual leadership will enhance employees' innovative behavior.

First, spiritual leadership builds a blueprint for the future development of the organization, this helps employees to set clear goals and visions. A good vision can inspire the growth and development for employees, and their own growth and development is a prerequisite for innovation. Secondly, spiritual leaders guide their employees so that they have hope and confidence in their own future and organizations, which will also promote employees to put effort into the work (Anderson, 2017). Thirdly, spiritual leaders with "altruistic love" will create care and support for their subordinates, which will create sense of harmony and happiness. In doing so, employees are more willing to work hard in current work conditions, in turn, will stimulate employees to engage in innovative behavior. It is clear that three dimensions of spiritual leadership provide spiritual resources for employees. Spiritual leaders set a vision for employees when they feel lost in organizations, and they are caring and compassionate when their employees encounter difficulties in organizations. As a result, spiritual leaders enhance work-related behavior proactively include innovative behavior by providing spiritual resources to employees. Therefore, we hypothesize that:

H1: Spiritual leadership has a significant positive effect on employees' innovative behavior.

#### 2.2 Spiritual Leadership and Thriving at Work

Thriving at work is a state of mind in which individuals experience both "vitality" and "learning" in their work. The Job Demands Resource Model states that if employees are provided with job-related resources, they will stimulate positive emotions, such as increasing their energy, dedication and focus at work, and also reducing their job burnout. From this perspective, we argue that spiritual leaders provide employees with spiritual resources that will enhance employees' positive emotions, such as thriving at work.

Spiritual leaders provide spiritual resources to their subordinates by conveying a vision, hope and beliefs to employees to achieve long-term goals, a long-term vision will allow employees to explore in their work and enable subordinates to improve themselves by continuous learning; at the same time, strong beliefs will motivate subordinates to be confident in their future work, thus enhancing vitality (Hildenbrand et al., 2018). In addition, spiritual leaders set challenging goals for their employees, and if employees are not able to meet work goals currently, they will take the initiative to learn to improve their abilities. Spiritual leaders provide employees with the positive belief that they will try to help organizations succeed. Employees, as members of organizations, naturally believe that spiritual leaders will help them succeed, and therefore employees learn from their leaders, improve their work capabilities actively, and try their best to help organizations succeed. Spiritual leader who have high levels of "altruistic love" will give relational and emotional resources, which makes subordinates feel supported and have senses of belonging, and meet employees' needs for their relationship. When employees feel that they are valued by organizations and leaders, they will actively pay back to organizations, thereby enhancing their learning enthusiasm and work vitality (Zhai et al., 2020). We hypothesize that:

H2: Spiritual leadership has a significant positive effect on employees' thriving at work.

## 2.3 Mediating Role of Thriving at Work

Employees working under spiritual leaders are more likely to receive spiritual resources provided, and employees will feel that their supervisors supports and values them, which will improve the vitality of employees at work, and will also promote active learning and eventually achieve the vision and challenges set by leaders. Subsequently, the improvement of employees' vitality and learning ability will broaden their work horizons, make them easy to solve problems at work, and use innovative working methods to do their jobs.

Employees feel energy and enthusiasm at work, and these positive emotions will make them engage in activities beyond the scope of their job duties, including innovative behaviors (Kwon and Kim, 2019). When employees experience positive emotions, they broaden their thinking patterns and are more inclined to be creative. Moreover, employees who are constantly learning can acquire new knowledge and skills to improve themselves at work, which helps employees improve existing working methods and processes, finally be beneficial for their innovative behaviors.

Therefore, spiritual leadership can stimulate employees' thriving at work, in turn, improve employees' innovative behavior, we hypothesize that:

H3: thriving at work mediates the relationship between spiritual leadership and employees' innovative behavior.

## 2.4 Moderating Role of Empowering Leadership

Empowering leadership is the leaders' behavior that is manifested by delegating authority to employees, promoting their self-direction and autonomous decision-making, guiding employees, sharing relevant information with them, and soliciting their input. Empowering leaders provide employees with job resources including job autonomy, career development opportunities, and participation in decision-making, which help to cultivate positive emotions for employees. Empowering leaders allow employees to participate in goal setting, encourage subordinates to lead and express their opinions, and will enhance employees' work vitality and learning motivation. Decentralization and elimination of bureaucracy can provide effective psychological resources and send positive signals to employees that leaders believe in their job capabilities and skills, and that they are trustworthy and competent, which establishes a mutual-trust relationship between leaders and subordinates. These feelings of being valued, trusted and recognized are important psychological resources that promote subordinates' motivation and necessary for thriving at work.

Empowering leadership differs from spiritual leadership in that spiritual leaders, while appearing to set a vision and expectations for followers, does not actually transfer much control or power to followers. For example, a spiritual leader may motivate subordinates with a vision, or set challenging work goals for subordinates' work, but the leader may still retain most of the decision-making power. Therefore, in organizational situations, leaders may exhibit higher spiritual leadership behaviors but not exhibit any empowering behaviors, and vice versa.

Therefore, we argue that when empowering leadership style is higher, the positive impact of spiritual leadership on employees' job prosperity is stronger. Employees realize that their leaders will build a vision for them, set challenging goals, support their work. At the same time, supervisors also allow employees to have more autonomy by delegating their own authority, which will stimulate positive emotions. When employees recognizable that they have both challenging goals and the autonomy to work, they will work hard because they are the first person in charge of the work. They will not only be energetic, but also be motivated to learn new knowledge.

Conversely, when the empowering leadership style is low, the positive impact of spiritual leadership on employee thriving at work may be weaker. Even if spiritual leaders set challenging vision for employees and show that they will support employees, leader does not delegate authority yet, employees will only obtain spiritual resources, but there are no resources such as job autonomy, unfortunately no positive emotions will arise. Likewise, employees will think that spiritual leadership is just "shouting slogans", there is no specific plan to achieve work goals, and the lack of delegation makes employees think that leaders do not trust them completely. Then, employees will have more concerns about their own work and will not generate higher energy at work. Thus, we hypothesize that:

H4: empowering leadership will moderate the relationship between spiritual leadership and thriving at work.

## 2.5 Moderating Role of Team Fault Tolerance

Qiufeng Huang (2016) defines team fault tolerance as "leaders and colleagues will tolerant for employees' work errors and acceptance for opposing views". Team fault tolerance gives employees supportive resources that will reduce the potential risks in work, innovation itself is a risky behavior, and the consequences of innovation are success or failure. Failure may make employees pay a heavy price, so innovation means that employees have to bear the risk of failure. However, because organizations/teams with high fault tolerance for error where leaders and colleagues will forgive serious mistakes made by subordinates, and colleagues and supervisors will listen to employee objections, this will mitigate the serious consequences of employee mistakes, thus employees will be brave enough to innovate.

We argue that when team fault tolerance is high, employees' thriving at work has a stronger positive impact on employees' innovative behavior. Because employees will contribute to organizations under these conditions proactively, and they don't have to worry about the consequences of innovation failure, employees will also find ways to improve work processes and propose innovative planning strategies. On the contrary, when team fault tolerance is low, even if employees have high levels of thriving at work, they may not necessarily engage in innovative behaviors. Because there is a risk of failure in innovation, when the team fault tolerance is low, the cost of employee failure may be very high (such as salary reduction, demotion or even dismissal, etc.), in this case, although employees will work hard, they will only put effort to complete routine works and avoid to engage in risky behavior. Thus, we hypothesize that:

H5: team fault tolerance will moderate the relationship between thriving at work and employees' innovative behavior.

#### 2.6 Dual-Stage Moderated Mediation

To sum up, we have postulated moderator variables strengthen the relationship between spiritual leadership and innovative behavior via thriving at work at separate stage. This can explain the indirect positive relationship between spiritual leadership and innovative behavior in employees with which traits are stronger, and how to induce this positive relationship ultimately. Thus, we propose that a higher level of empowering leadership will enhance the indirect effects of spiritual leadership that are strengthen by higher level of team fault tolerance climate.

H6: The relationships between spiritual leadership and subordinates' innovative behavior via thriving at work are moderated by empowering leadership and team fault tolerance climate at the first and second stages, respectively.

#### 3 Method

#### 3.1 Sample and Procedure

When designing the questionnaire in this study, we mainly draw on the existing mature scales. Secondly, the data collection adopts an anonymous method to ensure the reliability and scientificity of the questionnaire data.

The survey objects of this paper include graduated alumni. Since the research model adopts a cross-level model, the research questionnaires are collected as a team. Each team includes at least 3 employees, and at least 1 team participates in each company. The enterprises in our study include manufacturing industry, technology industry, sales industry and construction industry. These industries may carry out innovation activities for a long time to ensure the competitiveness of enterprises in the market.

In order to reduce common method bias, we are prepared to conduct the questionnaires in two stages, in which spiritual leadership, empowering leadership and control variables are distributed in the first stage, thriving at work, employees' innovative behavior and team fault tolerance are distributed in the second stage, the two stages are separated by one month. Restricted by manpower and material resources, all variables are carried out through self-reporting. It is worth noting that Montani et al. (2020) suggest that the evaluation of innovative behavior reported by others is inappropriate, because employees can evaluate their own innovative behavior better than their leaders and colleagues, so self-evaluation for innovative behavior is reasonable. In this study, 331 questionnaires were distributed in the first phase and 296 were returned. In the second stage, 296 questionnaires were distributed and 263 questionnaires were collected. After eliminating the unanswered and uncompleted questionnaires, 248 valid questionnaires and 75 teams were obtained. The effective recovery rate was 74.92%. In the final sample obtained, there were 130 males, accounting for 52.42%, and 118 females, accounting for 47.58%. In terms of age, employees aged 26–30 years old accounted for the largest number of employees at 37.10%, 33.06% employees are 25 years old or below. In terms of education level, the largest number of employees have a bachelor's degree, accounting for 73.79%. In terms of tenure, 23.39% employees work for 1–3 years. Finally, in terms of tenure with their leaders, the majority work for 1–3 years, accounting for 37.10%.

#### 3.2 Measures

Spiritual Leadership. We use 12 items and 3 dimensions scale to measure spiritual leadership developed by Wang et al. (2019). This scale was developed in the Chinese context and has been widely adopted in the domestic context. A sample item is "My supervisor encourages me to look for my calling in the workplace", Cronbach's alpha is 0.92. We used rwg, ICC (1), and ICC (2) indicators to assess whether the measurement of this construct has sufficient intra-group consistency and inter-group heterogeneity (Bliese, 2000). The ICC (1) and ICC (2) values of spiritual leadership were 0.392 (>.05) and 0.672 (>.50). A mean of rwg(j) of spiritual leadership was 0.887 (>.70). Thus, spiritual leadership in our study is supported to be aggregated to the team level.

**Thriving at Work.** We use 10 items and 2 dimensions scale to measure thriving at work developed by Porath et al. (2012). A sample item is "I am looking forward to each new day", Cronbach's alpha is 0.93.

*Innovative Behavior.* We use 6 items scale to measure innovative behavior developed by Scott and Bruce (1994). A sample item is "I always sarch out new technologies, processes, techniques, and/or product idea", Cronbach's alpha is 0.86.

**Empowering Leadership.** We use 12 items and 4 dimensions scale to measure empowering leadership developed by Ahearne et al. (2005). A sample item is "My

manager helps me understand how my objectives and goals relate to that of the Company", Cronbach's alpha is 0.93. The ICC (1) and ICC (2) values of empowering leadership were 0.282 (>.05) and 0.555 (>.50). A mean of rwg(j) of empowering leadership was 0.851 (>.70). Thus, empowering leadership in our study is supported to be aggregated to the team level.

**Team Fault Tolerance.** We use 4 items to measure team fault tolerance developed by Huang et al. (2016). A sample item is "My team can accept my failure", Cronbach's alpha is 0.82. The ICC (1) and ICC (2) values of team fault tolerance were 0.380 (>.05) and 0.661 (>.50). A mean of rwg(j) of team fault tolerance was 0.803 (>.70). Thus, team fault tolerance in our study is supported to be aggregated to the team level.

Control Variables. We controlled for demographic variables, gender, age, education level, tenure, and tenure with current superior. We also control for intrinsic motivation, because intrinsic motivation has been shown to have a significant positive effect on employees' innovative behavior (Yu, Chuan-Peng et al., 2022). We use 4 items scale to measure intrinsic motivation developed by Ryan and Connell (1989). Cronbach's alpha is 0.87.

## 4 Result

## 4.1 Confirmatory Factor Analysis

In order to verify that each variable in our study (spiritual leadership, empowering leadership, thriving at work, innovative behavior, team fault tolerance, and intrinsic motivation) has good discriminant validity, we use confirmatory factor analysis to conduct a discriminant validity test. This study only collected 248 samples. However, the items of spiritual leadership and empowered leadership in this study both have 12 items, and thriving at work also has 10 items. Too many items but a relatively small sample may result in a poor fit of the confirmatory factor analysis. Therefore, before conducting confirmatory factor analysis, we followed the suggestion of scholars to pack the parameters to obtain more stable parameters (Landis, et al., 2000). Table 1 shows that the discriminant validity of the six-factor model composed of variables in this study is better than other alternative models ( $\chi 2/df = 1.59$ , CFI = 0.966, TLI = 0.959, RMSEA = 0.049, SRMR = 0.042, 247.194  $\leq \Delta \chi 2(5 \leq \Delta df \leq 15) \leq 1550.308$ ), thus core variables in our study have good discriminant validity.

MODEL	χ 2	df	$\chi^2/df$	CFI	TLI	RMSEA	SRMR
Six factor model	309.244	194	1.59	0.966	0.959	0.049	0.042
Five factor model	556.438	199	2.80	0.894	0.877	0.085	0.077
Four factor model	840.856	203	4.14	0.811	0.785	0.113	0.079
Three factor model	1325.734	206	6.44	0.669	0.629	0.148	0.095
Two factor model	1585.096	208	7.62	0.593	0.548	0.163	0.114
One factor model	1859.552	209	8.90	0.512	0.460	0.178	0.126

Table 1. CFA Result

Table 2. Correlations, Means, and Standard Deviations

Variable	M	SD	1	2	3	4	5	6	7	8	9	10
1. Gender	.48	.50										
2. Age	2.09	1.03	.004									
3. Education	3.08	.53	.015	.040								
4. tenure	2.97	1.33	010	.791**	066							
5. tenure with supervisor	2.08	.96	080	.520**	.004	.647**						
6. IM	3.36	.64	038	.214**	022	.154*	.163*					
7. SL	3.79	.60	088	.256**	025	.225**	.368**	.510**				
8. M	3.73	.72	064	.268**	.062	.204**	.174**	.233**	.420**			
9. Y	3.68	.62	022	.254**	.110	.248**	.309**	.330**	.523**	.499**		
10. TTC	3.54	.79	.042	.194**	.097	.148*	.226**	.410**	.458**	.514**	.386**	
11. EL	3.42	.64	014	.211**	.059	.175**	.133*	.473**	.416**	.257**	.316**	.331**

Note. N = 248 IM = intrinsic motivation; SL = spiritual leadership; M = thriving at work; Y = innovative behavior; TTC = team fault tolerance climate. \*p < 0.05; \*\*p < 0.01; \*\*\* p < 0.001

#### 4.2 Descriptive Statistics and Correlations

Table 2 represents the means, standard deviations, and correlations of variables.

#### 4.3 Null Model

Before testing our hypotheses, we examined the extent of between-group variance in employees' innovative behavior. The results of the null model indicated that 22.08% of the variance in innovative behavior arose from the group. We also examined the degree of intercept variance in thriving at work. The results showed that 45.98% of the variance in thriving at work arose from the group. These values were both above the acceptable median of .06, as suggested in organizational literature (Cohen, 2013), thus justifying hierarchical linear model analyses.

## 5 Hypothesis Tests

Hypothesis 1 predicted that spiritual leadership is positively related to employees' innovative behavior. Model 5 of Table 3 shows that spiritual leadership is statistically related to employees' innovative behavior ( $\beta = 0.378$ , p < 0.001), thus supporting Hypothesis 1.

What's more, Model 2 of Table 3 shows that spiritual leadership is significantly associated with thriving at work ( $\beta=0.374$ , p<0.001), thus supporting Hypothesis 2. Model 6 of Table 3 shows that thriving at work is positively associated with employees' innovative behavior ( $\beta=0.321$ , p<0.001). To test Hypothesis 2 (i.e., that thriving at work mediates the relationship between spiritual leadership and employees' innovative behavior), we tested the mediation using a Monte Carlo approach (Preacher et al., 2010). After 10,000 Monte Carlo simulations, the indirect effect with 95% confidence interval contained zero (95%CI = (0.034, 0.219)), thus supporting Hypothesis 3.

We then tested Hypothesis 4 (i.e., that the positive relationship between spiritual leadership and thriving at work will be stronger under conditions of high empowering leadership than under conditions of low empowering leadership). As Model 3 of Table 3 illustrates, the interaction term between spiritual leadership and empowering leadership was positively related to thriving at work ( $\beta = 0.570$ , p < .05). In other words, the positive relationship between spiritual leadership and thriving at work is stronger under high empowering leadership. Figure 2 graphically represents this relationship. The simple slopes (see Fig. 2) represented that the relationship between spiritual leadership and thriving at work is positive and significant under conditions of higher empowering leadership and is not significant under conditions of lower empowering leadership.

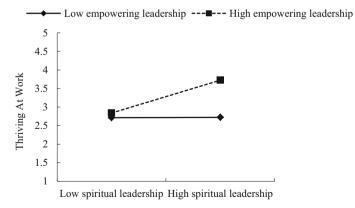
Hypothesis 5 proposes a cross-level thriving at work  $\times$  team fault tolerance climate interaction in predicting employees' innovative behavior. To verify Hypothesis 5, Model 7 added the cross-level thriving at work  $\times$  team fault tolerance climate interaction as predictor. As is shown in model 7 of Table 3, the cross-level thriving at work  $\times$  team fault tolerance climate interaction ( $\beta = 0.237$ , p < 0.01) in predicting employees' innovative behavior was significant. Subsequently, Hypothesis 5, that team fault tolerance climate moderates the relationship between thriving at work and employees' innovative behavior, was supported. Figure 3 graphically represents this relationship.

Lastly, hypothesis 6 considers the empowering leadership and team fault tolerance climate moderate the first and second stages, respectively, of a mediation model in which spiritual leadership is associated with innovative behavior via thriving at work. Table 4 shows the indirect effects and 95% CIs with Monte Carlo simulation with 10000 replications, the indirect effect of spiritual leadership on innovative behavior through thriving at work is stronger when empowering leadership and team fault tolerance climate are both high, thus supporting hypothesis 6.

Table 3. Hierarchical linear modeling results

Variable	Thriving at	Work		Employee innovational behavior			
	model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7
fixed effect:							
Individual level:							
intercept	2.625***	1.322*	2.738***	2.073***	0.864*	0.397	1.130**
gender	-0.074	-0.067	-0.080	-0.004	0.014	0.041	0.029
age	0.166**	0.159**	0.161**	0.038	0.023	-0.029	-0.039
Educational level	0.033	0.037	0.039	0.114†	0.126†	0.114†	0.113†
tenure	-0.045	-0.040	-0.037	0.003	0.015	0.024	0.035
Tenure with supervisor	0.012	-0.004	-0.013	0.133**	0.100*	0.104*	0.088*
Intrinsic motivation	0.241***	0.213***	0.197***	0.267***	0.205***	0.157**	0.177**
Mediator: thriving at work						0.321***	0.326***
Team level							
Predictor: spiritual leadership		0.374**	0.372*		0.378***	0.254**	0.362***
Moderator: empowering leadership			0.440**				
Moderator: team fault tolerance climate							-0.09
Interaction: spiritual leadership × empowering leadership			0.570*				
cross-level interaction: thriving at work × team fault tolerance climate							0.237**
random effect:							
τ <sub>00</sub>	0.227	0.203	0.142	0.050	0.026	0.001	0.000
$\delta^2$	0.242	0.242	0.243	0.273	0.272	0.251	0.244
Pseudo-R2 (fixed effect)	0.101	0.179	0.292	0.170	0.253	0.366	0.389
Pseudo-R <sup>2</sup> (total effect)	0.536	0.554	0.553	0.298	0.317	0.369	0.389

Note. N = 248 and 75 teams. \* p < 0.05; \*\* p < 0.01; \*\*\* p < 0.001



**Fig. 2.** The Moderating Effect of empowering leadership on the Relationship Between spiritual leadership and thriving at work

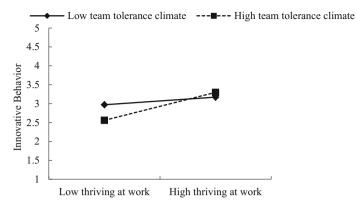


Fig. 3. The Moderating Effect of team fault tolerance climate on the Relationship Between thriving at work and employees' innovative behavior.

Outcome	Moderator		Stage		Effect		
	Empowering leadership	Team fault tolerance climate	First stage	Second stage	Indirect effect	95% CI	
Innovative behavior	high(+1SD)	high(+1SD)	0.630**(0.206)	0.467***(0.068)	0.294**(0.106)	(0.100, 0.513)	
		low(-1SD)	0.630**(0.206)	0.185**(0.068)	0.117*(0.059)	(0.022, 0.246)	
	low(-1SD)	high(+1SD)	0.113(0.208)	0.467***(0.068)	0.053(0.099)	(-0.139, 0.254)	
		low(-1SD)	0.113(0.208)	0.185**(0.068)	0.021(0.042)	(-0.059, 0.113)	

Table 4. Moderated Mediation

#### 6 Conclusions

#### 6.1 Theoretical Implication

We verified the positive relationship between team-level spiritual leadership and employees' innovative behavior. As a new type of leadership model, spiritual leadership has been proven to have significant positive effects on employees' performance, initiative behavior, and innovative behavior because it will show employees their vision, serve them, and show their stewardship spirit. Therefore, it has attracted more and more attention and has become a hot topic in the field of organizational science. Although the relationship between spiritual leadership and employee innovative behavior has been paid attention, the current theoretical understanding of why spiritual leadership leads employees to engage in more innovative behaviors is still limited (Jeon and Choi, 2020). Considering that scholars propose to further explore the relationship between spiritual leadership and employee innovative behavior from different theoretical perspectives (Liu Pingqing et al., 2021), we propose to explores the impact of spiritual leadership on employee innovation behavior based on the job demand resource model, we also explore the mediating role of thriving at work. It is worth noting that although Zhao Zidong (2022) found that the innovative behavior of employees in state-owned enterprises is an important outcome variable of spiritual leadership, he also explained the relationship between the two from the perspectives of social exchange theory, social identity theory and attribution theory, which emphasize too many theory. This study regards thriving at work as an mediator between spiritual leadership and employee innovative behavior, and focuses on a single theoretical perspective—job demand resource model—to explain why spiritual leadership stimulates thriving at work. By confirming the mediating role of thriving at work, this study provides a new theoretical perspective to explain why spiritual leadership leads employees to engage in innovative behaviors proactively.

By introducing the moderating role of empowering leadership, we discover that empowering leadership play an important situational role in influencing the relationship between spiritual leadership and thriving at work. When empowering leadership is higher, the influence of spiritual leadership on thriving at work is stronger. When the empowering leadership is lower, the influence of spiritual leadership on thriving at work is lower. Although spiritual leadership has been widely concerned by scholars, empirical research has not examined the differences between spiritual leadership and other leadership and the cross-level impact of spiritual leadership and other leadership behaviors on employee psychology and behavior (Liu Yuanyuan et al., 2022). This study introduces empowering leadership and conceptually analyzes the similarities and differences between spiritual leadership and empowering leadership, and further clarifies the interactive impact of spiritual leadership and empowering leadership on employees' thriving at work. Finally, this study finds that empowering leadership will strengthen the positive impact of spiritual leadership on thriving at work, and further strengthen the indirect impact of spiritual leadership on employee innovative behavior through thriving at work.

This study introduces team fault tolerance climate as a moderator, which further confirms the important situational role of team fault tolerance in influencing the relationship between thriving at work and employee innovative behavior. When the fault tolerance in the team is higher, employees' thriving at work has a more positive impact on employee innovative behavior; when the fault tolerance in the team is lower, the influence of thriving at work on innovative behavior is weaker. This finding extends research on the relationship between thriving at work and outcome variables. Existing literature views thriving at work as an important mediator between organizational context and employee behavior and outcomes (Alikaj et al., 2021; Kim and Beehr, 2022). However, few scholars in the current research pay attention to the boundary conditions between thriving at work and employee behavior and outcomes (Qu Rujie et al., 2022), and scholars call for further exploration of the boundary conditions between thriving at work and outcome variables (Kim and Beehr, 2022; Walumbwa et al., 2018). This study enriches the research on the impact of employee work thriving on employee innovative behavior by confirming the cross-level moderating role of team fault tolerance between employees' thriving at work and employees' innovative behavior, as well as another

situational condition which impact the positive indirect influence of spiritual leadership on employee innovative behavior.

## **6.2 Practical Implications**

First of all, companies can train leaders to learn spiritual leadership behaviors and meet employees' spiritual needs for respect and self-realization at work, which can motivate employees to continue learning and be full of vitality. In addition, leaders can create a benign innovation environment for employees by conveying the common vision of the enterprise organization, conveying expectations and beliefs about the realization of the vision, and at the same time enabling employees to experience the care of the organization, thereby stimulating employees' innovative behavior.

Second, leaders must also practice other good leadership behaviors, such as empowering leadership behaviors. Managers should not only pay attention to the needs of employees' spiritual realization, but also properly authorize their work, so as to promote the positive emotions of employees and improve their innovative behavior.

Third, the enterprise organization should also have a positive fault-tolerant atmosphere. Only under the conditions of highly accepting employees' mistakes, widely adopting new suggestions from employees, and be tolerant to employees' objections, can help to strengthen the positive influence of spiritual leadership.

## 6.3 Limitations and Future Research Directions

First, some limitations of the current research need to be addressed. First, although this study introduces empowering leadership as the moderating variable in the first stage of the theoretical model, the current research still has insufficient exploration of the boundary conditions between spiritual leadership and employees' thriving at work. This study only discusses the difference between empowering leadership and spiritual leadership and the influence of empowering leadership in this model. In fact, there are other different leadership styles in business, such as transformational leadership, benevolent leadership, and authoritarian leadership, etc., especially the benevolent leadership and authoritarian leadership rooted in Chinese Confucian culture. Currently, they have not been further explored. Future research can dig deeper into the relationship between other leadership styles and spiritual leadership.

Second, limited by the human, material and financial resources, only 248 valid questionnaires were obtained in this study, and the questionnaire collection rate was 74.92%. The small sample size of the research may be a limitation. However, we found from previous researches that there are also many empirical studies with only more than 200 questionnaires, and all the hypotheses of this study are basically supported, so the data sample size is not the fatal problem. In addition, this study collects questionnaires in two stages to reduce common method bias and we found that no unit root explained more than 40% of the variance, and therefore, two-stage questionnaire collection was acceptable.

Finally, employees' innovative behavior is evaluated by individuals as a dependent variable. Some empirical studies invite leaders to evaluate employees' innovative behaviors to reduce. However, it is still feasible for employees to fill in, because employees

are more aware of their own innovation capabilities. Thus, the evaluation of innovative behavior is more accurate (Montani et al., 2020).

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