

# *The Influence of Creative Self-Efficacy on Proactive Behavior of Medical Staffs: The Mediating Role of Person-Job Fit*

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**Abstract:** Objective: To explore the relationship between creative self-efficacy and proactive behavior of medical staffs, and the mediating role of person-job fit between them. It provides countermeasures for strengthening the matching between medical staffs and work, improving the initiative of medical staffs in the context of major public health emergencies, and provides theoretical support for further highlighting the leading role during major public health emergencies. Methods: In July 2022, 855 medical staffs were investigated using the person-job fit scale, the creativity self-efficacy scale and the proactive behavior scale. Results: the creative self-efficacy of medical staffs are positively correlated with their proactive behavior, and the relationship between them is mediated by person-job fit. Conclusion: The higher the creative self-efficacy, the higher the degree of person-job fit, and the more active the medical staffs are in dealing with work.

## 1. Introduction

During the outbreak of major public health emergencies, medical and nursing work is always accompanied by disaster rescue, and medical staffs play an important role in the process of disaster resistance and rescue<sup>[1]</sup>. As some major public health emergencies, such as some diseases, are highly infectious and rapidly transmissible, a large number of medical and nursing personnel are required to provide support. However, because some medical staffs do not have the experience and psychological preparation to deal with public health emergencies, they are prone to technical and psychological problems such as lack of professional knowledge and overwhelm in the face of public health emergencies<sup>[2-3]</sup>. As a result, problems such as mismatches and imbalances between the individual and the work of healthcare workers are highlighted. At the same time, coupled with the fact that some major public health emergencies are relatively ferocious, they are more harmful and spread faster, which will test the medical staff's ability to respond on the spot, their professional skills and level, and their ability to resist and rescue disasters. Therefore, will this cause medical staffs to have an escape mentality and withdraw in the face of emergencies? Over time, in order to avoid the above situation, they may reduce their investment in work and will not take the initiative to undertake the work they need to complete. However, in the face of sudden major public health emergencies, in the

face of increasingly sudden clinical diseases, and in the face of various problems and challenges encountered in clinical care, medical staff are required to actively devote themselves to their work and take the initiative to undertake medical and nursing responsibilities. Initiative plays an important role for medical staff to adapt to the increasingly complex work needs, increase their flexibility and adaptability, and the active work behavior of medical staff plays a decisive role in themselves, patients, hospitals and the whole human society. Therefore, in this context, it is of great theoretical value and practical significance to explore how to better mobilize and actively give play to the work initiative of medical staffs<sup>[4-5]</sup>, which has become an important research topic in management, psychology, organizational behavior and medicine.

To sum up, this study takes medical staffs as the investigation object, explores the current situation of medical staff's active behavior under the background of major public health emergencies, and explores the impact of medical staff's creative self-efficacy on their proactive behavior, as well as the intermediary role of person-job fit between creative self-efficacy and proactive behavior. Figure 1 is the theoretical model of this study.

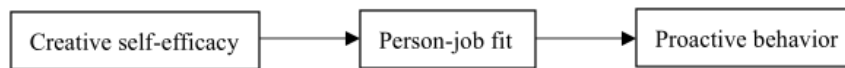


Figure 1: Theoretical model

## 2. Objects and methods

### 2.1 Objects.

This study will select the staff engaged in relevant medical and nursing work in the hospital as the research objects. A total of 931 questionnaires were issued and 931 questionnaires were recovered. After excluding some invalid and seriously biased questionnaires, there were 855 valid questionnaires, and the effective recovery rate was 91.84%.

### 2.2 Research Tools

#### 2.2.1 Person-job fit scale.

The person-job fit scale compiled by Singh and Greenhaus is used, which includes three items and has a one-dimensional structure<sup>[6]</sup>. This scale has been quoted by Chinese scholars Zhang Yong and Long Lirong<sup>[7]</sup>. The scale adopts 5-point scoring, 1 is "completely inconsistent" and 5 is "very consistent". The higher the score, the higher the person work matching degree. In this study, Cronbach's  $\alpha$  is 0.895. It has good reliability and can be used in general measurement.

#### 2.2.2 Creative self-efficacy scale.

In this study, the measurement of creative self-efficacy is based on the "creative self-efficacy" scale developed by Tierney and Farmer<sup>[8]</sup>. It is a one-dimensional scale with a total of three measurement items, scored on a 5-point Likert scale. In this study, Cronbach's  $\alpha$  is 0.919. It has good reliability and can be used in general measurement.

#### 2.2.3 Proactive behavior scale.

The scale developed by Griffin et al. is adopted, which includes 3 items and has a single dimension structure<sup>[9]</sup>. The scale adopts 5 points, 1 is "completely inconsistent" and 5 is "very consistent". The higher the score, the higher the degree of initiative. In this study, Cronbach's  $\alpha$  is 0.891. It has good

reliability and can be used in general measurement.

### 2.3 Statistical Method.

In this study, spss26.0 was used to sort out and analyze the data.

## 3. Results

### 3.1 Common Method Deviation Test.

Since all the questionnaire data are from medical staff reports, there may be common methodological bias. According to the research suggestion of Zhou Hao and Long Lirong<sup>[10]</sup>, all items in the questionnaire were tested for common method deviation, and Harman single factor test was used to exclude the problem of common method deviation. The results showed that among the nine items, two common factors with eigenvalues greater than 1 were extracted, and the first common factor explained 37.59% of the total variation, which was less than the 40% threshold of the standard, indicating that there was no serious common method deviation in the data.

### 3.2 Mean, Standard Deviation and Correlation Matrix of Each Variable.

It can be seen from Table 1, the results of correlation analysis showed that person-job fit was positively correlated with creative self-efficacy ( $r = 0.451, P < 0.001$ ), person-job fit was positively correlated with proactive behavior ( $r = 0.614, P < 0.001$ ), and creativity and self-efficacy were positively correlated with proactive behavior ( $r = 0.611, P < 0.001$ ). The above results provide basic data support for the follow-up research.

Table 1: The mean, standard deviation and correlation coefficient of each variable

Variables	Mean	SD	Creative Self-Efficacy	Person-Job Fit	Proactive Behavior
Creative Self-Efficacy	4.569	0.666	1		
Person-Job Fit	4.505	0.717	0.451***	1	
Proactive Behavior	4.435	0.798	0.611***	0.614***	1

Notes: \* for  $P < 0.05$ , \*\* for  $P < 0.01$ , \*\*\* for  $P < 0.001$  (two tailed test), the same below.

### 3.3 Main Effect and Intermediary Effect Test.

First, examine the direct effect of creative self-efficacy on the proactive behavior of medical staffs, as shown in **Table 2**. Creativity self-efficacy positively affect the proactive behavior of medical staffs( $\beta = 0.61, P < 0.001$ ).

Secondly, the mediating role of person-job fit between creative self-efficacy and proactive behavior was examined, as shown in **Table 2**. Creativity self-efficacy positively affects person-job fit( $\beta = 0.45, P < 0.001$ ). When person-job fit, creative self-efficacy and proactive behavior are put into the equation at the same time, the results show that the positive effect of creative self-efficacy on proactive behavior is significantly weakened( $\beta = 0.42, P < 0.001$ ), but the effect of person-job fit on proactive behavior was still significant( $\beta = 0.43, P < 0.001$ ), which indicates that person-job fit plays a part in mediating between creative self-efficacy and proactive behavior.

Table 2: Main effect and intermediary effect test results

Variables	Outcome variable: PBR			Outcome variable: PJF			Outcome variable: PBR		
	$\beta$	t	95%CI	$\beta$	t	95%CI	$\beta$	t	95%CI
Gender	-0.10	-0.68	[-0.38,0.19]	-0.01	-0.23	[-0.39,0.31]	-0.02	-0.65	[-0.33,0.17]
Age	0.04	0.82	[-0.06,0.14]	-0.02	-0.43	[-0.15,0.10]	0.05	1.17	[-0.04,0.14]
Education	-0.22	-1.11	[-0.62,0.17]	0.002	0.07	[-0.48,0.51]	-0.03	-1.30	[-0.58,0.12]
Marriage	0.001	0.37	[-0.09,0.10]	0.06	1.59	[-0.02,0.21]	-0.02	-0.82	[-0.12,0.05]
Working years	0.02	0.30	[-0.05,0.07]	0.81	1.45	[-0.02,0.13]	-0.02	-0.44	[-0.07,0.04]
PJF							0.43	15.82***	[0.33,0.43]
CSE	0.61	22.61***	[0.60,0.72]	0.45	14.78***	[0.47,0.61]	0.42	15.78***	[0.40,0.51]
R		0.62			0.46			0.72	
R <sup>2</sup>		0.38			0.22			0.52	
F		85.829***			38.728***			130.913***	

Notes: PJF stands for person-job fit; CSE stands for creative self-efficacy; PBR stands for proactive behavior. Gender: 1 = male, 2 = female; Age: 1 = 20 years old and below, 2 = 21-30 years old, 3 = 31-40 years old, 4 = 41-50 years old, 5 = 51-60 years old, 6 = 61 years old and above; Educational: 1 = undergraduate and below, 2 = master, 3 = doctor and above; Working years: 1 = 5 years and below, 2 = 6-10 years, 3 = 11-15 years, 4 = 16-20 years, 5 = 21 years and above; Marriage: 1 = unmarried, 2 = married.

## 4. Discussion

### 4.1 Creativity self-efficacy positively affect proactive behavior.

Proactive behavior refers to a series of voluntary, spontaneous and positive work behaviors taken by employees in order to improve their work performance, adapt to and improve their work environment and work roles, so as to better achieve the goal of meeting their own and organizational needs, rather than just being satisfied with the status quo and sticking to the form<sup>[11]</sup>. These behaviors mainly include timely feedback, actively finding problems, actively solving problems, putting forward new ideas and countermeasures, and actively assuming responsibilities<sup>[12]</sup>. Employees with high initiative often have high work enthusiasm and enterprising spirit in their daily work. These excellent characteristics will encourage employees to keep a clear mind when the organization is facing crises and difficulties, formulate detailed and careful work plans, come up with solutions and solutions for different problems, and actively explore new methods and ideas according to existing experience and conditions, take positive and effective work behaviors and participate in them. Such a series of proactive behaviors will have a positive effect on the development and growth of the organization<sup>[13-14]</sup>. Relevant research shows that when faced with some uncertain, complex and difficult to control environments, employees will be able to creatively solve various problems arising in this process through their active work behavior<sup>[15]</sup>. It can be seen that when faced with major public health emergencies, the active work behavior of medical staffs is particularly important.

Although the academic community has paid extensive attention to the influencing factors of active work behavior in the field of organizational behavior and psychology in recent years, some scholars pointed out in their research that in the current research on the guiding factors of active work behavior, such as emotional experience and goal orientation at the personal level, as well as work environment and leadership factors at the organizational level, these factors have a positive effect on active work behavior, However, most of these factors are only derived from the initiative of personal cognition or the active work behavior triggered by external stimuli, and the research on the influencing factors of both initiative and stimulation is relatively few<sup>[16]</sup>. Social cognition theory emphasizes that

individuals obtain information from the external environment, and then construct self-cognition and action strategies to make them consistent with the external environment. Creativity self-efficacy is the judgment and evaluation of employees on their own innovation and creativity, which can better reflect the level of individual innovation and creativity. When individual employees have innovative self-efficacy, they will have strong confidence and self-affirmation in innovative thinking, innovative behavior and innovative results in specific work tasks and situations, believe that they can overcome all kinds of difficulties encountered in the innovation process, are willing to try and change the problems encountered, and then show broader initiative, and can maintain high persistence.

#### **4.2 Mediating role of person-job fit.**

However, the high creativity self-efficacy of medical staffs may have an impact on their work attitude, work style, work ability and technology, but can these conditions and abilities of medical staffs meet the actual requirements of posts for dealing with various complex events? Person-job fit is a generalization and description of the above problems. Person work matching refers to the matching degree between the ability, knowledge, technology and other conditions of employees and the actual requirements of the post, and whether the post can meet the personal needs of employees. Compared with the low person work matching, the high person work matching can often save a lot of human, material, financial and time costs, and also improve the autonomy of employees to complete the work. When employees can skillfully use their abilities to complete the work, they will have internal work motivation, and their work initiative and willingness will also be strengthened<sup>[17]</sup>. From the perspective of research foundation, although no scholars have studied the relationship between the three as a chain relationship, there are still scholars who have explored the relationship between them. Zeng Hao, Wang Juanru and others have pointed out in their research that the role of the tutor's role model will have an impact on the apprentice's initiative work behavior, and that as an example for the apprentice to learn, the tutor will pass on knowledge, especially tacit knowledge, to the apprentice, which will improve the apprentice's work skills and experience and enable him to complete the work<sup>[18-19]</sup>. Li and Lin Yixuan have confirmed in their research that there is a significant influence relationship between people work matching, work initiative and job competence<sup>[20-21]</sup>.

#### **5. Conclusion**

To sum up, this study confirms that creativity self-efficacy will have an important impact on the proactive behavior and person-job fit of medical staffs, and that human work matching plays an intermediary role between them. This study provides a new theoretical basis and ideas for medical staffs to improve the person work matching degree and actively mobilize their work initiative. During the occurrence of major public health emergencies, hospital managers can guide medical staff to actively learn from each other about their own excellent quality and service technology, strive to improve their professional level, achieve a better balance and match between their own abilities and job needs, and improve their work initiative. In this way, they can play a better role in reducing the harm caused by major public health emergencies.

#### **Disclosure statement**

The author declares no conflict of interest.

#### **Author contributions**

Junbo Ma conceived the idea of the study, designed questionnaire and analyzed the data and wrote



the paper.

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