

# The Study on the Effect of Psychological Capital on the Employee Career Success: The Mediating Role of Leader-Member Exchange

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## Abstract

The paper introduces the mediating role of leader-member exchange based on the relationship of psychological capital and employee career success, constructs the model of psychological capital-leader member exchange-employee career success. Through questionnaire survey, the study has collected 306 effective matching questionnaires, tested the relationship of psychological capital and employee career success, the mediating effect of leader-member exchange between psychological capital and employee career success. In line with predictions, we find that employee psychological capital had a significant positive effect on career development satisfaction and the opportunity of career development. The results also indicated that LMX partially mediated the effect of psychological capital on career development satisfaction, psychological capital on career development opportunity.

**Key words:** Psychological Capital, Employee Career Success, Leader-Member Exchange, Mediating Role.

## 1. INTRODUCTION

According to an article in Bloomberg BusinessWeek, China has entered the era of "psychological man". People in the "psychological age" are exposed to tremendous mental pressure in the pursuit of career success, and thus it has become a major project of career success as to fix mental illness for employees (Li, 2014). By referring to career success, we mean the positive outcome of psychology and work acquired by employees in the organization (Seibert and Kraimer, 2001). A variety of empirical research findings indicate that employees full of hope, optimism, confidence and resilience perform better in both objective indicators (e.g., job performance) and subjective indicators (e.g., job satisfaction and happiness) of career success (Luthans et al., 2005). In the context of relationship-based Chinese society, leaders have great authority in guiding, evaluating and promoting subordinates whose career success is, therefore, influenced by the quality of their relationship with the leaders in some aspects (Eisenberger et al., 1986). This paper constructs the theoretical model of "psychological capital → superior-subordinate relations → employee career success", and adopts the questionnaire survey method to explore the relationship between psychological capitals, superior-subordinate relationship and employee career success in Chinese context.

## 2. LITERATURE REVIEW AND RESEARCH HYPOTHESIS

### 2.1 Definitions

#### 2.1.1 Psychological capital

Luthans et al. (2005) put forward the concept of "psychological capital", which is a positive mental state in a growing individual, and are characterized by confidence (self-efficacy) and result-oriented efforts in the face of challenging work, by positive ascription (optimism) of current or future successes, by perseverance and flexible adjustment of approaches to goals (hopefulness), and by quick resilience and self-transcendence in difficulty or complexing situations in order to achieve success (FRED LUTHANS., 2008). Conforming to this definition, this

paper considers psychological capital as a whole in the empirical analysis of its connection to employee career success.

### **2.1.2 Career success**

Career success is an employee's "positive psychological or job-related outcomes and achievement accumulated in a job" (Seibert et al., 1999). This study examines the career success of employees from two aspects: 1. the assessment of employee career development opportunities from the executives. 2. The self-assessment of employee career development satisfaction.

### **2.1.3 superior-subordinate relationship**

Superior-subordinate relationship refers to the quality of the communication between leaders and their subordinates. According to this theory, leaders treat subordinates differently, dividing them into insiders and outsiders.

## **2.2 The relationship between psychological capital and employee career success**

Chinese scholars (Wang and Song, 2011) revealed the mechanism of action of psychological capital elements such as self-confidence, hope, optimism, resilience, gratitude and forgiveness on college students' career development. They think that self-efficacy affects "motivated efforts": hopefulness and optimism contribute to the position aspiration of individual behaviour outcomes; resilience helps in overcoming slackness and career plateau; gratitude helps gather resources in workplace; forgiveness can clear negative energies from the workplace (Wang and Song, 2011). Based on the above analysis, we propose the following hypotheses:

Hypothesis 1: Psychological capital has a significant positive impact on employee career success;

Hypothesis 1a: Psychological capital has a significant positive impact on employee job satisfaction;

Hypothesis 1b: Psychological capital has a significant positive impact on employee career development opportunities.

## **2.3 The effect of psychological capital on superior-subordinate relationship**

(Tang, 2010) held that psychological capital and its dimensions are closely linked to superior-subordinate relationship and that psychological capital is highly predictive in superior-subordinate communication. (Wu, 2014) concluded through empirical analysis that employees with high hopes will communicate with leaders more actively and are accepted by leaders than those without. Based on the above analysis, this study proposes the following hypotheses:

Hypothesis 2: Psychological capital has a significant positive impact on superior-subordinate relationship.

## **2.4 superior-subordinate relationship and employee career success**

In the Chinese context, leaders have the authority of guiding, evaluating and promoting subordinates (Eisenberger, Huntington, Hutchison, and Sowa, 1986). First, leaders will support insiders with resources and informations (Li and Tu, 2011); Second, leaders will benefit insiders with vocational counselling and related assistance (Scandura and Schriesheim, 1994); thirdly, in the context of big power gap in China, benign leader-subordinate relations can be conducive to subordinates informally (Thomas et al., 2005). The element of personal bond between superiors and subordinates is of great significance in the decision-making process. Based on the above analysis, we propose the following hypotheses:

Hypothesis 3: superior-subordinate relationship has a significant positive impact on employee career success;

Hypothesis 3a: superior-subordinate relationship has a significant positive impact on employee career development satisfaction;

Hypothesis 3b: superior-subordinate relationship has a significant positive impact on employee career development opportunities.

**2.5 superior-subordinate relationship plays an intermediary role in psychological capital and employee career success**

First, according to the social cognition theory, employees with the sense of high efficacy always set targets at high levels, stimulate themselves and try hard to invigorate related resources to fulfil a task. It is much easier for them to be accepted by leaders such that acquiring high-quality leader-subordinate relationships which facilitates employees in career development and success. Second, hopeful employees always desire to succeed, be willing to participate, and have the mind to meet challenges (Snyder and Lopez, 2002). Third, optimists will make positive attributions for human and subordinates have an emotional flexibility that enables them to control their work atmosphere, influence others (including company leaders), and generate career success. Based on the above analysis, the following hypotheses are proposed:

Hypothesis 4: superior-subordinate relationships play a mediating role in psychological capital and employee career success;

Hypothesis 4a: superior-subordinate relationship plays a mediating role in psychological capital and employee career development satisfaction;

Hypothesis 4b: superior-subordinate relationship plays a central role in psychological capital and employee career development opportunities.

**3. Research Methods**

**3.1 samples and data collection**

In this study, managers and subordinates in 11 small and medium-sized enterprises in Nanjing and Changzhou were selected as the paired samples of our survey. Among the total number of 520 paired questionnaires, the effective recovery rate is 58.8%, the number of respondents to executive questionnaires is 78, and each of the executive assesses 3.92 employees on average. The composition of the evaluates is shown in Table 1.

**Table 1.** Sample composition (n=306)

Demographic variable	Category	Frequency	Proportion	Demographic variable	Category	Frequency	Proportion
Gender	Female	148	48.4	Post	Production	82	26.8
	Male	154	50.3		Technical/research and development	78	25.5
	Null	4	1.3		Sale/ads	28	9.2
Education background	Primary school graduate	26	8.5		Customer services/quality	38	12.4
	High school graduate	56	18.3		Logistics	4	1.3
	Associate's degree	124	40.5		Administrative	54	17.6
	Undergraduate's degree	90	29.4		Others	12	3.9
	Master's degree	10	3.3		Null	10	3.3
	Null	0	0		Levels of professional skills	Zero	92
Level of positions	Employees	222	72.5			Elementary	94
	Low-level managers	50	16.3	Intermediary		82	26.8

	Middle-level managers	34	11.1		Senior	24	7.8
	Null	0	0		Null	14	4.6

### 3.2 questionnaire

For the paired sample survey method used in this research, there are two types of questionnaires: "executive questionnaire" and "employee questionnaire". The "executive questionnaire" is the executives' evaluation of the career development opportunities of their immediate subordinates. The "employee questionnaire" is a self-assessment of employee indices such as psychological capital, leader-subordinate relationships, and career development satisfaction.

(1) Psychological capital: compiled from the psychological capital questionnaire (PCQ) of (LI and TU, 2011), with a few modifications on the original 24 questionnaire items.

(2) Career success: the career success opportunity questionnaire has 8 items that draws reference from the Huang Zhisen's compiled version of career promotion questionnaire and Liu Jun's compiled version of career development opportunities questionnaire.

(3) leader-subordinate relationship: for the leader-subordinate relationship measurement scale, we use leader-subordinate relationship measurement scale compiled. The study result shows that the measurement scale has good reliability and validity in the context of Chinese culture.

## 4. ANALYSIS RESULTS

### 4.1 questionnaire reliability test

In this study, with Cronbach  $\alpha$  coefficients as the reliability index of the questionnaire, we conducted exploratory factor analysis (EFA) and confirmatory factor analysis (CFA) to test the construct validity of the questionnaire. The common factors of EFA were extracted by means of principal component analysis and orthogonal rotation.

#### 4.1.1 Psychological capital

First, we sifted out the qualified ones from 24 items according to the criteria below before conducting EFA on them: ① item commonality is below 0.4; ② the factor loading is lower than 0.4; ③ the factor loadings in two or more common factors are greater than 0.4 with the difference  $<0.1$ ; ④ for items that satisfy the condition ③, if they can be classified into a specific common factor according to our definitions, we will keep them, or else we delete them. According to the above factors extraction methods and item screening standards, we removed unqualified items and performed EFA on the remaining items by the same means. After several rounds of exploratory factor analysis, 18 items were left and 6 were deleted. The EFA result shows that 4 common factors whose eigenvalue is greater than 1 are extracted and explain 64.4% of the total variance; all the item communities are larger than 0.4, and the factor loading falls within the range of 0.58-0.87. On this basis, we constructed the second-order four-factor CFA model with these items, leading to a good fitting of data. These results verify the good construct validity of the questionnaire (see it for Table 2). The Cronbach  $\alpha$  coefficient of the psychological capital questionnaire of 18 items is 0.901, and the Cronbach  $\alpha$  coefficient of the four subscales is between 0.75 and 0.90, which indicates that the psychological capital questionnaire has good reliability.

#### 4.1.2 Career success

As per the same method, we conducted EFA on the 8 items on the career development opportunities questionnaire. The results indicate that all the items were left; 1 common factor whose eigenvalue is greater than 1 is extracted and explains 69.0% of the total variance; all the item communities are larger than 0.4, and the factor loading falls within the range of 0.71-0.88. On this basis, we constructed a one-order single-factor CFA model with these items, leading to a good fitting of data. These results verify the good construct validity of the questionnaire (see it for Table 2). The Cronbach  $\alpha$  coefficient of the career development opportunities

questionnaire of 8 items is 0.93, which indicates that the career development opportunities questionnaire has good reliability.

### 4.1.3 superior-subordinate relationship

We conducted EFA on the 7 items on the superior-subordinate relationship questionnaire. The results indicate that all the items were left; 1 common factor whose eigenvalue is greater than 1 is extracted and explains 63.5% of the total variance; all the item communities are larger than 0.4, and the factor loading falls within the range of 0.71-0.84. On this basis, we constructed a one-order single-factor CFA model with these items, leading to a good fitting of data. These results verify the good construct validity of the questionnaire (see it for Table 2). The Cronbach  $\alpha$  coefficient of the superior-subordinate relationship questionnaire of 7 items is 0.90, which indicates that the superior-subordinate relationship questionnaire has good reliability.

**Table 2.**The CFA fit indices of all variables (n=306)

Questionnaire	$\chi^2/df$	RMSEA	NFI	RFI	IFI	TLI	CFI
Psychological capital	2.49	0.08	0.93	0.90	0.95	0.93	0.95
Employee career success	2.56	0.07	0.98	0.96	0.99	0.98	0.99
superior-subordinate relationship	1.60	0.04	0.99	0.97	0.99	0.99	0.99

### 4.2 hypothesis test

Without sacrificing quality, this study uses formal survey data to test the aforementioned hypotheses. First, a correlation analysis was conducted on each variable, and the results are shown in Table 3, indicating the significant pairwise correlation between psychological capital total score and its dimensions, superior-subordinate relationship, the assessment of employee career development opportunities from the executives, and the self-assessment of employee career development satisfaction.

**Table 3.**Correlation analysis of each study variable (n = 306)

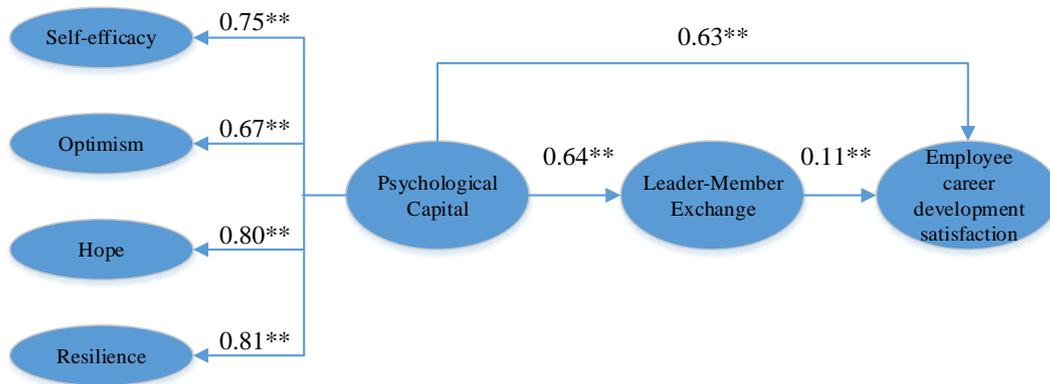
	F1	F2	F3	F4	F5	F6	F7	F8
F1 the sense of self-efficacy	(0.85)							
F2 optimism	0.34**	(0.75)						
F3 hopefulness	0.54**	0.43**	(0.78)					
F4 resilience	0.50**	0.44**	0.52**	(0.87)				
F5 psychological capital total score	0.76**	0.72**	0.81**	0.79**	(0.90)			
F6 superior-subordinate relationship	0.36**	0.42**	0.45**	0.57**	0.58**	(0.90)		
F7 career success opportunity	0.17**	0.17**	0.21**	0.19**	0.24**	0.13*	(0.93)	
F8 career success satisfaction	0.48**	0.45**	0.46**	0.52**	0.62**	0.47**	0.24**	—

**Note:** \*\*, P < 0.01; in the diagonal cell is the Cronbach  $\alpha$  coefficient of the variable.

On the basis of the correlation analysis, this study further adopted the structural equation modeling technique (SEM) to test the research hypotheses using the strictly confirmatory strategy (Houjie Tai, et al., 2004).

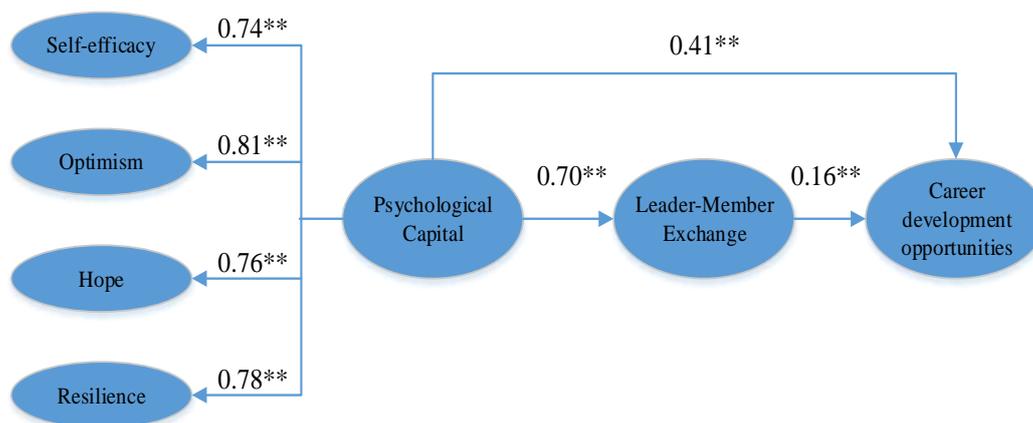
First, this study uses psychological capital as the independent variable, the self-assessment of employee career development satisfaction as the outcome variable, and LMX as the mediator variable to build part of the intermediary model, and the data fitting is shown in Figure 1 ( $\chi^2 / df = 2.95$ , NFI = 0.91, RFI = 0.90, IFI = 0.94, TLI = 0.93, CFI = 0.94, RMSEA = 0.092). As shown in Figure 1, the total effect of psychological capital on employee job satisfaction is 0.70 (0.63 + 0.64 \* 0.11), which validates hypothesis 1a; psychological capital has a significant effect on LMX ( $\beta = 0.64$ , p < 0.01), which validates hypothesis 2a; subordinate-superior relationship has a significant effect on the satisfaction of employee's career development (B = 0.11, p < 0.01), which validates hypothesis 3a; the influence of psychological capital on employee's job satisfaction is significant ( $\beta = 0.63$ , p < 0.01), which validates hypothesis 4a because LMX plays some mediating role between psychological capital and employee career development satisfaction. The mediating effect is 0.07, accounting for 10% of the

total effect of psychological capital on employee's job satisfaction, which is weaker than the direct effect of psychological capital on employee career development satisfaction.



**Figure 1.**The mediating effect of subordinate-superior relationship between psychological capital and employee career development satisfaction (n = 306)

Secondly, this study uses psychological capital as the independent variable, the assessment of employee career development opportunities from the executives as the outcome variable, and LMX as the mediator variable to build part of the intermediary model, and the data fitting is shown in Figure 2 ( $\chi^2 / df = 2.64$ , NFI = 0.92, RFI=0.91, IFI =0.95, TLI =0.93, CFI =0.95, RMSEA =0.085). As shown in Figure 2, the total effect of psychological capital on employee career development opportunities is 0.52 (0.41 + 0.70 \* 0.16), which validates hypothesis 1a; psychological capital has a significant effect on LMX ( $\beta=0.70$ ,  $p<0.01$ ), which validates hypothesis 2a; psychological capital has a significant effect on employee career development opportunities( $\beta=0.16$ ,  $p<0.05$ ), indicating that LMX plays some mediating role between psychological capital and employee career development opportunities, which validates hypothesis 4a. The mediating effect is 0.11, accounting for 21.2% of the total effect of psychological capital on employee career development opportunities, which is higher than the mediating effect of the last model. This phenomenon explains the stronger mediating effect of superior-subordinate relationship on employee career development opportunities than on employee career development satisfaction.



**Figure 2.**The mediating effect of superior-subordinate relationship between psychological capital and career development opportunities (n = 306)

## 5. CONCLUSION AND DISCUSSIONS

**5.1**In the Chinese context, this study examines the positive role of psychological capital on employee career success, which enriches the theories of career development.

(1) This study takes the employees as the research object for an in-depth discussion of the influence of psychological capital on employee career success. Our research findings remedies the deficiency of previous research, validating the positive and strong effect of dispositions such as psychological capital, self-efficacy, optimism, hopefulness, and resilience on the employee's career success.

(2) In the research field of career success, this study discusses the relationship between employee career success and dispositions such as psychological capital, self-efficacy, optimism, hopefulness, and resilience, which remedies the deficiency of previous research and enriches the theories of career development. (Hassan, 2007) found that the perceivable organizational support is positively related to career development and success, which works together with our research findings in showcasing the importance of organizational support and the great influence of superior-subordinate relationship on employee career development.

(3) We introduce the variable of superior-subordinate relationship to the effect of psychological capital on the success of an employee's career. Employees with strong psychological capital usually have a positive relationship with leaders and are more likely to be accepted by leaders, such that having more development opportunities and higher levels of career satisfaction. In this way, this paper uncovers the underlying connection between psychological capital and employee career success.

## **5.2 This study successfully introduces the variable of superior-subordinate relationship to the link between psychological capital and the success of an employee's career, which is of particular practical significance in the Chinese context.**

(1) The psychological capital of employees is an important resource. With weak psychological capitals, many new-generation employees cause troubles at the organizational or individual levels. In order to rise to challenges and to maintain core competition power, it has been an alternative to take efforts to develop employee psychological capital. The cultivation of positive psychological characters of employees has become an emphasis of the human resources management sector.

(2) Our conclusions further verify the idea that the essence of the career development concept is the interaction and fusion between internal career and external career (Wu Guochun, 1999). In the situations of Chinese enterprises, employees should fully foster psychological capitals and create benign relationships with team members, so as to gain high-quality superior-subordinate relationship. Superior-subordinate relationship provides a helpful hand in assessing employee performance and in the resultant extra career promotion and development opportunities for employees.

## **5.3 Research limitations and future research direction**

Due to the limitation of conditions and ability, there are some limitations in this study, which need to be improved in the follow-up study.

First, the sample of this study is mainly managers and subordinates in 11 small and medium-sized enterprises in Nanjing and Changzhou. Trapped by paired sample surveys, we recover effective questionnaires at a relatively low rate, which may affect the external validity of the study. Second, in light of the cross-cutting nature of this study, the follow-up research should focus on the dynamic change of the connection between psychological capital and employee career success. Thirdly, this study introduces the variable of superior-subordinate relationship to the effect of psychological capital on the success of an employee's career and thus uncovers the underlying connection between psychological capital and employee career success. However, the mediating role of superior-subordinate relationship is still weak, requiring the supplementary investigation of internal motives or other mediating variables so as to further explore the impact of psychological capital on the success of employee career mechanism and to render the theoretical model more explanatory.

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## **REFERENCES**

- Akacan B. (2017). Stress Experiences and Reactions of University Students Studying in the Education Faculties, *EURASIA Journal of Mathematics, Science and Technology Education*, 13(10), 6883-6890.
- Ballout H.I. (2007). Career success: the effects of human capital, person-environment fit and organizational support, *Journal of Managerial Psychology*, 22(8), 741-765.
- Eisenberger R., Huntington R., Hutchison S., Sowa D. (1986). Perceived organizational support, *Journal of Applied Psychology*, 71, 500-507.
- Geng X. (2017). The Influence of Teachers' Language on Middle Students' Psychology, *EURASIA Journal of Mathematics, Science and Technology Education*, 13(8), 5637-5644.
- Hou J.T., Wen Z.L., Cheng Z.J. (2004). Structural equation model and its applications, Beijing: Education science press, 12-16.
- Li M.G. (2014). Psychological capital creates performance, Peking:China business press, 6-9.
- Li Y.P., Tu Y.D. (2011). Does High LMX Quality Benefit Subordinate's Career Success? A Moderated Mediation Study, *Acta Psychologica Sinica*, 941-951.
- Luthans F., Avolio B.J., Walumbwa F.O., Li W. (2005). The Psychological Capital of Chinese Workers: Exploring the Relationship with Performance, *Management and Organization Review*, 1, 249-271.
- Luthans F., Youssef C.M., Avolio B.J. (2008). Psychological Capital: Developing the Human Competitive Edge, Peking: China Light Industry Press, 1-10.
- Scandura T.A., Schriesheim C.A. (1994). Leader-member exchange and supervisor career mentoring as complementary constructs in leadership research, *Academy of Management Journal*, 37, 1588-1602.
- Seibert S.E., Crant J.M., Kraimer M.L. (1999). Proactive personality and career success, *Journal of Applied Psychology*, 84, 416-427.
- Seibert S.E., Kraimer M.L. (2001). The five-factor model of personality and career success, *Journal of Vocational Behavior*, 58, 1-21.
- Snyder C.R., Lopez S.J. (2002). *Handbook of positive psychology*, Oxford, UK: Oxford university press, 50-52.
- Tang J.J. (2010). A Study on the Impact between Psychological Capital and Leader Member Exchange in Dalian Area, *JiLin University*, 41-42.
- Thomas N.G., Eby L.T., Sorensen K.L., Feldman D.C. (2005). Predictors of objective and subjective career success: A meta-analysis. *Personnel Psychology*, 58, 367-408.
- Wang J.Z., Song J.Q. (2011). The Mechanism of Psychological Capital on College Students' Career Development, *Journal of Liaoning University (Philosophy and Social Sciences)*, 117-119.
- Wu G.C. (1999). New perspectives on corporate career management—Professional development, *Nankai Business Review*, 17-21.
- Wu H.T. (2014). A Study of the Relationship among Leader-member Exchange, Psychological Capital and Organizational Citizenship Behavior, *Hunan Normal University*, 43-45.