

# Research on the Impact of Supervisors' and Colleagues' Creative Support on Employees' Innovative Behaviors Under the Interpersonal Trust Moderating Model

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## ABSTRACT

In recent years, as organizations focus on the competitiveness of innovation, the innovative behavior of employees has attracted more and more attention from managers. How to improve employees' innovative behavior is the key link to improve the core competitiveness of an enterprise, but it's still relatively lack of current research. This paper reviews the conceptual connotation of supervisors' and colleagues' creativity support, interpersonal trust, and employees' innovative behavior, then constructs a moderating model. The research results show that the supervisors' and colleagues' creativity support has a positive impact on employees' innovative behavior. When the level of interpersonal trust raise, the influence of supervisors' and colleagues' creativity support on employees' innovative behavior will increase. Finally, this article proposes ways and strategies to improve employees' innovative behavior.

**Keywords:** Supervisors' and colleagues' creativity support, Interpersonal trust, Employees' innovative behavior.

## 1. INTRODUCTION

It is proposed to persist in innovation-driven development and accelerate the development of modern industrial system in 2021 Government Work Report. The innovation of organization is inseparable from the innovation of employees, the innovation of employees is reflected in all aspects of the enterprise. Research by Gu Yuandong et al. (2016) shows that supervisors' support is closely related to employees' creativity, colleagues' support will also motivate employees to innovate[1]. Supervisors' and colleagues' creativity support can directly affect employees' innovative behavior. According to the theory of organizational support, when a supervisor shows support for employees, cares about their feelings and needs, it will enhance their self-identity and stimulate their interest on work. When employees feel support from their supervisors and colleagues, they will be motivated to contribute more to the organization. However, previous studies have neglected the moderating effect of supervisors' and colleagues' creativity support on employees' innovative behavior, and also have not solved the boundary

problem of creativity support to employees' innovative behavior.

## 2. THEORETICAL BACKGROUND AND ASSUMPTIONS

### 2.1. Supervisors' and Colleagues' Creativity Support

The creativity of employees refers to the creation of new or original ideas, products or programs that are useful to the organization (Amabile, 1996)[2]. These ideas can reflect the reorganization of existing materials or introduce new materials to the organization. "Creative Work" is not equal to "Creative Task". In other words, creative work can be produced by employees at any work or any level of organization, not just in tasks that are traditionally considered to require creativity. We believe that creativity is different from innovation, because the former refers to ideas generated at individual level, while the latter refers to the implementation of these ideas at the organizational level (Amabile, 1996)[2]. Studies have shown that supportive

behaviors from colleagues' and supervisors' enhance employees' creativity (Amabile et al., 1996)[2]. That is, the more the supervisor encourages employees, the more ideas employees submit to the organization. Therefore, supervisors and colleagues had better support as much as possible, so that the performance of employees' innovative behavior would be higher.

## **2.2. Employees' Innovative Behavior**

Definition of individual innovative behavior from Scott and Bruce (1994) is the new idea generated from team work, and also can be put into action and implementation[3]. Definition of employees' innovative behavior from domestic scholars Wu Zhiguo and Shi Jintao (2007) is employees propose precious new ideas or create valuable new products and behavior through individual knowledge and abilities rely on organizational resources[4]. We define employees' innovative behavior as the process by which employees generate, promote and implement innovative ideas, and put them into practice in related organizational activities. The status of employees are more dependent on their supervisors and colleagues at work, the support they feel from their supervisors, the care and help they receive from their colleagues are also more direct. Therefore, we propose hypotheses.

H1: Supervisors' and colleagues' creativity support has positive impact on employees' innovative behavior.

## **2.3. Interpersonal Trust**

Interpersonal trust refers to the reliability of the words, promises, oral or written narratives from communication partner, it is the generalization of trust established through interpersonal interaction (Rotter, 1967)[5]. Amabile (1988) believes that social situation can promote or hinder the generation of creativity, the mechanism of generation is individual's motivational state[6]. Motivation plays a moderating role between social situation and creative behavior. At the same time, environmental factors can promote or hinder individual's innovative behavior too. Therefore, exploring the relationship between supervisors' and colleagues' creativity support, interpersonal trust and innovative behavior is beneficial to provide better conditions for creation of innovative behavior in practical activities. It can be concluded that close interpersonal relationships can bring a sense of psychological security. Employees will not worry about encounter embarrassment and tension when communicating innovative ideas. On the contrary, listening, support and constructive information exchange from colleagues are more likely to stimulate employees' innovative thinking and behavior. Therefore, we propose hypotheses.

H2: The higher the interpersonal trust is, the greater impact on employees' innovative behavior from

supervisors' and colleagues' creativity support; The lower the interpersonal trust is, the less influence on employees' innovative behavior from supervisors' and colleagues' creativity support.

In summary, this paper studies the mechanism of supervisors' and colleagues' creativity support on employees' innovative behavior from the perspective of supervisors' and colleagues' innovation support, and based on the theory of organizational support. On this basis, we further examine the moderating effect of interpersonal trust between supervisors' and colleagues' creativity support and employees' innovative behavior.

## **3. RESEARCH METHODS**

### **3.1. Sample Process**

240 questionnaires are distributed in this survey, 218 valid questionnaires are returned, 90.83% effective rate. Age group: 64 people aged 20-25, accounting for 29.36%; 70 people aged 26-30, accounting for 32.11%; 60 people aged 31-35, accounting for 27.52%; 12 people aged 36-40, accounting for 5.50%; 6 people aged 41-45, accounting for 2.75%; 4 people aged 46-50, accounting for 1.83%; 2 people aged 51-55, accounting for 0.93%. Gender: 106 male, accounting for 48.62%; 112 female, accounting for 51.38%. Departments: 24 employees in human resources department, accounting for 11.00%, 49 employees in comprehensive department, accounting for 22.48%, 37 employees in production department, accounting for 16.97%, 55 employees in marketing department, accounting for 25.23%, 33 employees in R&D department, accounting for 15.14%, the other 20 people, accounting for 9.17%. Positions: 171 grassroots managers, accounting for 78.80%; 33 middle managers, accounting for 15.21%; 13 senior managers, accounting for 5.99%.

### **3.2. Measurement Methods**

The supervisors' and colleagues' creativity support questionnaire adopts the supervisor and colleague creativity support scale developed by Madjar (2002)[7]; the employees' innovative behavior adopts the innovative behavior scale compiled by Scott and Bruce (1994)[3]; the interpersonal trust adopts the interpersonal trust research from Lewicki et al. (1998)[8]. The three tools above adopt the Likert 7-point scale from "1-totally disagree" to "7-totally agree" to evaluate. The English questionnaires have been translated circularly between English and Chinese to determine the textual expression of each item. The internal consistency  $\alpha$  coefficient of supervisors' and colleagues' creativity support is 0.918,  $\alpha$  coefficient of interpersonal trust is 0.944, and  $\alpha$  coefficient of employees' innovative behavior is 0.910. The above data indicate that three scales have high reliability. In this study, Stata13.0 is used to sort and analyze the data,

and hierarchical regression is used for statistical testing.

**4. RESEARCH RESULT**

**4.1. Reliability and Validity**

In the confirmatory factor analysis results of validity of each variable, the three-factor model reached a good fit ( $\chi^2/df = 2.861, p < .001, CFI=0.911, TLI = 0.898, RMSEA =0.092, SRMR = 0.054$ ). The two two-factor models after merging are tested again, the results show that the fitting of two models both dropped sharply, and the CFI becomes 0.746, neither meet the fitting requirements. Finally, we test the single factor model, the result is even worse fit, and the CFI becomes 0.611. This test shows supervisors' and colleagues' creativity support is different from employees' innovative behavior, and the former forms a distinction from the moderating variables of the research?

**4.2. Descriptive Statistical Analysis**

Through software calculation, supervisors' and colleagues' creativity support is significantly positively correlated with employees' innovation behavior ( $r=0.477, p<0.001$ ), which provides preliminary evidence for hypothesis H1. Supervisors' and colleagues' creativity support is significantly positively correlated with interpersonal trust ( $r = 0.578, p <0.001$ ), and interpersonal trust is significantly positively correlated with employees' innovative behavior ( $r = 0.467, p <0.001$ ). The results of these simple correlation analyses are in line with expectations.

**4.3. Test Hypothesis Results**

Using the multiple regression model to test the proposed hypothesis in four steps (as shown in Table 1). After centering the relevant variables, calculate the interactive item. In model M1, add only control variables; in model M2, add independent variable "supervisors' and colleagues' creativity support" to test the direct effects of supervisors' and colleagues' creativity support; in model M3, the moderating variable "interpersonal trust" is added; in model M4, the interactive item of independent variable and moderating variable are added to test moderating effect.

As we can see from Table 1, the results of model M2 shows that supervisors' and colleagues' creativity support is significantly positively correlated with employees' innovative behavior ( $\beta = 0.445, p <0.001$ ), which supports hypothesis H1.

The result of model M4 shows that the interactive item of supervisors' and colleagues' creativity support and interpersonal trust is significantly positively correlated with employees' innovative behavior ( $\beta = 0.29, p<0.001$ ), this indicates that interpersonal trust significantly strengthens the relationship between supervisors' and colleagues' creativity support and employees' innovative behavior. When the level of interpersonal trust is high, supervisors' and colleagues' creativity support has a stronger effect on employees' innovative behavior. This result provides strong support for Hypothesis H2. When the level of interpersonal trust is differently, the impact of supervisors' and colleagues' creativity support on employees' innovative behavior is also different. When interpersonal trust is at a high level, supervisors' and colleagues' creativity support has a more positive impact on employees' innovative behavior.

**Table 1.** The relationship between supervisors' and colleagues' creativity support and employees' innovative behavior: the moderating effect of interpersonal trust

	Employees' innovative behavior			
	M1	M2	M3	M4
Variables controlled				
Gender	-0.170(0.129)	-0.294(0.113) **	-0.299(0.109) **	-0.298(0.106)***
Age	0.007(0.056)	0.047(0.049)	0.042(0.047)	0.029(0.046)
Department	0.035(0.042)	-0.011(0.037)	-0.018(0.035)	-0.020(0.035)
Position	0.076(0.120)	0.008 (0.104)	-0.006 (0.100)	0.033(0.098)
Independent variable "supervisors' and colleagues' creativity support"		0.445(0.052)***	0.301(0.061) ***	0.311(0.060) ***
moderating variable "interpersonal trust"			0.277(0.066) ***	0.295(0.065) ***
interactive item "supervisors' and colleagues' creativity support*interpersonal trust"				0.129(0.040) **
intercept	5.382(0.327)***	3.365(0.370) ***	5.766(0.276)***	5.687(0.710) ***

Note: N=218, \*\*\*means <0.001; \*\*means <0.01; \*means <0.05

## 5. RESULTS AND RECOMMENDATIONS

(1) Establish a working atmosphere in which supervisors and colleagues support each other. Establish channels for communicate between employees, and strengthen a harmonious and friendly working atmosphere in organizations. Consider arranging communication activities for employees to increase learning opportunities for employees and establish a long-term mechanism for employees' innovative behavior. By organizing various activities or training to enhance team cohesion, establish a team communication platform, promote mutual understanding between members, and then establish a good relationship of trust, mutual respect. Clear team goals can make team members more united, common vision will make members more trustworthy.

(2) Create a good atmosphere of mutual trust between supervisors and colleagues. When employees perceive the stronger of organizational trust, the more obvious their innovative behavior will be. Therefore, the organization should take measures to foster trust atmosphere. In a high level of trust environment, employees' thought will be more flexible, they are willing to complete their work more confidently, thus shows more innovative behavior. Managers should pay attention to the construction of trust culture. Companies can improve employees' innovative behavior through organizational innovation atmosphere. Through empirical analysis, interpersonal trust has a significant moderating influence on supervisors' and colleagues' creativity support and employees' innovative behavior. When the level of interpersonal trust is high, the positive correlation between supervisors' and colleagues' creativity support and employees' innovative behavior is stronger, and vice versa.

(3) Establish a complete reward and incentive mechanism. Organizations must establish a complete internal management system to provide announcement and incentive feedback of employees' innovative behavior timely, such as setting up models, creating an atmosphere of role model learning, and sharing successful innovation experiences. Organizations should start with salary incentives, training and promotion, etc. to stimulate employees' passion for work. When employees have a sense of identity with the organization, they will work better to achieve organizational innovation and development.

## 6. CONCLUSION

The research results show that the supervisors' and colleagues' creativity support has a positive impact on employees' innovative behavior. When the level of interpersonal trust raise, the influence of supervisors' and colleagues' creativity support on employees' innovative behavior will increase. Finally, this article

proposes ways and strategies to improve employees' innovative behavior.

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