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The Relationship Between Psychological Capital, Job Performance and Innovative Behaviour of University Teacher

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Abstract

The internal effect of psychological capital in the improvement of teachers' performance is that positive psychological state helps to relieve stress and burnout, generate positive emotions and internal motivation, and promote higher level of individual teachers' performance. The external effect of psychological capital in the improvement of teachers' performance can be seen in the formation of harmonious interpersonal relationships and positive organizational atmosphere through positive emotions, which can promote the efficiency of the use of resources around individual teachers and the improvement of another teachers' performance. Based on the above, it is suggested that in the context of revitalizing the quality of teachers in universities, the development of teachers' psychological capital is proposed as a new path to improve teachers' performance.

Key words: Psychological capital, job performance, innovative behavior

Introduction

In the context of the Internet-based support and the accelerated development of the world economic integration process, the contemporary social environment is in an unstable and complex state, and international competition in higher education is becoming increasingly intense (Song, 2017). Teachers are the most important human resources of colleges and universities, and are the main force of running colleges and universities. The development of teachers in colleges and universities directly affects the improvement of the quality of education and teaching and talent training in colleges and universities, and is related to the

realization of scientific and technological innovation function and social service function of colleges and universities.

Research Objectives

1. To examine the direct impact of psychological capital on the job performance of university teachers and to find new positive ways to enhance their performance.
2. To examine the impact of psychological capital on the innovative behavior of university faculty.
3. To reveal the mediating role of innovative behaviour in the relationship between psychological capital and performance of university teachers.

Literature Review

1. Psychological capital and job performance.

Unlike other types of capital in the past, psychological capital has emerged to transform the traditional human resource management paradigm and become a key determinant of future organizational competitive advantage and a truly valuable asset for companies. Hosen (2003) asserts that psychological capital is an innate trait of individuals that is innate and stable. In contrast to Hosen, Luthans (2004) argues that psychological capital represents a state of being. This state induces positive organizational behavior and motivates employees to work hard to do the right thing, ultimately achieving and maintaining high performance and job satisfaction. Previous research has concluded that personality traits, knowledge, and abilities are currently recognized as factors that influence performance, and that psychological capital is a reliable antecedent variable of job performance. In addition, individual or partial psychological capital dimensions have an impact on job performance, and psychological capital in general has an impression on job performance. Fredrickson (2010), in his "Extension-Construct Theory", states that high levels of motivation allow individuals to maintain high levels of motivation and performance. High levels of motivation create an intellectual, physical, social, and psychological resource that helps individuals to face a variety of challenges and thus improve performance. Thus, teachers with higher psychological capital have higher self-confidence, willpower, and energy, and can show more patience in the face of difficulties and come up with more solutions, thus showing higher productivity than the average person and producing higher job performance.

2. Psychological capital and innovative behaviour.

The existing research basically follows the "generation-implementation" paradigm, which assumes that innovative behavior refers not only to the generation of the innovative idea itself, but also to the promotion and implementation of the innovative idea. For the idea generation stage, the creative way of idea generation is not part of the formal job role, i.e., the innovative behavior has the characteristics of organizational citizenship behavior, and empirical studies show that psychological capital has a positive impact on organizational citizenship behavior, so it is inferred that employees with higher levels of psychological capital are more likely to exhibit innovative behavior to achieve their work goals. Individuals with

higher psychological capital are able to maintain the necessary confidence to achieve desired goals, are more likely to develop new paths when faced with difficulties, adopt positive attributions for what they encounter, and can quickly bounce back and surpass when faced with setbacks. In addition, from a trait perspective, Jin (1998) argues that individual innovative behavior is influenced by the following types of personality: self-control, autonomy, independence, impulsiveness, curiosity, flexibility, and durability. The first three personality connotations are similar to self-efficacy and optimism, curiosity and flexibility are close to the meaning of hope, and durability can be used as a synonym for resilience, thus suggesting that teachers are more inclined to exhibit innovative behavior when individuals have high levels of positive psychological states such as self-efficacy, optimism, hope, and resilience. In response to the direct relationship between the two, Abbas and Raja (2011) showed that psychological capital has a positive effect on innovation performance (expressed as innovative behavior); Han Yi et al. (2011) conducted an empirical analysis of electric power company employees, and the results showed that psychological capital has a positive relationship with innovative behavior; in addition, He (2013) studied innovative talents and empirically pointed out that psychological capital positively influenced employees' innovative behavior.

3. Innovative behaviour and job performance.

Individual innovative behavior is an individual action that generates, introduces useful novel ideas or things, forms or develops new ideas or technologies, and applies them to the organization to improve efficiency (Liu, Yun, and Shi, Jintao, 2009). This definition implicitly assumes that individuals engage in innovative activities because of the expected benefits of innovative change, and that positive outputs will accompany innovation. Studies have been devoted to innovative behavior as a dependent variable, neglecting to explore the impact of innovative behavior on final task performance; the generation of innovative behavior is not the ultimate goal, and the promotion of performance through innovative behavior is the essential goal. First, innovative behaviors include a creativity component, which refers to developing new methods, refining existing methods, or finding more effective alternatives to accomplish work tasks, and Gilson et al. (2008) showed that such behaviors can lead to improved performance of employees. Although some studies have suggested that creativity can lead to fluctuations in performance due to different integration and attention to detail, a review of the literature reveals that the empirical findings of a positive association between creativity and performance are still the dominant view; secondly, performance theory suggests that employees' competencies affect their individual performance and that innovative behavior is a competency element related to task performance. In addition, employees' willingness to learn is identified as the key to good performance, i.e., learning facilitates teachers' acquisition of new skills needed to complete tasks, and innovative teachers are more likely to be willing to learn to improve their competencies and solve problems; finally, innovative employees favor adapting their work environment through innovative behaviors, and there is a positive association between effective response to change and task performance, which indicates that innovative behaviors help teachers adapt more effectively to their research and teaching work and promote performance This suggests that innovative behaviors help faculty adapt more effectively to their research and teaching work and contribute to improved performance. Although no research has been conducted to examine the relationship between innovative behavior and individual teacher performance, theoretical analysis suggests that innovative

behavior has a positive impact on task performance.

4. The mediating role of innovative behavior.

The work of teachers in higher education cannot be carried out without innovation. Innovation is the essence and vitality of all academic research, and it is also the basic way to create excellent research results and obtain better teaching effectiveness. For the research and teaching work of university teachers, academic innovation includes several aspects: broadening the research field of a certain discipline, i.e. the generation of innovative ideas; developing cutting-edge academic ideas and making arguments, i.e. the implementation of innovative ideas; introducing new academic research methods or classroom teaching modes, i.e. the adoption of innovative tools and means. In such an innovation process, university teachers need to have firm self-efficacy based on the complexity and uncertainty that the act of innovation has (Tierney & Farmer, 1999). In addition, psychological capital consisting of self-efficacy, hope, optimism, and resilience provides new ways of human resource development that can help college faculty construct critical resources in a stressful work process (Avey & Luthans, 2010). Although no research has been conducted to examine the mediating effect of innovative behavior in the relationship between psychological capital and job performance, psychological capital influences job attitudes (organizational commitment) and behaviors (organizational commitment) through(organizational commitment) and behavior (organizational citizenship behavior) and thus job performance, the theoretical paradigm that psychological capital affects job performance has been validated.

Conceptual Framework and Hypotheses

Based on previous literature review, this research will propose hypotheses, discussion and explain. Afterwards, establish a conceptual model and hypotheses.

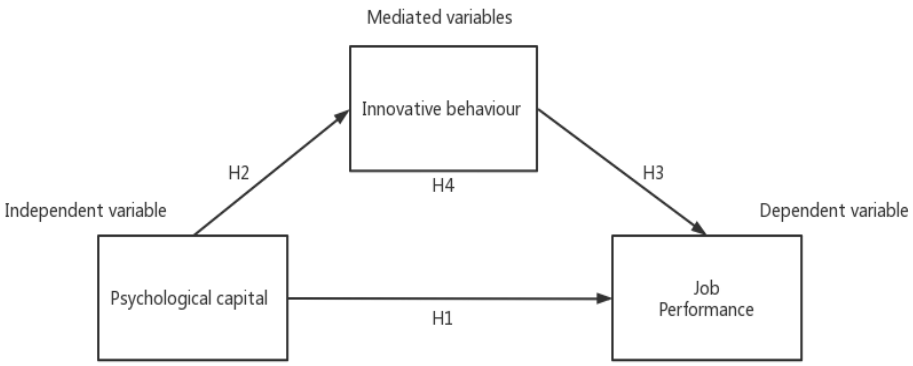

Figure 1. *Conceptual Framework Showing Key Variables*

H1: Psychological capital has a significant positive effect on job performance of university teachers.

H2: Psychological capital has a significant positive effect on innovative behaviour of

university teachers.

H3: Innovative behaviour has a significant positive effect on job performance of university teachers.

H4: Innovative behavior has a mediating role between psychological capital and job performance of university teachers.

Research Methodology

5. Research design

In this paper, a quantitative research method, which is the questionnaire method, was used to collect data.

1. Research Instrument

Questionnaire: The variables involved were adopted from existing studies, with some modifications to facilitate the respondents' understanding. The basic information of the questionnaire included gender, age, teaching experience, title, and academic major. The scale was used in the form of a five-point Likert scale. The psychological capital scale was borrowed from the Psychological Capital Questionnaire (PCQ-24) developed by Luthans (2008) and others, which contains four dimensions of self-confidence, optimism, hope, and resilience, with a total of 24 questions. The Innovative Behavior Inventory (IBI), which draws on the research of Huang Zhikai (2004) and Lu Xiaojun and Zhang Guoliang (2007), consists of two dimensions: idea generation and idea implementation, with a total of 12 items. The job performance scale is based on the study of Hu Jian and Mo Yan (2005), and is divided into two dimensions, research performance and teaching performance, with a total of 11 items.

2. Data collection

The research sample for this paper was drawn from a survey of university teachers within a university city in Chongqing, China.A total of 500 questionnaires were distributed and 500 were returned, of which 462 were valid, with a valid questionnaire return rate of 92.4%.

Data Analyze

3. Analyze tool: SmartPLS 4.0

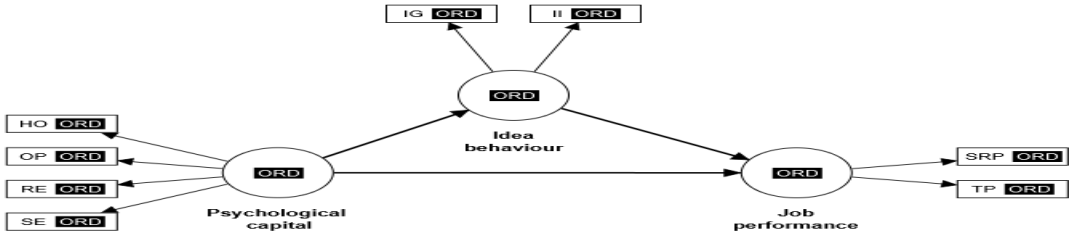

Figure 2. *Initial SmartPLS model*

Source: *Data and information from the authors' research*

4. Reliability and Validity Analyze

Table 1. *Reliability and validity reporting*

Constructs	Items	Loading	Cronbach's alpha	Composite reliability	Average variance extracted (AVE)
Psychological capital	SE	0.906	0.939	0.956	0.846
	HO	0.940			
	OP	0.927			
	RE	0.904			
Innovative behaviour	IG	0.965	0.924	0.963	0.929
	II	0.963			
Job performance	SRP	0.947	0.886	0.946	0.898
	TP	0.949			

Source: *Data and information from the authors' research*

As shown in Table 1, the values of external loadings for each variable ranged between 0.940 and 0.963, all of which were greater than 0.7, demonstrating that the data reached a usable level.Cronbach's alpha, CR (constructed reliability) and AVE (average variance extracted), and correlation analysis between the three variables. Cronbach's alpha>0.8, CR>0.9, and AVE>0.8, this result confirms the reliability and validity of the data.

Date Analyze

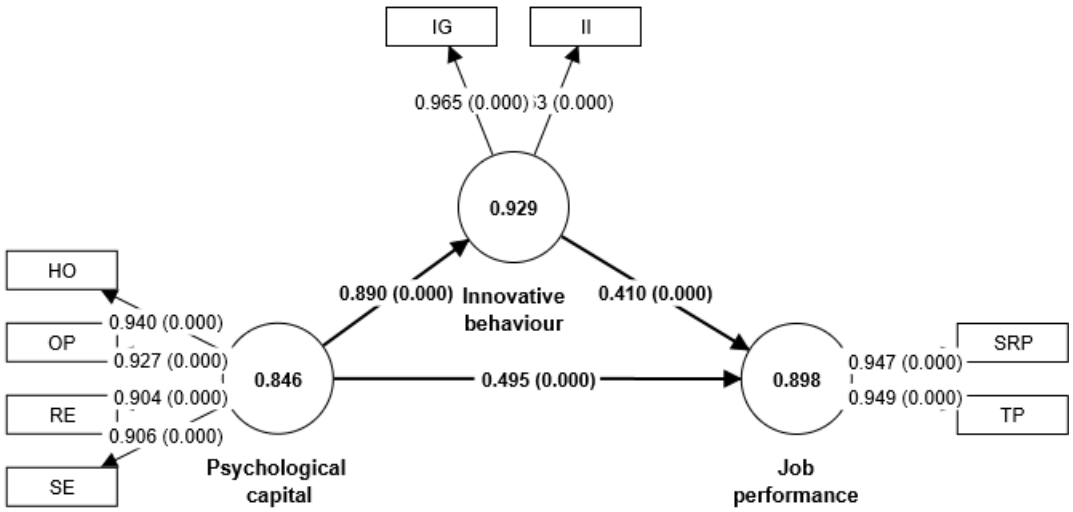

Figure 3. *Model analysis results graph(N=462)*

Source: *Data and information from the authors' research*

Table 2. *Hypothesis testing results of Main effect*

	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics	P values
PC -> JP	0.495	0.508	0.085	5.836	0.000
PC -> IB	0.89	0.89	0.025	35.706	0.000
IB -> JP	0.41	0.397	0.09	4.537	0.000

Source: *Data and information from the authors' research*

Hypothesis 1 predicted an direct effect that the psychological capital has a significant positive effect on job performance of university teachers. The results of main effect as shown in table 2 revealed an significant main effect of psychological capital on job performance (STDEV=0.085, t=5.836, p<0.001), thus supporting Hypothesis 1.

Hypothesis 2 predicted an direct effect that the psychological capital has a significant positive effect on innovative behaviour of university teachers. The results of main effect as shown in table 2 revealed an significant direct effect of psychological capital on innovative behaviour (STDEV=0.025, t=35.706, p<0.001), thus supporting Hypothesis 2.

Hypothesis 3 predicted an direct effect that the innovative behaviour has a significant positive effect on the job performance of university teachers. The results of main effect as shown in table 2 revealed an significant direct effect of innovative behaviour on job performance (STDEV=0.09, t=4.537, p<0.001), thus supporting Hypothesis H3.

Table 3. *Verify the Mediating Effect of Innovation Behavior*

	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics	P values
PC -> JP	0.365	0.352	0.075	4.891	0.000

Source: *Data and information from the authors' research*

As shown in Figure 3, psychological capital affects job performance through innovative behavior notation over: STDEV=0.075, t=4.891, p<0.001, i.e., innovative behavior plays an extremely significant mediating role in the relationship between psychological capital and job performance.Thus supporting Hypothesis H4.

Discussion

1. Psychological capital has a significant positive effect on job performance

A teacher with high psychological capital means that he or she is hopeful and confident about life and work, optimistic and resilient about difficulties and setbacks; has efficient work efficiency and completes work tasks successfully. At the same time, teachers with high psychological capital tend to get along well with their colleagues, which helps to increase their sense of identity with the organization. Once they identify with the organization, they will take the initiative to internalize the core values and mission of the organization, and will set the goals of the organization as their own goals. Strictly and consciously They will strictly and consciously abide by the rules and regulations, work hard to accomplish their goals, and

improve the overall performance of the organization.

2. Psychological capital has a significant positive effect on university teacher's innovative behavior

The results of the data analysis showed that university teachers with positive psychological qualities tend to tackle innovative challenges with a positive, optimistic, open and confident mindset, and also show resilience and hope when innovation fails, and are willing to take the initiative to implement innovative behaviors, a finding that is highly consistent with previous related studies.

3. Innovative behavior plays a mediating role in the relationship between psychological capital and job performance of university teachers

For innovative behavior, on the one hand, the extent to which it is influenced by the antecedent variable psychological capital is examined. Previous studies have been conducted in terms of personality traits, intrinsic motivation, and external environment, while this paper points out that higher levels of psychological capital will produce more innovative behavior, and the findings of this paper confirm that innovative behavior has a significant positive effect on job performance. Based on this, the relationship between psychological capital, innovative behavior and job performance of university teachers is examined. Teachers with high levels of psychological capital are highly self-motivated and will actively devote more energy to achieve their goals, which are necessary conditions for innovative behavior. This study verifies the mediating role of innovative behavior between psychological capital job performance, and that high levels of psychological capital trigger more innovative behavior, which in turn promotes job performance.

Suggestion Application of Research Findings

Measures for psychological capital development of college teachers. Psychological capital is an aggregate of four positive competencies. The four factors of self-confidence, hope, optimism and resilience form the psychological capital of college teachers in a synergistic manner. Therefore, the highest development goal is to enhance the cumulative advantages of the psychological capital elements and bring into play the integration effect of the economic value of the psychological capital of university teachers. Specifically, combined with the long-term development orientation of universities, the focus of universities can be implemented to three aspects of self-confidence, hope and optimism if the focus is on the improvement of scientific research performance; if the emphasis is on the high level of teaching performance, the focus can be on the intervention of university teachers' self-confidence and resilience.

Measures to Motivate Innovative Behavior of College Teachers. Many scholars have been pointing out that innovation should be advocated, and university administrators also regard innovation as the concept and purpose of university work. However, in fact, innovation is not the ultimate purpose, and the ultimate goal of innovation is to facilitate performance improvement. College administrators should start from college management mechanism to provide a platform for college teachers' innovative behavior: Firstly, the system reform should establish a system suitable for innovation, and give teachers certain innovation autonomy, such

as the autonomy to choose scientific research topics and design teaching programs, and reduce unnecessary restrictions; secondly, effective incentives should be established to encourage teachers to propose new ideas and adopt alternative ways to complete scientific research and teaching work. The effectiveness of incentives is closely related to the subjective experience of teachers' self-perception and motivation of innovation. Finally, we need to improve the personnel management system, encourage teachers to join a team flexibly according to their research interests and teaching tasks, i.e. to implement the novel "dual-track model of research and teaching", and play the leading role of team leaders, so as to stimulate and encourage the innovative behaviors of young teachers in research and teaching.

Recommendation for Future Studies

Given that psychological capital theory is still emerging, there is a need for more in-depth research to facilitate managers' recognition of the benefits of psychological capital and its widespread use in practice. There are three specific recommendations.

Broaden the research perspective. In the future, we should analyze more the antecedent variables affecting psychological capital and examine the possible moderating or mediating role of psychological capital in the relationship between other organizational behaviors and human resource variables in order to reveal the essence of the effect of psychological capital.

Expanding the level of research. Although there have been initial studies conducted at the group level, they have only analyzed the impact of psychological capital on job performance for some college teachers. In the future, there is a need to focus on the development of psychological capital at the group level, to examine the overall growth of psychological capital in teams, and even to extend the research to a larger collective context, such as the organizational, community, and regional levels.

A more detailed study of the research content is needed. Initial empirical research is generally a main effect paradigm, and this study mainly focuses on the direct effect of psychological capital of college teachers on job performance, and whether innovative behavior plays a mediating role in between. Later studies should strengthen the in-depth exploration of the mechanism of action and find other mediating variables or moderating variables that play a buffer effect in the relationship between the two.

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