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# Interaction between the Employees' Psychological Capital on Job Involvement Based on Job Satisfaction in Medical Industry: Empirical Research from China

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## Abstract

The fierce competition, pressure, and overwork have seriously threatened employees' health in the medical industry. The cultivation of employees' personal resources would generate more positive attitudes and tend to respond to the work requirements with positive coping strategies. It becomes the key to enhance employees' psychological level and promote job satisfaction and job involvement. Employees in the medical industry are studied, and a questionnaire is applied to collect data. The research results conclude that 1. psychological capital shows notably positive effects on job satisfaction, 2. job satisfaction reveals remarkably positive effects on job involvement, and 3. psychological capital appears significantly positive effects on job involvement. According to the results, suggestions are proposed, expecting to benefit the domestic medical industry by enhancing employees' positive psychological capital, job satisfaction, and job involvement.

*Keywords:* psychological capital, job satisfaction, job involvement, medical industry.

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## Introduction

Along with the time change and the advance of technology, the delivery of information becomes popular and the quality of service becomes a new indicator of business performance on the market. Meanwhile, people are increasing the demand for the quality of service. Under the fiercely competitive environment, it would be a new challenge for medical businesses doing better on the quality of service. “Talents” are the primary capital of medical industry. A lot of medical businesses provide sound working environment and welfare for attracting excellent talents. By emphasizing on employees feelings and being willing to precede two-way communication with employees allow employees growing with the company to enhance the coherence and identity. The enterprise therefore could stably grow. In other words, the happier employees appear the better work performance, and the efficiency and productivity would be enhanced. That is, an employee with good mood shows certain importance on an enterprise.

With the advance of the era, people start to pursue better quality of medical service. In order to pursue sustainable development as well as overall benefits and performance, the link from leaders to employees in a medical business becomes primary. It becomes the key point to cultivate the employability of employees and the teamwork among enterprises to enhance employees’ psychology and identity. In this case, employees’ job satisfaction is especially important in medical industry, allowing employees presenting hope, optimism, satisfaction, and even favor of the job to enhance the quality of medical service. Having employees be satisfied at work could have customers acquire the best medical quality that it would be a different level of promotion for medical industry. The fierce competition, pressure, and overwork in medical industry seriously threaten the employees’ health. For this reason, cultivating employees with more personal resources would have them appear more positive work attitudes and tend to respond to work requirements with positive coping strategies and psychologically enhance job satisfaction and job involvement. It becomes an extremely important key point.

## Literature review

### *Psychological capital*

Jung & Yoon (2015) regarded psychological capital as individual intrinsic character, the persistent and relatively stable intrinsic structure acquired through learning. Cogaltay (2015) pointed out psychological capital as a self-affirmation indicator, containing real and possible ego. Psychological capital proposed by Mete & Sokmen (2016) referred to the positively psychological state of an individual in the growth and development process, a psychological element exceeding human capital and social capital, the psychological resources enhancing personal growth

and performance enhancement, and the extension to human resource management. Aminikhah, Khaneghah, & Naghdian (2016) regarded psychological capital as the positively psychological state performed in individual growth and development process. Tahira, Latif, & Arif (2015) defined psychological capital as self-esteem; ones with high self-esteem could better present self-control ability and work hard in frustration as well as present optimistic and positive action. Jirdi & Darwish (2016) considered that the development of psychological capital could change and promote people's behavioral performance; in other words, psychological capital could develop human potential.

Referring to Wu & Marsono (2017), psychological capital in this study contains the following dimensions: (1) *Self-efficacy*: It is defined as an individual being confident in the ability to positively apply existing resources, i.e. being able to take correct and necessary action to execute specific action under existing background; (2) *Hope*: It does not simply reflect individual determination to fulfill objectives, but the belief would result in successful plan making and confirm the route for fulfilling objectives; (3) *Optimism*: With learning and development as the conditions, "optimism", in positive organizational behaviors (POB), could induce work motivation and is the primary feature of an ideal leader and employees, e.g. happiness, perseverance, personal achievement, and health; (4) *Resiliency*: Resiliency is a recovery capability suitable for adversity, uncertainty, and failure, and even actual and irresistible changes, such as more responsibilities. In work adaptation, resiliency is defined as the ability to recover from adversity, uncertainty, conflict, and failure or even "recover confidence" from positive changes or further increased responsibility (Yalcin, 2016).

### *Job satisfaction*

Hsu (2015) proposed that job satisfaction was an employee's physiological and psychological satisfaction with working environment, i.e. a worker's personal reaction to work situations. Min, Kim, & Lee (2015) regarded job satisfaction as the gap between actually acquired reward and expected reward of an employee in specific working environment. The smaller gap revealed the higher employee's job satisfaction, while the larger gap appeared the smaller satisfaction. Ayyash-Abdo, Sanchez-Ruiz, & Barbari (2016) pointed out job satisfaction as an employee's role in the working organization, i.e. the perception and emotional reaction in the organization. Karatepe & Karadas (2015) regarded job satisfaction as an employee's positive work attitudes. When an employee remained the job satisfaction at high level, the employee presented more positive attitudes toward the job; on the contrary, the lower job satisfaction revealed the employee's negative attitudes toward the job. Consiglio *et al.* (2016) considered that job satisfaction was a worker's emotional reaction or feeling about the job, and the worker's satisfaction would determine the gap between the expected and actually acquired value; the smaller gap revealed the higher satisfaction. Teimouri, Dezhtaherian,

& Jenab (2015) pointed out job satisfaction as an employee's feeling about the working environment, including the job, supervisors, the team, organization, and life. Referring to Wang (2016), the single dimension scale is used for measuring an employee's job satisfaction to assist an enterprise in clarifying the employee's conditions and helping the employee enhance the job satisfaction and increase performance.

### *Job involvement*

Chang (2015) defined job involvement as the emphasis on employees in the workplace thoroughly participating in the job, showing job enthusiasm, and presenting initiative, activeness, and responsibility to further take actions; such job involvement could further strengthen organizational benefits. It was also interpreted as "employee engagement" or "work engagement". Moreover, Ngo & Li (2015) defined it as organizational members' self-management in face of work duty. Job involvement was a unique work motivation and belief, aiming at individual identity to work role and control of the role as well as a worker's physical action, cognition, and emotional and spiritual performance in an organization (Lorenz *et al.*, 2016). Job involvement was described as a worker's identity and commitment to the job (Trivellas *et al.*, 2015). Ones with high job involvement presented positive work psychology and performed the features of energy, dedication, constant absorption, and positively facing and coping with job burnout. Farsi, Rodgarnezhad, & Anbardan (2015) regarded job involvement as an individual concentrating on, involving in, and concerning about current job. Ones with higher job involvement showed higher devotion to the work role and situations. Referring to Huang & Luthans (2015), a single-dimension job involvement scale is used in this study. They defined job involvement as individual psychological agreement with the job, i.e. individual work performance and satisfaction of the work to personal needs (e.g. self-dignity, self-fulfillment).

## **Research hypothesis and method design**

### *Research hypothesis*

Wu & Marsono (2017) found out the positive relations between employees' psychological ownership of organization and employees' organizational commitment, job satisfaction, and organization-based dignity. Jung & Yoon (2015) indicated that hope would affect job satisfaction and performance of managers and employees. Bozek (2015) considered that self-confidence would affect job satisfaction. Min, Kim, & Lee (2015) pointed out the effect of toughness on job satisfaction. Mete & Sokmen (2016) indicated that, in the rapidly changing working environment, a worker would increase or decrease personal performance

and job satisfaction due to optimism or pessimism. Turan, Tunc, & Goktepe (2015) pointed out the significant prediction of “optimism” in psychological capital to job satisfaction. Jirdi & Darwish (2016) proposed the factor in job satisfaction of information personnel as hope, self-efficacy, and toughness. Optimism did not influence much of information personnel’s job satisfaction, and ones with higher positions appeared higher psychological capital and higher job satisfaction. Accordingly, the following hypothesis is established in this study.

*H1: Psychological capital reveals significant correlations with job satisfaction.*

Hsu (2015) pointed out job satisfaction as an employee’s emotional reaction and the perceived role played in the organization. Vipinosa (2016) regarded it as employee satisfaction with the work performance. Such satisfaction referred to an employee perceiving the meaning and achievement in the organization or considering the development of specialty and being interested in the job. In this case, job satisfaction would positively affect job involvement. Wang (2016) mentioned that job involvement referred to an individual involving in the job, performing work responsibility, actively participating in the job and enjoying it, and further presenting the psychological state and work attitudes of self-value being important when regarding the job being able to satisfy the remarkable needs (Lorenz *et al.*, 2016). In this case, the following hypothesis is established in this study.

*H2: Job satisfaction shows remarkable correlations with job involvement.*

Chang (2015) discovered that psychological capital combining self-efficacy, hope, optimism, and toughness showed notably positive correlation with job performance, and the combined psychological capital could better predict an employee’s self-performance than the use of single self-efficacy, hope, optimism, and toughness. Ngo & Li (2015) also combined such four concepts to inspect an employee’s psychological capital and revealed significantly positive correlations between psychological capital and employees’ job involvement (Trivellas *et al.*, 2015). Huang & Luthans (2015) indicated that positive psychological capital played a critical role in job involvement. It was discovered that the higher positive psychological capital would enhance job involvement, as ones with highly positive psychological capital would predict the better results of the work, believe that they could create success, and not be affected by frustration that they presented higher job involvement (Yalcin, 2016). The following hypothesis is therefore established in this study.

*H3: Psychological capital presents notable correlations with job involvement.*

*Research object*

Employees of medical industry in Shanghai City, as the research samples, are distributed 360 copies of questionnaire. After deducting invalid and incomplete copies, there are 288 valid copies, with the retrieval rate 80%.

**Analysis and discussion***Factor analysis of psychological capital*

With factor analysis, psychological capital in this study is extracted three factors, job satisfaction is extracted one factor, and job involvement is extracted one factor.

variable	factor	eigenvalue	$\alpha$	cumulative variance explained
psychological capital	self-efficacy	3.162	0.84	79.534
	hope	2.751	0.88	
	optimism	2.334	0.83	
	resiliency	1.763	0.80	
job satisfaction		4.168	0.90	84.225
job involvement		3.422	0.86	80.433

*Correlation analysis of psychological capital and job satisfaction*

Regression analysis is utilized in this study for testing the hypothesis and the theoretical structure. The analysis results, Table 1, reveal the regression equation achieving the significance ( $F=27.534$ ,  $p<0.001$ ). “Self-efficacy”, “hope”, “optimism”, and “resiliency” in psychological capital show remarkably positive effects on job satisfaction ( $\beta=1.833$ ,  $p=0.022$ ;  $\beta=2.233$ ,  $p=0.000$ ;  $\beta=2.166$ ,  $p=0.000$ ;  $\beta=2.059$ ,  $p=0.000$ ). H1 is therefore supported.

Table 1. Regression analysis of psychological to job satisfaction

Independent: psychological capital	Dependent: job satisfaction		
	$\beta$	Beta	$\rho$
self-efficacy	1.833*	0.176	0.022
hope	2.233**	0.214	0.000
optimism	2.166**	0.203	0.000
resiliency	2.059**	0.195	0.000
F	27.534		
P	0.000***		
R2	0.266		
adjusted R2	0.225		

Note: \* stands for  $p < 0.05$ , \*\* for  $p < 0.01$ .

*Correlation analysis of psychological capital and job satisfaction to job involvement*

Applying regression analysis to test the hypothesis and the theoretical structure in this study, the first regression result, *Table 2*, presents the regression equation reaching the significance ( $F=34.277$ ,  $p < 0.001$ ). “Self-efficacy”, “hope”, “optimism”, and “resiliency” in psychological capital appear notably positive effects on job involvement ( $\beta=2.154$ ,  $p=0.000$ ;  $\beta=2.396$ ,  $p=0.000$ ;  $\beta=2.275$ ,  $p=0.000$ ;  $\beta=2.084$ ,  $p=0.000$ ). Accordingly, H3 is supported.

The second regression result, *Table 2*, shows the regression equation achieving the significance ( $F=36.831$ ,  $p < 0.001$ ). Job satisfaction presents significantly positive effects on job involvement ( $\beta=2.433$ ,  $p=0.000$ ) that H2 is supported.



Table 2. Regression analysis of psychological capital to job satisfaction

independent: psychological capital	dependent: job involvement					
	$\beta$	Beta	$\rho$	$\beta$	Beta	$\rho$
self-efficacy	2.154**	0.205	0.000			
hope	2.396**	0.228	0.000			
optimism	2.275**	0.217	0.000			
resiliency	2.084**	0.197	0.000			
job satisfaction				2.433**	0.231	0.000
F	34.277			36.831		
P	0.000***			0.000***		
R2	0.337			0.358		
adjusted R2	0.302			0.316		

Note: \* stands for  $p < 0.05$ , \*\* for  $p < 0.01$ .

## Conclusion

From above research results, psychological capital reveals the importance on job satisfaction and job involvement in medical industry. In addition to enhancing employees' self-efficacy, a medical business should concern more about the employees' current conditions and timely offer support and encourage so that employees could perceive the warmth from the peers. When an employee actually perceives good psychological capital, the job satisfaction would be naturally promoted. In addition to maintaining good job satisfaction, having the employee be willing to involve in the work is the most important to further maintain the operation of the medical business and reduce turnover rate for the sustainable development. A medical business could enhance employees' job satisfaction by providing quality working environment and good pay and welfare as well as creating friendly and favorable working climate with peers. The enhancement of employees' job satisfaction, to some degree, would promote the job involvement. In other words, the promotion of job satisfaction would enhance employees' job involvement in medical industry.

### *Suggestions*

Aiming at the research result on psychological capital, job satisfaction, and job involvement in medical industry, the importance of psychological capital is apparent. The following suggestions are therefore proposed in this study.

1. When enhancing professional development, work skills and literature should be advanced, and employees' inner and underdeveloped psychological capitals of self-efficacy, hope, toughness, and optimism should be cultivated. Such psychological capitals are not learned or imitated from each other in short time, but require continuous and planned development for the promotion. Accordingly, a medical business should realize the importance of psychological capital to an employee's self-promotion and plan relevant courses for the employees' learning.

2. The research indicates the effect of psychological capital on job satisfaction, where one with higher "hope and optimism" shows higher job satisfaction. A supervisor in medical industry concerning about subordinates, encouraging or providing personal experiences for the subordinates, presenting the learning model for the employees, and offering hope and optimism for future development would promote self-confidence and enhance positive attitudes.

3. Under the shortage of medical personnel, the pressure of an employee in a medical business is apparent. Being a new positive route, psychological capital could establish and maintain long-term competitive advantages. Employees in a medical business should comprehend and develop personal advantages, keep positive and optimistic attitudes under the harsh environment, continuously develop self-potential, be brave to break through current situations, and present strong will to search for the goal and go for it.

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