

Study on the Impact of Innovative Self-efficacy on Innovation of Employees Behavior under the Creative Process Engagement Mediating Model

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ABSTRACT

Recently, under the emphasis on the competitiveness of innovation, the innovation of employees behavior has been paid more attention by managers. It is the key to increase the core competitiveness of companies on how to enhance innovation of employees, but the current research is relatively lacking. By collecting the concepts of self-efficacy, creative process engagement, and innovation of employees behavior, this paper constructs a mediating model. The results show that innovative self-efficacy has an active impact on employee innovation behavior. At the same time, innovation self-efficacy influences employee innovation behavior through creative process engagement. Finally, this paper puts forward the path and strategy of how to improve innovation of employees behavior.

Keywords: Innovative self-efficacy, Creative process engagement, Innovation of employees behaviour.

1. INTRODUCTION

In the 2021 Government Work Report, it is proposed to persist in innovation-driven development and accelerate the development of modern industrial system. However, organizational innovation cannot be separated from employee innovation, which is reflected in all aspects of the company. Bandura (1997), a famous scholar, innovated an activity that consumed a lot of time and energy. It required long-term investment of time and effort. Because it is a thinking process of integrating knowledge, it needs continuous efforts [1]. Ford (1996) proposed that self-efficacy is the core element of innovation, which can enable employees to exert their creativity and maintain the level of innovation in their work. However, previous studies ignored the moderating effect of creative process engagement and did not solve the boundary problem of innovation of employees [2].

2. THEORETICAL BACKGROUND AND HYPOTHESS

2.1. Innovative Self-efficacy

Tierney and Farmer (2002) believed that innovative self-efficacy was the confidence that individuals can

perform creatively at work. Innovative self-efficacy can be aimed at employees at all levels of the organization to study the degree of confidence of employees in whether they can solve problems innovatively and achieve work goals [3]. When employees have great confidence in their innovative self-efficacy, they can devote themselves wholeheartedly to creative behavior.

2.2. Innovation of Employees Behavior

Scott and Bruce (1994) defined individual innovation, which means that individuals can actively generate new ideas in team activities and can carry out personal practice in subsequent behavior activities [4]. Domestic scholars Wu Zhiguo and Shi Jintao (2007) believed that employees with innovations would make full use of organizational resources, skillfully combine organizational resources with individual knowledge and ability, generate valuable source of new ideas, or create unique and valuable new products, which has extremely creative new behaviors [5]. In a general sense, we usually define innovation of employees as the process in which employees generate innovative ideas and practice them in organizational activities. Employees rely more on their supervisors and colleagues around them in their work. After obtaining the support of supervisors and the care and help of colleagues, they could be able to find a better job status, which completes their daily work

arrangements with more devotion. Therefore, we put forward a hypothesis.

H1: Innovative self-efficacy has a active impact on innovation of employees behavior.

2.3. Creative Process Engagement

On the one hand, Shalley et al. (2004) proposed that creative research focuses on a better understanding of the process leading to creative results [6]. On the other hand, in order to produce creative responses, individuals must engage in creative activities(Shalley, 1995) [7]. If the cognitive process is interrupted, the key information would be missing, which may lead to low creative results (Shalley, 1995) [7]. Therefore, we put forward a hypothesis.

H2: Innovative self-efficacy influences employee innovation behavior through creative process engagement.

3. RESEARCH METHODS

3.1. Sample Process

240 questionnaires were distributed and 218 valid questionnaires were recovered, with an effective rate of 90.83%. 64 people aged 20-25, accounting for 29.36% of the total;70 persons aged between 26 and 30, accounting for 32.11% of the total;31 to 35 years old accounted for 27.52%;36 to 40 years old accounted for 5.50%;Only 2.75% in 41-45 years old;46-50 years old only 1.83%; There are 2 people aged 51-55, accounting for 0.93%. Gender: 106 boys, accounting for 48.62%; There are 112 girls, accounting for 51.38%. Departments: 24 people in human resources department, accounting for 11.00%, 49 people in comprehensive department, accounting for 22.48%, 37 people in production department, accounting for 16.97%, 55 people in marketing department, accounting for 25.23%, 33 people in R&D department, accounting for 15.14%, and 20 others, accounting for 9.17%. Positions: 171 grass-roots managers, accounting for 78.80%, 33 middle managers, accounting for 15.21%, and 13 senior managers, accounting for 5.99%.

3.2. Measurement Method

The innovative self-efficacy questionnaire adopted the innovative self-efficacy scale compiled by Carmeli and Schaubroeck (2007) [8]; Innovation of employees behavior used the innovation scale compiled by Scott and Bruce (1994) [4]; Creative Process Engagement adopted Zhang and Bartol's (2010) Inventory on creative process engagement [9]. Among them, the English questionnaire has been translated into English and Chinese for many times to determine the written expression of each item. The internal consistency α

coefficient of innovative self-efficacy was 0.953, the participation coefficient of innovation process α was 0.881, and the innovation coefficient of employees α was 0.910, which indicates that the reliability of these three scales was high.

4. RESEARCH RESULTS

4.1. Reliability and Validity

The three-factor model achieved a good fit ($\chi^2/df = 2.539, p < 0.001, CFI = 0.896, TLI = 0.885, RMSEA = 0.084, SRMR = 0.068$). Then, the combined two two-factor models are tested. The fitting of these two models dropped sharply to 0.842, and both failed to meet the fitting requirements. Finally, we also tested the single factor model, and the result fitted worse, CFI became 0.700. This test shows that innovative self-efficacy is different from innovation of employees, and it is distinguished from the the mediating variables of the study.

4.2. Descriptive Statistical Analysis

After software calculation, The correlation coefficient between innovation self-efficacy and employee innovation behavior is 0.661 ($P < 0.001$), which provides preliminary evidence for hypothesis H1. Innovative self-efficacy and creative process engagement are significantly positively correlated ($r = 0.587, P < 0.001$), and the correlation coefficient between creative process engagement and employee innovation behavior is 0.675 ($P < 0.001$). The results of these simple correlation analyses are in line with expectations.

4.3. Test Hypothetical Results

Multiple regression models were used to test the proposed hypotheses in four steps. The interaction items are calculated after the related variables are centralized. In Model1, there are only control variables; Then the independent variable innovation self-efficacy was added to form Model2, which was used to test the direct effect of innovation self-efficacy. The moderating variables continue to be added to the innovation process involved in the formation of Model 3.As can be seen from Table 1, Model2 shows a significant positive correlation between innovative self-efficacy and innovative behaviors of employees ($P < 0.001$), which supports Hypothesis H1. Model3 showed that creative process engagement played a mediating role between innovation self-efficacy and employee innovation behavior ($P < 0.001$), indicating that innovation self-efficacy could have a significant positive effect on employee innovation behavior through creative process engagement. This result provides a strong support for the hypothesis H2.

Table 1. The relationship between innovative self-efficacy and innovation of employees behavior: The mediating effect of creative process engagement

	M1	M2	M3
Control variable			
Age	0.043(0.336)	0.044(0.250)	-0.060(0.221)
Gender	-1.020(0.776)	-1.389(0.578)	-1.136(0.512)
Department	0.210(0.252)	-0.032(0.188)	-0.143(0.167)
Position	0.455(-0.721)	0.358 (0.536)	0.261 (0.474)
Independent variable			
Innovative self-efficacy		0.466(0.035)***	0.291(0.038) ***
Mediation variable			
Participation in the innovation process			0.283(0.036) ***
Intercept	32.294(1.963)***	14.725(1.970)** *	4.848(2.156) *

Note: N=218

5. CONCLUSION

One is to establish a positive working atmosphere for the innovation process of employees. It takes a period of accumulation for employees in an organization to participate in innovation work, then the improvement of creativity may be improved. Organizations need to establish links in which employees can participate, such as rational expression of opinions, positive incentive suggestions and suggestions, and an equal and friendly working atmosphere. What's more, the organization should intensify training and establish a long-term mechanism for employees to produce innovations. Under the guidance of innovation, define company goals, department goals and individual goals of employees.

The second is to establish a perfect recruitment system. Organizations should focus on the test and observation of employees' self-efficacy in recruitment. New employees with innovative personality should be cultivated attentively so that their self-efficacy can last and will not be worn away by the passage of working hours. Employees who have contributed innovative achievements to the company should have corresponding assessment supporting reward mechanism, so that there can be a positive reward atmosphere within the organization.

Third, leaders should authorize and empower subordinates. Creativity depends on various individual differences, including innovative self-efficacy, role identity, personality, knowledge and skills. The more creative self-efficacy a person has, the more likely he or

she is to come up with novel ideas .Therefore, within the organization, we should start from the managers themselves, enhance the intrinsic motivation of work autonomy, and empower subordinates. When employees feel empowered, their sense of innovative self-efficacy will also be improved, and then they will actively participate in every link of innovation work.

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