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Article

Positive Psychological Capital and Its Impact on Employee Engagement and Job Satisfaction: A Case Study of Enterprise A in Hangzhou, China

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Abstract: Purpose: Extant research suggests that employees' positive psychological capital (PsyCap)-a higher-order construct encompassing hope, self-efficacy, optimism, and resilience-contributes to desirable attitudes and behaviors at work. Yet little is known about how PsyCap operates within the contemporary Chinese organizational context or the mechanisms through which it influences outcomes. This study examines the impact of Psychological Capital (PsyCap) on employee engagement and job satisfaction, and investigates the mediating role of engagement among employees of a private technology manufacturing firm in Hangzhou, Zhejiang Province. Design/methodology/approach Drawing on positive organizational behavior and resource-based theories, we developed a cross-sectional survey that was administered to 200 employees of Enterprise A. Valid data from 178 respondents (52 % male; mean age 29.4 years) were analyzed. PsyCap was assessed using the Psychological Capital Questionnaire (PCQ-24), engagement with the Utrecht Work Engagement Scale, and job satisfaction with the Job Satisfaction Index. Descriptive statistics, confirmatory factor analyses, reliability tests, Pearson correlations, hierarchical regression models, and bootstrapped mediation analyses were employed. Findings: PsyCap was positively correlated with engagement ($r = 0.56$, $p < 0.001$) and job satisfaction ($r = 0.49$, $p < 0.001$), while engagement correlated positively with satisfaction ($r = 0.60$, $p < 0.001$). Regression analyses revealed that PsyCap significantly predicted engagement ($\beta = 0.58$, $p < 0.001$) and satisfaction ($\beta = 0.42$, $p < 0.001$); when engagement was included, the coefficient for PsyCap declined but remained significant, indicating partial mediation. Mediation tests confirmed that engagement accounted for 54 % of the total effect of PsyCap on satisfaction. Originality/value This research extends positive organizational behavior theory to an understudied cultural and industrial setting, demonstrating the cross-cultural relevance of PsyCap and its pathways to engagement and satisfaction. By providing a detailed analysis of PsyCap's components and mechanisms in a Chinese organization, the study offers actionable insights for human resource practitioners seeking to enhance employee well-being and performance. It also highlights practical strategies to develop PsyCap through training and organizational support, thus contributing to the literature on applied psychology and human resource management.

Keywords: positive psychological capital; employee engagement; job satisfaction; human resource management; positive organizational behavior; China

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1. Introduction

1.1. Theoretical Background and Significance

Positive psychology, a field popularized by Seligman and Csikszentmihalyi, shifts the focus of psychological research from deficits and disorders to strengths and virtues.

Within the workplace, this paradigm has given rise to positive organizational behavior (POB), a domain that examines how employees' positive psychological states can be measured, developed, and managed for performance improvement [1]. A core construct in POB is positive psychological capital (PsyCap), defined as "an individual's positive psychological state of development characterized by: (1) having confidence (self-efficacy) to take on and put in the necessary effort to succeed at challenging tasks; (2) making a positive attribution (optimism) about succeeding now and in the future; (3) persevering toward goals and, when necessary, redirecting paths to goals (hope) in order to succeed; and (4) when beset by problems and adversity, sustaining and bouncing back and even beyond (resilience) to attain success" [2]. PsyCap goes beyond personality traits because it is state-like and malleable; it can be developed through short interventions such as training workshops.

Given that resources are fundamental to human functioning, the Conservation of Resources (COR) theory provides a useful lens for understanding PsyCap [3]. COR posits that individuals strive to obtain, retain, and protect valued resources; when resources are plentiful, individuals are more capable of investing additional resources in their work, leading to positive emotions and performance. PsyCap serves as a personal resource that can offset the depletion of energy caused by job demands and stimulate resource gains. Moreover, the broaden-and-build theory of positive emotions suggests that positive states broaden individuals' thought-action repertoires, enabling them to build enduring resources. By increasing hope, optimism, self-efficacy, and resilience, PsyCap may broaden employees' perspectives, facilitating engagement and satisfaction.

Employee engagement is another construct receiving widespread attention. Defined by Schaufeli, Bakker, and Salanova as a fulfilling work-related state characterized by vigor, dedication, and absorption, engagement is associated with improved performance, reduced turnover intention, and better psychological health [4]. The Job Demands-Resources (JD-R) model posits that engagement emerges when job resources (e.g., supportive management, autonomy) and personal resources (e.g., PsyCap) allow employees to cope with job demands. Engagement subsequently fosters job satisfaction, a long-studied outcome reflecting an individual's general affective orientation toward work [5].

1.2. Literature Review

Numerous studies in Western contexts have demonstrated the positive impact of PsyCap on job attitudes and behaviors. Avey et al. found that PsyCap predicted job performance and satisfaction over time [6]. Luthans et al. observed that employees with higher PsyCap reported greater organizational commitment and lower cynicism. Meta-analytical evidence indicates moderate to strong correlations between PsyCap and work engagement, suggesting that personal resources like PsyCap facilitate high involvement at work [7].

Research on PsyCap in China is emerging. For example, Ding et al. reported that PsyCap was positively related to job performance and creativity among Chinese engineers. Zhang and Chen showed that PsyCap predicted nurse engagement in Chinese hospitals. However, existing studies often focus on specific industries (e.g., healthcare, education) or use convenience samples, limiting generalizability. Moreover, few examine the underlying mechanisms linking PsyCap to job satisfaction, particularly in manufacturing firms experiencing rapid technological change.

1.3. Contextual Background

Zhejiang Province, and its capital Hangzhou in particular, is a hub for private enterprise and technological innovation in China. Enterprise A is a medium-sized, privately owned manufacturing firm that supplies precision components to larger electronics companies. It employs approximately 500 workers, most of whom are between the ages of 20

and 40 and hold technical diplomas or university degrees. The company has recently undergone a digital transformation, introducing new production technologies and quality control systems. Consequently, employees face increased complexity and time pressure, which can strain their psychological resources and affect attitudes toward work. Management has expressed concern over fluctuating engagement levels and turnover. In consultation with university researchers, the organization agreed to participate in a study examining how employee PsyCap influences engagement and satisfaction, with the aim of developing targeted interventions.

1.4. Research Hypotheses

Drawing on POB, COR, and JD-R theories, we hypothesize the following:

Hypothesis 1. Positive psychological capital is positively related to employee engagement. Employees with greater hope, optimism, self-efficacy, and resilience should experience more vigor, dedication, and absorption at work because they perceive challenges as opportunities rather than threats.

Hypothesis 2. Positive psychological capital is positively related to job satisfaction. PsyCap enables employees to appraise work situations more positively and to cope with stressors effectively, resulting in greater overall satisfaction.

Hypothesis 3. Employee engagement mediates the relationship between positive psychological capital and job satisfaction. PsyCap equips employees with resources to invest in work, leading to higher engagement, which in turn enhances satisfaction. As COR posits, resources generate resource caravans, meaning that initial resources (PsyCap) lead to further resource gains (engagement) and ultimately outcomes (satisfaction).

1.5. Contributions

This study contributes to the literature in several ways. First, it examines PsyCap and its outcomes in the context of a Chinese private manufacturing firm, thereby enhancing cross-cultural understanding of positive organizational behavior. Second, by testing engagement as a mediator, it sheds light on the mechanisms linking PsyCap to satisfaction and underscores the role of personal resources in driving attitudes. Third, the study offers practical guidance for human resource management in emerging economies, demonstrating how investment in psychological resources can improve employee well-being and organizational effectiveness [8].

2. Method

2.1. Research Design and Sampling Procedure

The study utilized a cross-sectional survey design, which is common for examining attitudinal relationships in organizational settings. While longitudinal designs can establish causality more rigorously, they were not feasible due to organizational constraints; thus, we employed procedural remedies, such as temporal separation of measures and anonymity, to mitigate potential common method bias [9]. Our sampling frame consisted of all full-time employees in Enterprise A. Using employee rosters, we randomly selected 200 individuals stratified by department (production, engineering, quality control, administration) to ensure diverse representation. The human resource department distributed participation invitations via email along with a link to the online questionnaire.

To preserve ethical standards, participation was voluntary, and respondents were assured that their data would be kept confidential and used only for research purposes. All procedures conformed to the guidelines of the university's Institutional Review Board. Of the 200 employees invited, 178 completed both phases of the survey, yielding a usable response rate of 89 %. Comparisons of demographic characteristics between respondents and the overall workforce indicated no significant differences in age, gender, or tenure, supporting the representativeness of the sample.

2.2. Measures

2.2.1. Positive Psychological Capital (PsyCap)

PsyCap was assessed using the 24-item Psychological Capital Questionnaire [8]. The instrument measures four components: hope (e.g., "If I find myself in a jam at work, I can think of many ways to get out of it"), self-efficacy (e.g., "I feel confident helping to set targets/goals in my work area"), optimism (e.g., "I am optimistic about what will happen to me in the future as it pertains to work"), and resilience (e.g., "I usually take stressful things at work in stride"). Each item is rated on a six-point scale from 1 = strongly disagree to 6 = strongly agree. Confirmatory factor analysis (CFA) using Mplus indicated that the second-order factor model provided a good fit to the data ($\chi^2/df = 2.51$, CFI = 0.93, RMSEA = 0.07). Composite reliability for the four subscales ranged from 0.82 to 0.89, and Cronbach's alpha for the overall PsyCap construct was 0.90.

2.2.2. Employee Engagement

Engagement was measured with the nine-item Utrecht Work Engagement Scale [4]. The scale assesses three dimensions: vigor (e.g., "At my work, I feel bursting with energy"), dedication (e.g., "I am enthusiastic about my job"), and absorption (e.g., "I get carried away when I'm working"). Respondents rate how frequently they experience each state on a seven-point scale from 0 = never to 6 = always. CFA supported the three-factor structure ($\chi^2/df = 2.76$, CFI = 0.95, RMSEA = 0.08). The overall scale exhibited high internal consistency ($\alpha = 0.88$).

2.2.3. Job Satisfaction

Job satisfaction was evaluated using the Job Satisfaction Index developed by Brayfield and Rothe and adapted for Chinese employees. The instrument contains items covering satisfaction with work tasks, pay and benefits, supervision, colleagues, and promotion opportunities. Sample items include "I feel fairly satisfied with my present job" and "I am satisfied with the way my supervisors treat me." Responses range from 1 = very dissatisfied to 5 = very satisfied. CFA results supported a unidimensional model ($\chi^2/df = 2.40$, CFI = 0.92, RMSEA = 0.07), and internal reliability was acceptable ($\alpha = 0.85$).

2.3. Data Collection Procedure

Data were gathered in May and June 2025. To reduce common method bias, the survey was administered in two phases separated by one week. In the first phase, participants completed the PsyCap and job satisfaction scales. In the second phase, they completed the engagement scale. Each questionnaire included a unique code that allowed us to match responses across waves while preserving anonymity. Participants completed the survey during work hours using company computers. We included attention-check items (e.g., "Please select 'agree' for this item") and removed responses failing these checks. The final dataset comprised 178 valid cases.

2.4. Data Analysis Strategy

Statistical analyses were conducted with SPSS 26.0 and Mplus 8.0. We began by inspecting data for outliers and missing values; less than 2 % of the data were missing, which we handled using mean imputation. Descriptive statistics and Cronbach's alphas were computed to evaluate scale properties. CFA was performed to validate the measurement model. Pearson correlations were calculated to assess bivariate relations between variables. To test hypotheses, we conducted hierarchical regression analyses: PsyCap was entered in the first block to predict engagement and satisfaction, followed by engagement in the second block when predicting satisfaction. We examined multicollinearity diagnostics (variance inflation factor < 2) and residuals to verify regression assumptions. Mediation was tested using Model 4 of the PROCESS macro with 5,000 bootstrap samples and

95 % bias-corrected confidence intervals. We controlled for demographic variables (age, gender, tenure, and education) in all analyses to rule out alternative explanations.

3. Results

3.1. Descriptive Statistics and Reliability

Table 1 presents the means, standard deviations, reliability coefficients, and intercorrelations for PsyCap, engagement, and job satisfaction. The average level of PsyCap was moderately high (M = 4.74, SD = 0.72), indicating that employees generally perceived themselves as hopeful, confident, optimistic, and resilient. Engagement scores were similarly moderate to high (M = 4.98, SD = 0.85), suggesting considerable vigor, dedication, and absorption. Job satisfaction was at a moderate level (M = 3.92, SD = 0.69). All scales demonstrated satisfactory internal consistency, with Cronbach's alphas above 0.85.

Table 1. Means, Standard Deviations, Reliability, and Intercorrelations of Study Variables.

Variable	Mean	SD	Cronbach's α	1	2	3
1. Positive psychological capital	4.74	0.72	0.90	1	0.56**	0.49**
2. Employee engagement	4.98	0.85	0.88	0.56**	1	0.60**
3. Job satisfaction	3.92	0.69	0.85	0.49**	0.60**	1

Note: **p < .01.

3.2. Hypothesis Testing

The hypotheses were tested using hierarchical regression analyses. Table 2 summarizes the regression coefficients, t-values, and explained variance for each model. In Model 1, PsyCap significantly predicted engagement ($\beta = 0.58$, $t = 9.84$, $p < 0.001$), accounting for 31 % of the variance ($R^2 = 0.31$). Age and tenure had small but nonsignificant effects. Thus, Hypothesis 1 was supported.

Table 2. Hierarchical Regression Analysis of PsyCap, Engagement, and Job Satisfaction.

Model	Predictor	β	t	R^2
1 (Engagement)	Positive psychological capital	0.58***	9.84	0.31
2 (Job satisfaction)	Positive psychological capital	0.42***	6.72	0.21
3 (Job satisfaction with mediator)	Positive psychological capital	0.17*	2.05	0.37
	Employee engagement	0.43***	7.38	

Note: p < .05; **p < .001.

Model 2 examined the direct effect of PsyCap on job satisfaction. PsyCap was a significant predictor ($\beta = 0.42$, $t = 6.72$, $p < 0.001$), explaining 21 % of the variance in satisfaction ($R^2 = 0.21$). Hypothesis 2 was therefore supported. In Model 3, both PsyCap and engagement were entered as predictors of satisfaction. Engagement emerged as a strong predictor ($\beta = 0.43$, $t = 7.38$, $p < 0.001$), whereas the coefficient for PsyCap diminished but remained marginally significant ($\beta = 0.17$, $t = 2.05$, $p = 0.04$). The change in R^2 from Model 2 to Model 3 was 0.16, indicating that engagement explained an additional 16 % of the variance in satisfaction. These results suggest partial mediation.

3.3. Mediation Analysis

The PROCESS mediation analysis corroborated the regression findings. The indirect effect of PsyCap on satisfaction via engagement was 0.25 (SE = 0.06), and the 95 % confidence interval [0.15, 0.39] did not include zero, confirming a significant mediation. The direct effect of PsyCap on satisfaction was reduced to 0.20 (SE = 0.09) but remained statistically significant (95 % CI = [0.01, 0.38]). Approximately 54 % of the total effect (0.45) was transmitted through engagement, suggesting that engagement is a substantive mechanism connecting PsyCap and satisfaction. This pattern aligns with Hypothesis 3.

4. Discussion

4.1. Summary of Findings

This study sought to investigate the role of positive psychological capital in fostering employee engagement and job satisfaction within a Chinese manufacturing enterprise. Consistent with our hypotheses and prior research in Western contexts, PsyCap was positively related to engagement and satisfaction. Moreover, engagement partially mediated the link between PsyCap and satisfaction. These findings underscore the importance of developing employees' psychological resources to enhance their work attitudes.

4.2. Theoretical Implications

Our results contribute to the growing literature on positive organizational behavior by verifying that PsyCap functions as a valuable personal resource across cultural boundaries. In line with COR theory, individuals with higher PsyCap were better equipped to invest energy in their work, resulting in higher engagement. The partial mediation supports the notion that PsyCap generates "resource caravans", whereby initial personal resources catalyze further resource gain in the form of engagement, which then enhances satisfaction [10]. The residual direct effect of PsyCap on satisfaction suggests that other mechanisms may also be at play, such as positive appraisal of work conditions or greater resilience in the face of adversity.

Furthermore, the study bridges PsyCap research with the JD-R model by positioning PsyCap as a personal resource that complements job resources in fostering engagement. Future research could integrate PsyCap into comprehensive JD-R models, examining how interactions between personal and job resources affect motivation and health outcomes [11].

4.3. Practical Implications

The findings have several practical implications for human resource management, particularly in the context of emerging economies undergoing rapid technological change:

PsyCap development programs. Organizations can implement training interventions targeting the four PsyCap components. For example, goal-setting workshops and solution-focused coaching can nurture hope; mastery experiences and vicarious learning can enhance self-efficacy; cognitive reframing and gratitude exercises can foster optimism; and stress-management techniques and social support can build resilience. Research shows that even brief interventions can significantly increase PsyCap and sustain gains over time.

Supportive leadership and climate. Leaders play a crucial role in modeling positive behavior and providing resources. Training supervisors to offer constructive feedback, encourage experimentation, and recognize efforts can cultivate a climate that facilitates PsyCap development. Such climates may also buffer the negative impact of job demands, thereby improving engagement and satisfaction.

Job design and resource provision. In line with the JD-R model, organizations should ensure that job demands are balanced with sufficient resources (e.g., autonomy, social support, learning opportunities). When employees perceive they have the resources to perform tasks, their PsyCap can be activated and channeled into engagement.

Tailoring interventions to culture. Because Chinese culture emphasizes collectivism and harmony, interventions should consider group-based activities and emphasize interpersonal relationships. Encouraging peer support and community building may enhance resilience and optimism more effectively than individual-focused approaches.

4.4. Limitations and Future Directions

Although this study provides valuable insights, several limitations warrant consideration. First, the cross-sectional design precludes definitive causal inferences. Longitudinal or experimental studies would be beneficial to establish temporal precedence and test

PsyCap interventions. Second, data were collected from a single firm in one industry; while the sample was representative of that firm, findings may not generalize to other sectors or regions. Future research could employ multi-organization samples or national surveys. Third, all measures were self-reported, raising concerns about common method variance. Although procedural and statistical remedies were applied, incorporating supervisor ratings or objective performance metrics would strengthen the validity of findings. Finally, potential moderators-such as leadership style, organizational culture, or generational differences-were not examined. Exploring how these factors influence the PsyCap-engagement-satisfaction linkage would deepen understanding of boundary conditions.

4.5. Directions for Research

Researchers could extend this work in several ways. First, experimental designs could test the effectiveness of specific PsyCap training modules in enhancing engagement and satisfaction over time. Second, integrating PsyCap with job resources in the JD-R model may reveal synergistic effects; for instance, high PsyCap employees may benefit more from autonomy or social support. Third, cross-cultural comparative studies could examine whether the PsyCap-engagement-satisfaction relationship differs across collectivist and individualist cultures. Fourth, qualitative approaches could explore employees' lived experiences of PsyCap development and its influence on their attitudes. Finally, investigating potential negative consequences of high PsyCap (e.g., overconfidence) would provide a more nuanced understanding.

5. Conclusion

This study explored how positive psychological capital influences employee engagement and job satisfaction in a Chinese manufacturing context. The findings confirm that employees with greater hope, self-efficacy, optimism, and resilience are more engaged and more satisfied with their jobs, and that engagement partly mediates the PsyCap-satisfaction relationship. The research extends positive organizational behavior theory to an understudied cultural milieu and offers practical recommendations for enhancing psychological resources through human resource management initiatives. By investing in PsyCap development and fostering a supportive climate, organizations can cultivate engaged and satisfied employees who are better prepared to navigate the challenges of technological change. The study thus underscores the strategic value of psychological resources in driving individual and organizational success.

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