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SPIRITUAL LEADERSHIP, TEAM COMMUNICATION, AND COHESION: IMPACT ON TEAM PERFORMANCE IN CHINESE BANKS

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Abstract

This study examines the interrelationships among spiritual leadership, team communication quality, team cohesion, and team performance within Chinese commercial banks. Addressing a research gap, it investigates how spiritual leadership and communication, acting through team cohesion, jointly influence team outcomes in a culturally distinct setting. Using a snowball sampling method, data were collected from 440 employees. Structural Equation Modeling (SEM) revealed that spiritual leadership has a significant positive impact on team cohesion ($\beta = 0.532$, $p < 0.001$) and performance ($\beta = 0.410$, $p < 0.001$). Team communication quality has a positive influence on both team performance ($\beta = 0.394$, $p < 0.001$) and cohesion. The findings highlight team cohesion as a key mediating factor, facilitating coordination and collective efficacy. This research contributes to cross-cultural leadership studies, underscoring the importance of cohesive and communicative team dynamics in boosting organizational performance. The Chinese organizational context is validating the relationship between communication quality and cohesion. These results have implications for fostering relational mechanisms for enhanced team outcomes.

Keywords: Spiritual Leadership, Team Communication, Team Cohesion, Team Performance, Chinese Banks

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Introduction

Teams are distinguished from simple work groups by clearly defined and mutually valued goals, coordinated interdependent tasks, cooperative interactions, and effective communication among members (Paris et al., 2000). Effective teamwork has become crucial for Chinese banks to navigate internal complexities and respond to external market pressures (Zhao et al., 2019). Recent studies indicate that banking institutions in China, which rely heavily on effective team collaboration, demonstrate higher strategic flexibility, adaptability, and overall performance (Wei & Lau, 2011). Despite the recognized benefits of teamwork, the specific mechanisms through which teams achieve optimal performance, particularly through leadership practices, communication processes, and internal cohesion, remain inadequately understood, especially within unique cultural contexts such as China's banking sector (Zhu, 2021). Leadership frameworks predominantly emphasize hierarchical leader-follower interactions and personal leadership traits, which limit their effectiveness in addressing emerging organizational demands for deeper intrinsic motivation, collective purpose, and team-oriented engagement (Yukl, 2010). Spiritual Leadership Theory stands out by addressing employees' psychological needs, motivations, and organizational commitment through fostering a collective sense of purpose, meaning, and community within teams (Fry, 2003). Rifuddin et al. (2022) demonstrate the positive impact of spiritual leadership on various organizational outcomes.

Effective communication is essential and affects team performance (Kozlowski & Ilgen, 2006). However, Zhang et al. (2022) addressed the explicit mechanisms through which intrateam communication quality enhances organizational cohesion and subsequently influences team performance, particularly within culturally distinct institutional settings such as China's banking industry (Liu et al., 2022). Cohesion reflects the strength of interpersonal bonds, shared commitment toward collective goals, and mutual support among team members. Grossman et al. (2021) indicate that task cohesion strongly correlates with improved team performance. Cohesive teams consistently demonstrate superior decision-making capabilities, resilience under stress, and overall excellence in performance (Majeed et al., 2023). However, the theoretical rationale explaining how cohesion functions as a mediator in relationships between leadership practices, communication quality, and team performance has not been thoroughly explored, especially in Asian organizational contexts (Chen et al., 2015; Sakdapat et al., 2025). This research explicitly integrates spiritual leadership theory with team communication quality and cohesion in the unique cultural setting of China's banking industry.

Literature Reviews

Spiritual Leadership

Aboramadan & Dahleez (2021) indicate that spirituality, religion, and work (SRW) have a positive influence on both organizational and individual performance outcomes. Spiritual leadership is presented as a value-driven process that intrinsically motivates individuals through vision, hope/faith, and altruistic love. Pawar's (2014) and Dede & Ayranci's (2014) emphasize belief, spirituality, and holism. Fry's model integrates vision, hope/faith, and altruistic love with elements of spiritual well-being to promote organizational alignment and positive outcomes (Fry et al., 2010). Allen & Fry (2023) confirm the model for predictive utility, with outcomes such as job satisfaction, self-directed career behavior, and ethical engagement.

Spiritual Leadership and Team Performance

Fry et al. (2008) state that spiritual leadership can activate autonomous motivation, increase job satisfaction, work engagement, and task performance. Spiritual leadership promotes organizational commitment and mitigates work-family conflict, thereby extending positive influence on well-being and sustained engagement (Khan & Mahmud, 2024). In the Chinese cultural context, leaders who exhibit care, humility, and moral commitment can activate shared

identity and collective efficacy within teams, thus reinforcing coordinated effort and task cohesion (Zhu et al., 2019). Thus, we propose a hypothesis:

Hypothesis 1: Spiritual leadership has a significant impact on team performance.

Spiritual Leadership and Team Cohesion

Spiritual leadership fosters an intrinsically motivating environment where team members are united by a shared vision and a higher purpose beyond extrinsic rewards (Fry & Nisiewicz, 2013). It is considered an essential contributor to team cohesion (Mariam et al., 2022). Such alignment fosters a climate characterized by respect, collaboration, and shared responsibility, core elements that underpin strong team cohesion (Reave, 2005). Zhu et al. (2019) reveal that spiritual leadership enhances the social and task dimensions of team cohesion by cultivating trust, shared identity, and a sense of collective efficacy. Thus, we propose a hypothesis:

Hypothesis 2: Spiritual leadership has a significant effect on team cohesion.

Communication Quality and Team Performance

The quality of communication within a team is a pivotal factor influencing overall team performance (Lacerenza et al., 2017). Communication quality plays a central role in shaping psychological safety and motivating team members to contribute constructively and collaboratively (Newman et al., 2017). Teams that engage in open and constructive dialogue are more capable of solving problems together, innovating, and adapting to changing conditions, factors that are essential to sustaining high team performance (Salas et al., 2005). Thus, we propose a hypothesis:

Hypothesis 3: Team communication quality has a significant effect on team performance.

Communication Quality and Team Cohesion

Communication is essential for maintaining alignment and operational efficiency, especially in complex or high-pressure environments (Amewuda & Ocansey, 2024). Team cohesion depends on the presence of interpersonal clarity, mutual trust, and shared understanding, all of which are supported through sustained and genuine communication (Paul et al., 2016). Thus, we propose a hypothesis:

Hypothesis 4: Effective communication has a positive impact on team cohesion.

Team Cohesion and Team Performance

The degree of cohesion within a team plays a critical role in determining overall team performance. Chaudhary et al. (2022) indicate that cohesive teams demonstrate higher labor productivity and superior project outcomes, confirming that cohesion exerts a significant positive influence on team performance. Seligman & Csikszentmihalyi (2000) point out that constructive interpersonal interactions enhance both cohesion and performance outcomes. Thus, we propose a hypothesis:

Hypothesis 5: Team cohesion has a positive effect on team performance.

Mediating Role of Team Cohesion on the Relationship between Spiritual Leadership and Team Performance

Spiritual leadership has been found to foster stronger team cohesion by cultivating shared vision, interconnectedness, and a sense of collective identity among team members (Zhang et al., 2023). Sedrine et al. (2021) indicate that cohesive teams are more likely to achieve higher levels of performance. Mathieu et al. (2000) suggest that cohesion reinforces team dynamics by aligning individual efforts toward shared objectives and improving communication quality. Thus, we propose the hypothesis:

Hypothesis 6: Team cohesion mediates the relationship between spiritual leadership and team performance.

Relationship between Communication Quality and Team Performance

Communication qualities, including clarity, accuracy, timeliness, and openness, promote trust, mutual respect, and a sense of shared identity among team members (Driskell et al., 2017). These qualities play a foundational role in shaping team cohesion, which in turn affects team

performance. In highly cohesive teams, individual contributions integrate more efficiently, resulting in improved collective performance (Judeh, 2023). Moreover, empirical evidence suggests that cohesion strengthens the relationship between communication quality and team effectiveness (Tekleab et al., 2009). Thus, we propose the hypothesis:

Hypothesis 7: Team cohesion mediates the relationship between communication quality and team performance.

Research Conceptual Framework

The Conceptual Framework in this study integrates four core constructs: spiritual leadership, team communication quality, team cohesion, and team performance. Spiritual leadership, as outlined by Fry (2003), includes vision, hope/faith, and altruistic love. González-Romá & Hernández (2014) indicate that team communication quality uses five key dimensions: clarity, completeness, effectiveness, fluency, and timeliness. Team cohesion, which includes both task and social dimensions (Carron et al., 1998), serves as a linking factor between leadership, communication, and performance. Cohesion enables trust, coordination, and goal alignment, all of which are essential for improving team outcomes. Hu & Liden (2011) emphasized that cohesive teams under strong leadership and with effective communication tend to achieve higher levels of performance. The authors develop a framework that aligns with the input-mediator-output (IMO) model, where spiritual leadership and team communication quality serve as inputs, team cohesion acts as the mediating variable, and team performance is the outcome.

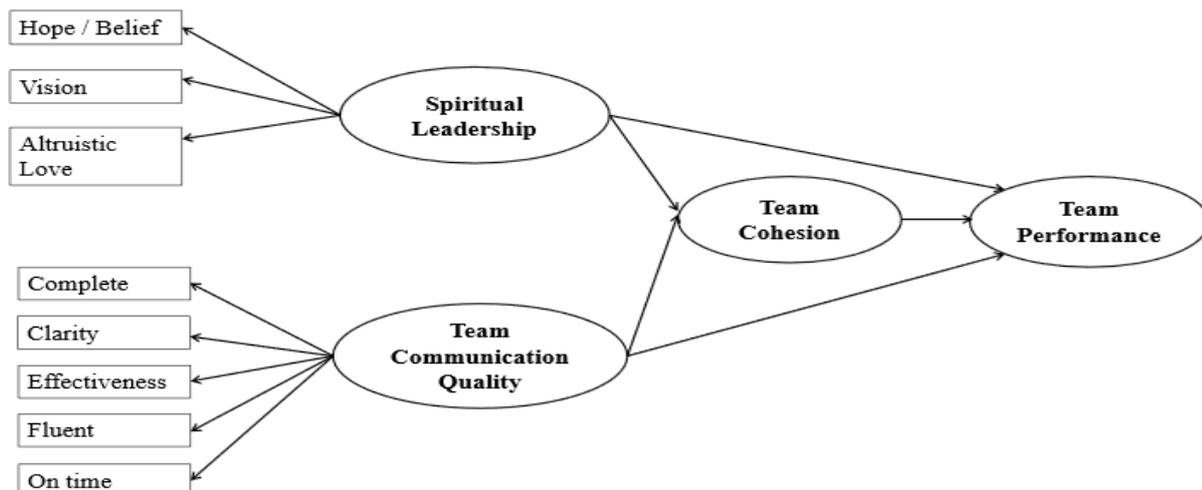


Figure 1 Conceptual Framework

Research Methodology

This study employed a quantitative research design that utilized an online questionnaire via snowball sampling to gather data from Chinese commercial banks in Shandong Province. Data were gathered for the study from January to February 2025. Based on Yamane's (1967) formula, the sample size was calculated to be 400. Adding 10% for non-response risk, the final target sample size was set at 440. A pilot test of 30 participants was conducted to identify and revise problematic questionnaire items. All items in the questionnaire were measured using five-point Likert scales, ranging from 1 ("strongly disagree") to 5 ("strongly agree"). Spiritual leadership was assessed using 12 items adapted from Fry et al.'s (2005) Spiritual Leadership Scale, with a Cronbach's alpha value of 0.888. Team communication quality was measured using a validated multidimensional scale that incorporates dimensions as established by Jämsen et al. (2022).

A representative item includes: "To what degree is the communication among your team members clear?" The internal consistency of the overall scale in this study was exceptionally

high, with Cronbach's alpha coefficient of 0.948, indicating excellent reliability. Team cohesion was assessed across two dimensions—task cohesion and social cohesion, using the instrument developed by Carless & de Paola (2000), which yielded Cronbach's alpha values of 0.904, respectively. Sample items include “Our team works together to achieve the goals for performance” and “I am pleased with the commitment my team has to the task.” Team performance was measured using a validated scale developed by Gonzalez-Mulé et al. (2014), with a Cronbach's alpha value of 0.930, which supports its reliability and applicability across organizational settings. The collected data were analyzed using Structural Equation Modelling (SEM), beginning with confirmatory factor analysis (CFA) to verify construct reliability, convergent validity, and discriminant validity. The implementation of SEM followed this to assess model-data fitness, conduct path analysis for hypothesis testing, and evaluate mediation effects through the AMOS program.

Research Findings

Demographic Profile of Respondents

Majority of the respondents are male 227 (51.59%), ages are between 41-50 years old 173 (39.32%), hold bachelor's degrees 208 (47.27%), service year more than 10 years 129 (29.32%), working in state-owned banks 351 (79.77%), under current supervisor 6-10 years 129 (29.32%), and team size 6-10 members 197 (44.77%).

Measurement Model

The results of the confirmatory factor analysis (CFA) confirmed the robustness and validity of the measurement model across all latent constructs. Each construct demonstrated strong standardized factor loadings (all > 0.69), with all loadings statistically significant at $p < 0.001$, suggesting satisfactory item reliability. The composite reliability (CR) values ranged from 0.830 to 0.879, exceeding the recommended threshold of 0.70, thereby confirming internal consistency (Hair et al., 2019). The average variance extracted (AVE) values were also above the 0.50 criterion (Fornell & Larcker, 1981), indicating good convergent validity—for instance, “Hope Belief” (AVE = 0.640, CR = 0.876) and “Clarity” (AVE = 0.628, CR = 0.866).

Model fit indices further supported the measurement validity, with the structural model for spiritual leadership and team communication quality demonstrating excellent fit ($\chi^2/df = 1.688$, RMSEA = 0.040, CFI = 0.987). Similarly, the model evaluating team cohesion and team performance also exhibited acceptable fit indices ($\chi^2/df = 2.130$, RMSEA = 0.051, CFI = 0.996), aligning with established thresholds for well-fitting models (Hu & Bentler, 1999). These findings collectively affirm the psychometric adequacy of the instruments used to assess the core constructs in the study.

The discriminant validity of the latent constructs was rigorously assessed using the Fornell-Larcker criterion, which compares the square root of the average variance extracted (AVE) for each construct with the correlations between constructs (Fornell & Larcker, 1981). As shown in Table 2, the findings demonstrate that all diagonal values, representing the square roots of AVEs, exceeded the corresponding off-diagonal correlation coefficients in their respective rows and columns.

Structural Model

The structural model demonstrated a strong fit, as indicated by established indices of model fit. In Table 3, the model fit statistics satisfied widely accepted thresholds: $\chi^2/df = 1.373$ (<3.00), RMSEA = 0.029 (≤ 0.08), CFI = 0.968, IFI = 0.969, and NFI = 0.893. While NFI slightly fell below the 0.90 benchmark and GFI (0.89) nearly met the 0.90 threshold, overall fit remained acceptable for complex models (Hu & Bentler, 1999). These results align with the standards of Hair et al. (2019), confirming the model's structural integrity and validity in representing the data relationships.

Hypothesis Testing & Mediating Effect Testing

The hypothesis testing results confirmed all proposed relationships with high statistical significance. Table 4, Spiritual leadership exerted a significant direct influence on team performance ($\beta = 0.410$, S.E. = 0.076, C.R. = 5.359, $p < 0.001$), H1 supported. Also, it had a positive effect on team cohesion ($\beta = 0.532$, S.E. = 0.081, C.R. = 6.595, $p < 0.001$), H2 was supported. Team communication quality also significantly influenced team performance ($\beta = 0.394$, S.E. = 0.056, C.R. = 7.055, $p < 0.001$), H3 was supported H3. Additionally, communication quality significantly improved team cohesion ($\beta = 0.309$, S.E. = 0.059, C.R. = 5.201, $p < 0.001$), supporting H4. team cohesion was found to significantly improve team performance ($\beta = 0.255$, S.E. = 0.068, C.R. = 3.726, $p < 0.001$), providing support for H5.

A bootstrapping procedure with 5,000 resamples was employed to assess the mediating role of team cohesion, following the approach recommended by Preacher & Hayes (2008). Table 5, the indirect effect of spiritual leadership on team performance via cohesion was found to be statistically significant ($\beta = 0.136$, 95% CI [0.036, 0.302], $p = 0.01$), thereby, supporting Hypothesis 6, the team cohesion variable exerted a significant mediating effect on the relationship between communication quality and performance ($\beta = 0.079$, 95% CI [0.011, 0.188], $p = 0.016$), Hypothesis 7 was supported. These findings highlight the dual role of team cohesion as both a direct performance enhancer and a key transmission mechanism linking leadership, communication, and team effectiveness.

Table 1 Factor Loading and Validity Testing

Latent variables	Observed Variables	Standardized Coefficients	Std. Error	z (C.R.)	p	AVE >0.5	CR >0.7
Hope Belief	Hb1	0.717				0.640	0.876
	Hb2	0.884	0.074	17.211	***		
	Hb3	0.818	0.071	16.153	***		
	Hb4	0.771	0.07	15.279	***		
Vision	Vi1	0.802				0.575	0.843
	Vi2	0.674	0.059	14.131	***		
	Vi3	0.795	0.059	16.932	***		
	Vi4	0.755	0.062	16.052	***		
Altruistic Love	AL1	0.800				0.619	0.866
	AL2	0.866	0.057	19.174	***		
	AL3	0.747	0.057	16.361	***		
	AL4	0.726	0.058	15.793	***		
$\chi^2/df = 1.688$, GFI = 0.969, CFI = 0.987, NFI = 0.969, IFI = 0.987, RMSEA = 0.04							
Complete	Co1	0.775				0.623	0.868
	Co2	0.821	0.061	17.574	***		
	Co3	0.792	0.062	16.914	***		
	Co4	0.768	0.062	16.337	***		
Clarity	Cl1	0.736				0.628	0.866
	Cl2	0.835	0.072	16.764	***		
	Cl3	0.827	0.071	16.62	***		
	Cl4	0.74	0.072	14.903	***		
Effectiveness	Ef1	0.779				0.569	0.840
	Ef2	0.756	0.063	15.556	***		
	Ef3	0.707	0.06	14.497	***		
	Ef4	0.772	0.06	15.887	***		

Latent variables	Observed Variables	Standardized Coefficients	Std. Error	z (C.R.)	p	AVE >0.5	CR >0.7
Fluent	F11	0.827					
	F12	0.795	0.053	18.429	***	0.645	0.879
	F13	0.792	0.052	18.345	***		
	F14	0.799	0.053	18.572	***		
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On time	Ot1	0.698					
	Ot2	0.816	0.079	14.877	***	0.559	0.835
	Ot3	0.691	0.077	12.948	***		
	Ot4	0.778	0.079	14.349	***		
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$\chi^2/df = 1.401$, GFI = 0.952, CFI = 0.986, NFI = 0.954, IFI = 0.986, RMSEA = 0.030							
Task cohesion	Tc1	0.714					
	Tc2	0.855	0.072	16.501	***	0.626	0.870
	Tc3	0.748	0.074	14.636	***		
	Tc4	0.84	0.076	16.268	***		
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Social cohesion	Sc1	0.746					
	Sc2	0.771	0.066	15.583	***	0.608	0.861
	Sc3	0.751	0.065	15.185	***		
	Sc4	0.847	0.066	16.971	***		
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$\chi^2/df = 1.531$, GFI = 0.984, CFI = 0.995, NFI = 0.984, IFI = 0.995, RMSEA = 0.034							
Team Performance	Tp1	0.713					
	Tp2	0.705	0.084	12.982	***	0.551	0.830
	Tp3	0.822	0.082	14.398	***		
	Tp4	0.723	0.079	13.265	***		
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$\chi^2/df = 2.130$, GFI = 0.995, CFI = 0.996, NFI = 0.993, IFI = 0.996, RMSEA = 0.051							

*P < 0.05; **P < 0.01; ***P < 0.001

Table 2 Discriminant Validity

	1	2	3	4	5	6	7	8	9	10	11
1) Hb	0.800										
2) Vi	0.614	0.758									
3) AL	0.568	0.571	0.787								
4) Co	0.214	0.221	0.262	0.789							
5) Cl	0.098	0.222	0.157	0.604	0.786						
6) Ef	0.255	0.275	0.271	0.609	0.607	0.754					
7) Fl	0.228	0.314	0.266	0.611	0.525	0.546	0.803				
8) Ot	0.153	0.251	0.154	0.614	0.642	0.553	0.584	0.748			
9) Tc	0.276	0.367	0.442	0.318	0.237	0.281	0.271	0.162	0.792		
10) Sc	0.292	0.366	0.323	0.202	0.359	0.238	0.262	0.279	0.677	0.780	
11) Tp	0.442	0.467	0.482	0.523	0.336	0.436	0.529	0.438	0.484	0.517	0.742

Table 3 Test Results of Goodness-of-Fit of the Model

Goodness-of-fit indices	χ^2	df	χ^2/df	GFI	RMSEA	CFI	NFI	IFI
ideal value	-	-	<3	>0.9	<0.08	>0.9	>0.9	>0.9
Standard value	-	-	<5	>0.8	<0.10	>0.8	>0.8	>0.8
Actual value	1216.592	886	1.373	0.89	0.029	0.968	0.893	0.969

Table 4 Hypothesis Testing Results

Path			Estimate	S.E.	C.R.	P	Result
TC	←	SP	0.532	0.081	6.595	***	Accept
TC	←	TCQ	0.309	0.059	5.201	***	Accept
TP	←	TC	0.255	0.068	3.726	***	Accept
TP	←	TCQ	0.394	0.056	7.055	***	Accept
TP	←	SP	0.410	0.076	5.359	***	Accept

*P < 0.05; **P < 0.01; ***P < 0.001

Table 5 Analysis of Mediating Effects

Path	Direct effect	Indirect effect	Bias-corrected (95%)		p	Interpretation
			Lower	Upper		
SP → TC → TP	0.410(***)	0.136	0.036	0.302	0.01	Significant
TCQ → TC → TP	0.394(***)	0.079	0.011	0.188	0.016	Significant

***p < 0.001

Conclusion and Discussion

This study confirmed that value-based leadership significantly enhances both team cohesion and performance which consistent with Fry's (2003), the positive influence of spiritual leadership on cohesion ($\beta = 0.532$, $p < 0.001$) and performance ($\beta = 0.410$, $p < 0.001$) supports the notion that a shared vision and moral grounding foster not only individual motivation but also collective functioning (Reave, 2005). The results also indicate that spiritual leadership has a significant influence on team performance, consistent with the findings of Liu et al. (2022). However, this study demonstrated significant positive effects of spiritual leadership on team performance

($\beta = 0.410$, $CR = 5.359$, $p < 0.001$), validating its structural dimensions (hope belief, vision, altruistic love; loadings .75-.79) within a collectivist context of China.

This study found that team communication quality has a significant positive effect on team performance ($\beta = 0.394$, $p < 0.001$), which is consistent with the findings of González-Romá & Hernández (2014) and Marlow et al. (2018), who emphasized that clarity, completeness, and timeliness of communication are important factors in facilitating task coordination and enhancing team performance. A positive relationship exists between communication quality and team performance within the context of Chinese culture.

The Chinese organizational context validated the relationship between team communication quality and cohesion, which is in line with the Western findings and further highlights the key role of communication quality in driving relational integration within teams in the context of Asia's distinctive relationship-oriented culture (Oh & Wang, 2020; Yuangngoen et al., 2025). The results of this study indicate that team cohesion plays a significant mediating role between spiritual leadership and both team communication quality and team performance, consistent with the findings of Chang & Bordia (2001). The concept of cohesion within a team setting has been demonstrated to have a positive impact on overall effectiveness. The present study further confirmed this concept by revealing that cohesion not only mediated spiritual leadership and team performance but also effectively mediated the role of communication quality on team performance. Finally, the findings are consistent with Adibinia's (2024) theoretical frameworks. Thus, team cohesion plays a significant role in mediating the relationship between leadership behaviors and performance outcomes in Chinese contexts.

Implications

This study examined the interaction between spiritual leadership, team communication quality, and team performance, with team cohesion as a mediating variable. The results of the study

indicate that both spiritual leadership and communication quality have significant direct and indirect effects on team performance through enhanced cohesion. These findings highlight the pivotal role of relational mechanisms in shaping collective outcomes, offering novel empirical insights into team functioning within collectivist organizational contexts.

The findings from this study validate the hypothesized model and clarify the pathways through which leadership and communication processes affect team outcomes. The study offers new knowledge by integrating spiritual leadership and communication quality into a unified framework and verifying the dual mediating role of team cohesion. This area has received limited empirical attention, particularly in the Chinese context. The findings address a notable gap in the literature regarding the integration of leadership and communication constructs as relational antecedents of team effectiveness. Furthermore, the findings enrich existing theories by demonstrating the robustness of spiritual leadership theory in the context of state-owned enterprises (SOEs). This extends the cultural applicability of spiritually grounded leadership and highlights its potential in hierarchically structured organizations where formal authority is emphasized but relational influence remains critical. For practice, organizations should prioritize programs that cultivate spiritual and relational competencies, such as articulating shared values and fostering trust, as these skills strengthen team alignment and purpose. Training modules focusing on vision-driven communication, such as aligning messages with organizational values, may enhance cohesion. Additionally, structured communication protocols, such as standardized feedback mechanisms, can enhance operational efficiency.

Limitation

This study has several limitations. First, the sample was drawn from the Chinese state-owned banking enterprises, which may limit the generalizability of the findings to other cultural or organizational settings. Second, the cross-sectional design excludes fundamental implications. Future research should adopt a longitudinal design and expand the sample to diverse sectors and cultural contexts to test the model's broader applicability.

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