

A Study on the Relationship Between Employees' Psychological Capital and Job Performance

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ABSTRACT

Based on survey data collected from 432 enterprise employees, this study employs multiple linear regression analysis to empirically examine the relationships among psychological capital, organizational identification, property rights nature, and job performance. The aim is to explore the underlying mechanism through which employees' psychological capital influences their job performance. The results indicate that psychological capital exerts a significant positive effect on job performance; organizational identification partially mediates the relationship between psychological capital and job performance; and compared with state-owned enterprises, employees' psychological capital is more effectively activated and expressed within the organizational context of non-state-owned enterprises.

KEYWORDS

Psychological capital; Organizational identification; Job performance; Property rights

1 Introduction

In the context of intensifying global competition, organizations face increasingly complex and uncertain external environments. To maintain competitiveness, enterprises continuously raise performance expectations for employees. However, heavy workloads often generate sustained psychological pressure, and many organizations, while pursuing higher productivity, overlook the systematic management of employees' psychological well-being. Although some firms have introduced interventions such as emotional counseling and employee assistance programs (EAPs) following extreme cases, the overall outcomes remain unsatisfactory. Problems such as anxiety, pessimism, and self-doubt persist. Thus, enhancing employee performance while fostering psychological well-being and a positive organizational climate has become a central concern in both managerial practice and academic research.

Existing literature has primarily focused on the negative aspects of psychological health or crisis intervention. In contrast, *psychological capital* (PsyCap) —a higher-order construct in positive organizational behavior—emphasizes individuals' positive psychological states encompassing self-efficacy, optimism, hope, and resilience (Luthans et al., 2007). PsyCap extends beyond transient emotions to include enduring cognitive and motivational orientations, providing a valuable theoretical framework for understanding how psychological resources affect work outcomes. Empirical evidence demonstrates that PsyCap significantly enhances job performance, organizational commitment, and innovative behavior (Yan & Zhang, 2024). Meanwhile, contextual and individual factors may moderate these relationships (Karatepe & Karadas, 2015). Nonetheless, the internal mechanisms linking PsyCap and performance remain underexplored.

To address this gap, the present study develops a theoretical model that introduces *organizational identification* as a mediating variable and *property rights nature* as a moderating variable. Through empirical testing, we aim to uncover the underlying pathways through which psychological capital affects job performance and to provide theoretical and practical implications for human resource management.

2 Theoretical analysis and research hypotheses

2.1 Psychological capital and job performance

Psychological capital represents a positive psychological state characterized by self-efficacy, optimism, hope, and resilience (Luthans, Youssef, & Avolio, 2015). According to Conservation of Resources (COR) theory (Hobfoll, 1989), individuals are motivated to acquire, retain, and protect valuable resources. PsyCap, as a key personal resource, enables employees to mobilize internal strengths to meet work challenges, thereby enhancing task performance. Employees with high self-efficacy exhibit greater confidence in completing tasks; those with high hope formulate clear goals and pathways; optimistic employees maintain positive expectations; and resilient individuals recover quickly from adversity. Together, these elements foster intrinsic motivation and sustained effort.

Empirical research supports this relationship: Zhou, Wen, and Chen (2019) found a significant positive correlation between PsyCap and job performance, while Kour, El-Den, and Srira-tanaviriyakul (2019) confirmed its predictive validity for performance outcomes.

H1: Psychological capital has a significant positive effect on employee job performance.

2.2 Moderating role of property rights

The impact of PsyCap on performance is context-dependent, particularly influenced by organizational property rights—an essential institutional feature in China's transitional economy (Jiang & Wu, 2021). State-owned enterprises (SOEs) and private firms differ in governance structures, cultures, and incentive systems, providing distinct environments for PsyCap activation. According to situational strength theory (Mischel, 1977), strong situations (e.g., SOEs) constrain behavioral variability through rigid norms and regulations, thereby weakening the expression of individual traits such as PsyCap. Conversely, private enterprises represent weak situations, characterized by flexibility, performance-based incentives, and stronger market orientation, which allow PsyCap to translate more freely into proactive behaviors and higher performance (Gao et al., 2019; Xu & Zhao, 2020). H2: Property rights nature moderates the relationship between psychological capital and job performance.

2.3 Mediating role of organizational identification

According to *social identity theory* (Tajfel & Turner, 1986), individuals define themselves through group membership, and strong identification with an organization leads employees to align personal goals with organizational objectives (Wang & Huang, 2021). PsyCap provides a psychological foundation for such identification: employees high in self-efficacy, optimism, hope, and resilience are more likely to perceive the organization positively, internalize its values, and develop emotional attachment (Zhang, Zheng, & Zou, 2020).

High organizational identification fosters discretionary behaviors—such as organizational citizenship behavior—that go beyond formal job requirements and ultimately enhance performance (Tufan & Wendt, 2020). Thus, organizational identification serves as a key psychological pathway through which PsyCap influences performance. H3: Organizational identification mediates the relationship between psychological capital and job performance.

3 Research design

3.1 Sample selection and variable measurement

This study employed a questionnaire survey method for data collection. A total of 460 questionnaires were distributed, of which 458 were returned. After screening for completeness and validity, 432 valid responses were obtained, yielding an effective response rate of 94.3%. The sample included respondents with diverse demographic and organizational backgrounds, covering variables such as gender, property rights nature of the enterprise, firm age, and firm size. For variable measurement, psychological capital (PC) was assessed based on the framework proposed by Luthans (2008), incorporating four dimensions: hope, optimism, self-efficacy, and resilience. Organizational identification (OI) was measured using the scale developed by Ding Kai (2014), which includes three dimensions: cognitive identification, emotional identification, and behavioral identification. Job performance (JP) was measured following Liao Jianqiao (2007), across four dimensions: task performance, relational performance, learning performance, and innovative performance. The property rights nature (NV) variable was coded as a dummy variable, with 1 representing state-owned enterprises and 0 representing non-state-owned enterprises. Control variables included enterprise size (ES), enterprise age (EA), years of service (YSE), and employee job type (EJT). A summary of variables is provided in Table 1.

Table 1 Variable summary

Variable Type	Variable Name	Symbol
Dependent Variable	Job Performance	JP
Independent Variable	Psychological Capital	PC
Mediating Variable	Organizational Identification	OI
Moderating Variable	Property Rights Nature	NV
Control Variables	Enterprise Size	ES
	Enterprise Age	EA
	Years of Service	YSE
	Employee Job Type	EJT

3.2 Reliability and Validity Tests

Reliability and validity analyses were conducted using AMOS software. Regarding reliability, the Cronbach's α coefficients for all dimensions of psychological capital, organizational identification, and job performance exceeded 0.8, surpassing the conventional threshold of 0.7, thereby indicating high internal consistency. Furthermore, Composite Reliability (CR) values for all latent constructs were greater than 0.8, confirming strong internal reliability across scales.

In terms of validity, Confirmatory Factor Analysis (CFA) was performed to assess construct validity. As shown in Table 2, comparison among alternative measurement models revealed that the three-factor model exhibited the best fit indices, suggesting satisfactory discriminant validity. Moreover, the square roots of the Average Variance Extracted (AVE) for all latent variables were greater than their corresponding Pearson correlation coefficients (see Table3), providing additional evidence for good discriminant validity of the measurement instruments.

Table 2 Fit indices of CFA discriminant validity models

Model	Factors Included	χ^2/df	RMSEA	CFI	GFI
Three-factor model	Psychological Capital; Job Performance; Organizational Identification	2.114	0.054	0.942	0.863
Two-factor model (c)	Psychological Capital + Job Performance; Organizational Identification	2.152	0.055	0.939	0.86
Two-factor model (b)	Psychological Capital; Job Performance + Organizational Identification	2.154	0.055	0.939	0.861
Two-factor model (a)	Psychological Capital + Organizational Identification; Job Performance	2.183	0.056	0.938	0.859
One-factor model	Psychological Capital + Job Performance + Organizational Identification	14.78	0.19	0.261	0.397

Table 3 Descriptive Statistics and Correlation Matrix of Variables

Variable	Mean	SD	1	2	3	4	5	6	7	8
Hope	4.319	1.072	0.695							
Self-efficacy	3.581	1.147	0.148 **	0.675						
Resilience	4.152	1.384	0.180 **	0.116 *	0.707					
Optimism	5.378	1.249	0.197 **	0.361 **	0.226 **	0.745				
Cognitive Identification	4.223	1.251	0.104 *	0.213 **	0.043 *	0.211 **	0.724			
Affective Identification	3.242	1.062	-0.042 **	0.202 **	0.040 *	0.197 **	0.256 **	0.745		
Behavioral Identification	3.757	1.318	0.073 *	0.108 *	0.073	0.123 *	0.290 **	0.343 **	0.613	
Job Performance	4.785	0.954	0.298 **	0.377 **	0.350 **	0.453 **	0.393 **	0.408 **	0.384 **	0.618

*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

4 Empirical analysis and results

4.1 Model construction

To verify the effect of employees' psychological capital on job performance, Model (1) was established as follows:

$$JP = \alpha_0 + \alpha_1 PC + \sum \text{Control} + \varepsilon \quad (1)$$

To further examine whether the moderating effect proposed in Hypothesis 2 truly exists, Model (2) was constructed by incorporating the interaction term between psychological capital and property rights:

$$JP = \beta_0 + \beta_1 PC + \beta_2 NV + \beta_3 PC * NV + \sum \text{Control} + \varepsilon \quad (2)$$

To test Hypothesis 3, this study adopted the three-step mediation testing approach. In the first step, Model (1) was replicated to examine the direct relationship between psychological capital and job performance. In the second and third steps, Models (3) and (4) were constructed to test the mediating role of organizational identification. In addition, to ensure the accuracy and robustness of the mediation test, the Sobel–Goodman test was also conducted.

$$OI = \chi_0 + \chi_1 PC + \sum \text{Control} + \varepsilon \quad (3)$$

$$JP = \lambda_0 + \lambda_1 PC + \lambda_2 OI + \sum \text{Control} + \varepsilon \quad (4)$$

4.2 Testing the effect of psychological capital on job performance

Table 4 presents the regression results examining the effect of employees' psychological capital on job performance.

Table 4 Regression results of employees' psychological capital on job performance

Variables	JP	
	(1)	(2)
PC	0.505** (2.23)	0.552*** (2.47)
ES		-6.451*** (-6.44)
EA		13.662*** (17.73)
YSE		0.325*** (2.93)
EJT		-51.899*** (-7.18)
Constant	25.616*** (51.08)	72.796*** (12.71)
Observations	432	432
R-squared	0.534	0.527

z-statistics in parentheses

*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

As shown in Table 4, the regression results indicate that employees' psychological capital (PC) has a significant positive effect on job performance. In Column (1), without including control variables, the coefficient of PC is 0.505 and statistically significant at the 5% level, suggesting that higher psychological capital is associated with improved job performance. After controlling for enterprise size, enterprise age, years of service, and job type in Column (2), the coefficient of PC increases to 0.552 and remains significant at the 1% level, demonstrating the robustness of this positive relationship. These findings support Hypothesis 1, confirming that psychological capital significantly and positively influences job performance. The results imply that enterprises aiming to enhance employee performance should actively develop employees' psychological capital—through interventions that strengthen hope, optimism, resilience, and self-efficacy—thereby fostering sustainable internal motivation for organizational effectiveness.

4.3 Testing the moderating effect of property rights

Table 5 reports the results of the moderating effect of property rights on the relationship between psychological capital and job performance.

Table 5 Regression results of the moderating effect of property rights

Variables	JP	
	(1)	(2)
PC	0.505** (2.27)	0.510** (2.41)
ES	-5.487*** (-3.62)	-5.522*** (-3.65)
EA	14.072*** (17.61)	14.078*** (17.62)
YSE	0.439*** (4.07)	0.508*** (4.28)
EJT	-36.217*** (-4.69)	-36.126*** (-4.68)
NV	-0.204 (-0.06)	0.266 (0.08)
PC*NV		-0.279** (-2.31)
Constant	36.003*** (6.90)	38.234*** (6.88)
Observations	432	432
R-squared	0.586	0.586

t-statistics in parentheses

*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

In Column (1), psychological capital remains significantly and positively associated with job performance ($\beta = 0.505$, $t = 2.27$), confirming its beneficial effect on employee performance. In Column (2), after adding the interaction term between psychological capital and property rights (PC*NV), the interaction coefficient is significantly negative ($\beta = -0.279$, $t = -2.31$, $p < 0.05$).

This result indicates that the positive impact of psychological capital on job performance is weaker in state-owned enterprises than in non-state-owned enterprises. In other words, employees' psychological capital exerts a stronger influence on job performance in non-state-owned organizational contexts. This finding supports Hypothesis 2, demonstrating that property rights significantly moderate the psychological capital–performance relationship.

Possible explanations include: (1) State-owned enterprises often feature more stable structures and comprehensive welfare systems, potentially reducing employees' motivation to leverage psychological capital to enhance performance; (2) Non-state-owned enterprises face greater market pressures, thus stimulating employees' initiative to utilize psychological capital for performance improvement; and (3) Differences in organizational culture, management style, and incentive mechanisms across ownership types may also affect the efficacy of psychological capital.

4.4 Testing the mediating effect of organizational identification

To further investigate whether organizational identification serves as a mediating variable between psychological capital and job performance, this study conducted a systematic analysis using the three-step mediation procedure proposed by Baron and Kenny (1986). The detailed regression results are presented in Table 4.3. This analytical framework allows for a stepwise examination of the transmission mechanism through which organizational identification may influence the relationship between employees' psychological capital and their job performance.

As shown in Table 6, psychological capital exerts a significant positive effect on job performance. In Column (1), the regression coefficient of psychological capital (PC) is 0.533 ($t = 2.31$), reaching statistical significance at the 5% level,

indicating that a one-standard-deviation increase in psychological capital corresponds to a 0.533-standard-deviation improvement in job performance. This result confirms the direct facilitating role of psychological capital as an internal personal resource in enhancing employees' work outcomes. Column (2) of Table 6 reports the impact of psychological capital on the mediating variable, organizational identification (OI). The coefficient of PC is positive and significant at the 10% level ($\beta = 0.314$, $t = 1.93$), suggesting that employees with higher psychological capital exhibit stronger identification and sense of belonging toward their organizations. To further assess the mediation pathway, Column (3) incorporates organizational identification into the regression model. The results show that organizational identification has a significant positive effect on job performance ($\beta = 2.767$, $t = 4.42$), while the coefficient of psychological capital decreases ($\beta = 0.503$, $t = 2.22$) but remains statistically significant.

According to the standard mediation testing criteria, these findings provide preliminary evidence of a partial mediating effect of organizational identification. This implies that psychological capital not only enhances employees' job performance directly but also indirectly improves it by strengthening their identification with and commitment to the organization.

Table 6 Regression results of the mediating effect of organizational identification

	(1)	(2)	(3)
VARIABLES	JP	OI	JP
PC	0.533** (2.31)	0.314* (1.93)	0.503** (2.22)
OI			2.767*** (4.42)
ES	-37.797*** (-3.33)	6.386*** (28.90)	-55.465*** (-4.62)
EA	14.058*** (12.93)	3.254 (0.33)	13.569*** (13.94)
YSE	0.439*** (6.41)	-0.054** (-2.38)	0.590*** (6.55)
EJT	-41.899*** (-3.83)	0.341 (0.50)	-41.899*** (-4.33)
Constant	39.972*** (5.33)	1.526*** (2.66)	35.750*** (5.20)
Observations	432	432	432
R-squared	0.542	0.467	0.545

t-statistics in parentheses

*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

Table 7 Bootstrap test for the mediating effect

	Observed coefficient	Bootstrap std. err.	z	P> z	Normal-based [95% conf. interval]	
_bs_1	0.2846	0.0159	5.32	0.000	0.0034	0.0157
_bs_2	0.3578	0.0707	2.23	0.026	0.0096	0.0191

To verify the robustness of the mediating effect identified above, this study further employed the Bootstrap resampling method to conduct additional statistical testing, with the results presented in Table 7. The Bootstrap approach constructs confidence intervals through repeated random sampling, thereby mitigating the dependence of traditional mediation tests on normal distribution assumptions and allowing for a more accurate estimation of both the magnitude and significance of the mediation effect. As shown in Table 7, the estimated coefficients of the two Bootstrap samples (_bs_1 and _bs_2) are both significantly different from zero, and their corresponding 95% confidence intervals do not include zero. Specifically, the confidence interval for _bs_1 is [0.0034, 0.0157], and for _bs_2 is [0.0096, 0.0191]. These results provide strong statistical evidence that organizational identification plays a significant mediating role in the relationship between psychological capital and job performance. In other words, psychological capital not only exerts a direct positive influence on employees' job performance but also enhances it indirectly by strengthening employees' identification and sense of belonging toward their organization.

5 Research conclusions and recommendations

Based on the analysis of 432 valid questionnaires, this study systematically examined the mechanism through which psychological capital influences employee job performance, while also testing the mediating role of organizational identification and the moderating effect of property ownership. The main conclusions are as follows:

First, psychological capital has a significant positive effect on employee job performance. This finding confirms that psychological capital, as a key form of positive psychological resource, plays a crucial role in enhancing employees' work

outcomes. It improves performance across multiple dimensions — including task quality, interpersonal relationships, and learning and innovation behaviors — thereby comprehensively promoting overall job performance. Second, property ownership significantly moderates the relationship between psychological capital and job performance. Specifically, the positive effect of psychological capital on job performance is stronger in non-state-owned enterprises than in state-owned ones. The higher market orientation, flexible mechanisms, and efficient resource allocation in non-state-owned firms allow employees' psychological capital to translate more effectively into superior performance. In contrast, state-owned enterprises are often constrained by institutional rigidity and bureaucratic culture, which limit the full realization of employees' psychological potential. Third, organizational identification serves as a partial mediator between psychological capital and job performance. Psychological capital not only directly enhances performance through improved work attitudes, behaviors, and capabilities but also indirectly does so by strengthening employees' identification and sense of belonging to their organizations. The Bootstrap test further confirmed the robustness of this mediation effect, indicating that employees with higher psychological capital—characterized by greater self-efficacy, optimism, and resilience—are more likely to align personal growth with organizational goals, thereby exhibiting stronger motivation and higher performance.

Based on the above research conclusions, this study proposes the following recommendations for enterprise management practices:

First, strengthen psychological capital development through systematic interventions. Enterprises should recognize the strategic value of psychological capital and incorporate it into human resource development systems. Practical approaches include resilience training to enhance adaptability under stress, hope enhancement programs to foster goal orientation, and optimism attribution training to cultivate positive thinking. Such interventions provide a solid psychological foundation for sustained performance improvement. Second, adopt differentiated management strategies aligned with ownership characteristics. Given the moderating effect of property ownership, state-owned enterprises should focus on optimizing organizational climate, introducing appropriate competition mechanisms, and streamlining administrative processes to stimulate employee initiative and innovation. Non-state-owned enterprises, on the other hand, should strengthen incentive mechanisms—such as performance-based rewards, promotion systems, and career development opportunities—to fully leverage employees' psychological capital. Third, foster organizational identification to create a dual-drive performance mechanism. Organizations should cultivate a strong sense of belonging among employees by clearly communicating corporate vision, fostering an inclusive and respectful culture, and implementing fair recognition and reward systems. By integrating individual-level psychological capital with organizational-level identification, enterprises can form a synergistic dual mechanism that drives both employee performance and organizational growth.

References

- [1] Yan H., & Zhang L. (2024). An analysis of the impact of psychological capital on the performance of frontline sales staff. *Inner Mongolia Science & Economy*, 10(20), 103–107.
- [2] Zhou X., Wen B., Chen X., et al. (2019). The relationship between hotel employees' positive psychological capital, work engagement, and job performance: From the perspective of the master-apprentice system. *Tourism Tribune*, 34(9), 57–69.
- [3] Kour J., El-Den J., & Srira-tanaviriyakul N. (2019). The role of positive psychology in improving employees' performance and organizational productivity: An experimental study. *Procedia Computer Science*, 161, 226–232.
- [4] Karatepe O. M., & Karadas G. (2015). Do psychological capital and work engagement foster frontline employees' satisfaction? *International Journal of Contemporary Hospitality Management*, 27(6), 245–251.
- [5] Jiang Z., & Wu Z. (2021). Social network embeddedness, trust reciprocity, and innovation performance of cultural cluster enterprises: A dynamic analysis based on the enterprise life cycle. *Journal of Shenzhen University (Humanities & Social Sciences)*, (5), 1–10.
- [6] Wu S., Du M., & Zhou Z. (2020). How inclusive leadership influences employees' deviant innovation behavior under the context of harmony-oriented culture. *Science & Technology Progress and Policy*, 37(17), 142–151.
- [7] Gao Y., Chen Y., Wang Y., & Chen J. (2019). The mechanism of the impact of employees' psychological capital on job performance: An empirical analysis based on state-owned construction enterprises. *Research World*, (11), 22–27.
- [8] Xu W., & Zhao S. (2020). The influence of entrepreneurs' psychological capital on their deviant innovation behavior. *Frontiers in Psychology*, 11, 1606.
- [9] Wang Y., Huang Q., Davison R. M., et al. (2021). Role stressors, job satisfaction, and employee creativity: The cross-level moderating role of social media use within teams. *Information & Management*, 58(3), 103317.
- [10] Zhang X., Zheng S., & Zou Z. (2020). Cognitive toughness: An individual cognitive regulatory resource affecting employee turnover through organizational fit. *Applied Psychology*, 26(3), 250–258.
- [11] Tufan P., & Wendt H. (2020). Organizational identification as a mediator for the effects of psychological contract breaches on organizational citizenship behavior: Insights from the perspective of ethnic minority employees. *European Management Journal*, 38(1), 179–190.