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The Relationship between Organizational Motivation and Individual Innovation

-- The Mediating Effect of Innovation Self-efficacy

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Abstract

Purpose: To explore the mediating role of innovation self-efficacy between organizational motivation and individual innovation. Methods: 340 subjects were surveyed using the Organizational Motivation Scale, the Innovation Self-Efficacy Scale and the Individual Innovation Scale. Results: There was no significant gender difference in the individual innovative behavior of the subjects; both the organizational innovation motivation and general innovative self-efficacy of the subjects were significantly positively correlated with individual innovative behavior, and they could jointly predict individual innovative behavior; innovative self-efficacy Sense plays a partial mediating role between organizational innovation motivation and individual innovation behavior, and the mediating effect value is 29.05%. Conclusion: Organizational incentives not only have a direct impact on employee innovation, but also indirectly affect individual innovation through innovation self-efficacy.

Keywords

Organizational Motivation; Individual Innovation; Innovation Self-efficacy; Mediation Effect.

1. Introduction

The relationship between self-efficacy and innovative behavior is a topic of much interest. In modern enterprises, innovation is considered to be one of the important factors to promote enterprise development. Therefore, understanding how to improve the innovative behavior of individuals is very important for enterprises.

Bandura, A. (1997) believes that self-efficacy is an individual's confidence and belief that he can complete a certain task. Individuals with high self-efficacy are more likely to exhibit innovative behaviors at work because they believe in their ability to complete tasks and be successful. Research by Tierney, P., Farmer, S. M., & Graen, G. B. (1999) shows that the characteristics and relationships of leaders have an important impact on employees' innovative behavior. Leaders should provide support and encouragement to unleash the innovative potential of employees. Scott, S. G., & Bruce, R. A. (1994) found that individual innovation behavior is affected by many factors, including individual characteristics, organizational support, and work motivation. Organizations can improve individuals' self-efficacy and innovation ability by providing training, feedback, and rewards.

Chen Xiaohong (2014) believes that self-efficacy is one of the important factors affecting individual innovation behavior. Individuals who exhibit innovative behaviors at work need to have certain skills and knowledge, and at the same time, they need to have enough confidence and belief to try and practice. Therefore, organizations can promote innovative behavior by improving individuals' self-efficacy. Wang Juan's (2015) research shows that organizational support and work motivation have a significant impact on individual innovative behavior.

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Organizational support includes support in resources, information, technology, etc., which can help individuals better complete tasks and improve their work efficiency. Work motivation refers to the individual's interest, needs and expectations for work, which can stimulate the individual's enthusiasm and initiative. Deng Xiaohua's (2017) research found that there is a significant positive correlation between individual self-efficacy and innovative behavior. Individuals with high self-efficacy are more likely to exhibit innovative behaviors at work because they believe in their ability to complete tasks and be successful.

2. Methodology

2.1. Research Object

Distributed online questionnaires in various enterprises in Dongguan, Guangzhou, Shenzhen, Huizhou, Zhongshan and other cities. A total of 450 questionnaires were distributed, and 340 valid questionnaires were recovered (190 males, accounting for 55.9%; 150 females, accounting for 44.1%). There are 184 people with a junior college degree , 105 people with a bachelor degree , and 51 people with a graduate degree.

2.2. Research Tool

Organizational Motivation Scale: The Chinese version of the Organizational Incentive Scale revised by Shang Jiayin et al. (Shang Jiayin, Gan Yiqun, 2009) is adopted, with 6 items in total and 5-point Likert scoring, 1 of which represents "very Disagree", 5 means "strongly agree". The internal consistency reliability of the scale is 0.83. The Cronbach's α coefficient of the scale in this study is 0.842;

Self-efficacy Scale : adopts the innovation self-efficacy scale revised by Wang Caikang et al. and compiled by Schwarzer et al. (Wang Caikang et al., 2001). The scale consists of 3 items and is scored using a 5-point Likert scale, where 1 represents "strongly disagree" and 5 represents "strongly agree". Higher scores indicate higher general creative self-efficacy. The Cronbach's α coefficient of the scale in this study is 0.838;

Individual Creative Behavior Scale : uses the Chinese version of the Individual Innovation Scale (Satisfaction with Life Scale, SLS) (Wang Xiangdong et al., 1999). The scale consists of 5 items and uses a 5-point Likert scale, where 1 represents "strongly disagree" and 5 represents "strongly agree". The higher the total score, the stronger the satisfaction. The Cronbach's alpha coefficient of this scale in this study was 0.78. In addition, this study also self-made demographic variables questionnaire, including gender, education level, working years.

2.3. Statistical Method

The study used SPSS21.0 software to conduct descriptive statistics, Harman common method deviation test and correlation analysis of various variables and other data statistical analysis, and used Process 4.20 program to test the mediation effect.

3. Results

Common method bias: Aiming at the problem of common method bias, the procedure uses the anonymity of the questionnaire, unified test questionnaire, etc. to control, and then uses the Harman single factor test for statistical control. The items of all variables were subjected to unrotated principal component factor analysis (Zhou Hao, Long Lirong, 2004). The results show that the KMO value is 0.836, the Bartlett value is 2342.652 ($P < 0.001$), and the characteristic roots of 4 factors are greater than 1, explaining 58.372% of the variation, and the first factor explains 37.287% of the total variation, which is less than the critical Value 40%. Therefore, there is no serious common method bias in this study.

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3.1. Differences in Individual Innovation among Subjects of Different Genders

An independent sample t-test was carried out on the subject's individual innovative behavior on gender, and the results showed that there was no significant difference in individual innovative behavior on gender, Table 1.

Table 1. Gender difference analysis table of subjects' individual innovation behavior Independent Samples Test

Levene's Test for Equality of Variances		t-test for Equality of Means							
F	Sig.	t	df		Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
								Lower	Upper
y	.002	.964	-.378	338	.706	-.01986	.05252	-.12317	.08345
			-.376	312.497	.707	-.01986	.05282	-.12379	.08407

***At the 0.001 level (two-tailed), the correlation is significant; **At the 0.01 level (two-tailed), the correlation is significant; *At the 0.05 level (two-tailed), the correlation is significant. (The same below).

x: Organizational Innovation Incentives.

me: creative self-efficacy.

y: individual innovative behavior((The same below).

3.2. Correlation Analysis of Organizational Innovation Incentive, Innovation Self-efficacy and Individual Innovation Behavior

The correlation analysis of the total score of organizational innovation motivation, innovation self-efficacy and individual innovation behavior shows that there is a pairwise correlation between organizational innovation motivation, innovation self-efficacy and individual innovation behavior. See Table 2.

Table 2. Correlation analysis results of organizational innovation motivation, innovation self-efficacy and individual innovation behavior

	x	me	y
x	1		
me	.385**	1	**
y	.539**	.553**	1

3.3. Regression Analysis of Subjects' Organizational Innovation Incentive and Innovation Self-efficacy on Individual Innovation Behavior

According to the results of correlation analysis, there is a significant positive correlation between the subjects' organizational innovation motivation, innovative self-efficacy and individual innovative behavior. Therefore, taking individual innovation behavior as the dependent variable, and organizational innovation motivation and innovation self-efficacy as predictor variables, multiple regression analysis is carried out. The results showed that both innovation self-efficacy and organizational innovation motivation entered into the regression equation, which could jointly predict 42.7% of the variation of individual innovative behavior,

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and innovation self-efficacy (t = 9.127, P < 0.001), organizational innovation motivation (t = 8583 , P < 0.001) can significantly and positively affect individual innovation behavior. The linear regression equation is: individual innovative behavior = 1.144 + 0.337*organizational innovation incentive + 0.342*innovative self-efficacy, see Table 3.

Table 3. The regression analysis table of organizational innovation motivation and innovation self-efficacy on individual innovation behavior

	Unstandardized Coefficients	Standardized Coefficients	t	P	VIF
(Constant)	1.144		7.553	***	
x	.337	.382	8.583	***	1.174
me	.342	.406	9.127	***	1.174
Adjusted R Square		0.427			
F	127.48				
P < 0.01					
Dependent variable: individual innovation behavior					

3.4. Analysis of the Mediating Role of Innovation Self-efficacy in the Relationship between Organizational Innovation Motivation and Individual Innovation Behavior

Table 4. Mediating Effect table of Innovation Self-efficacy on Organizational Innovation Incentive and Individual Innovation Behavior

	Effect	BootSE	t	95% CI for Bootstrap	
				LLCI	ULCI
Total effect	.475	.040	11.750***	.396	.555
Direct effect	.337	.039	8.583***	.260	.414
Indirect effect(s)	.138	.028		.088	.196

From the correlation analysis and regression analysis results of organizational innovation incentives, innovative self-efficacy and individual innovative behavior, we can know that the mediating effect analysis can be carried out among the three variables. In order to further examine the mediating role of innovative self-efficacy between organizational innovation incentives and individual innovative behavior, according to the mediating analysis procedure, firstly, the variables are centralized, and then the PROCESS macro program is used, referring to the Bootstrap method, with 95% as the confidence level interval, the sample size is 5000, and the mediation test is carried out (Chen Rui et al., 2013). The results show that the confidence interval (LLCI = 0.088, ULCI = 0.196) of the mediating effect does not contain 0, indicating that the mediating effect of innovation self-efficacy is significant. After controlling the intermediary variable of innovation self-efficacy, organizational innovation incentives still have a very significant impact on individual innovation behavior, and the confidence interval of the direct effect (LLCI = 0.2605, ULCI = 0.414) does not contain 0, indicating that the direct effect has

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Statistical significance. It can be seen that innovation self-efficacy plays a partial mediating role in the impact of organizational innovation incentives on life, and the mediating effect value is 29.05%. Therefore, organizational innovation incentives can directly and positively affect individual innovation behavior, and at the same time indirectly affect individual innovation behavior by affecting innovation self-efficacy. See Figure 1 and Table 4.

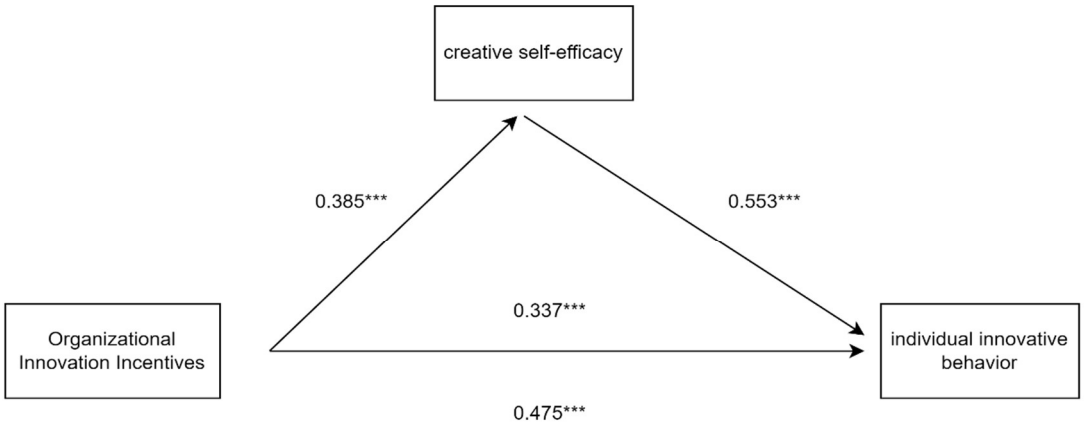

Figure 1. The Mediating Effect of Innovation Self-efficacy on Organizational Innovation Incentive and Individual Innovation Behavior

4. Conclusion

First, improving individuals' self-efficacy can promote their innovative behavior. Individuals who exhibit innovative behaviors at work need to have certain skills and knowledge, and at the same time, they need to have enough confidence and belief to try and practice. Therefore, organizations can improve individuals' self-efficacy by providing training, feedback, rewards, etc., thereby promoting their innovative behavior.

Second, organizational support and work motivation are also important factors that affect individual innovative behavior. Organizational support includes support in resources, information, technology, etc., which can help individuals better complete tasks and improve their work efficiency. Work motivation refers to the individual's interest, needs and expectations for work, which can stimulate the individual's enthusiasm and initiative.

Finally, improving individual innovative behavior also requires noting that each individual has different motivational sources and needs. Therefore, in practice, it is necessary to formulate corresponding incentive measures according to specific conditions, and to continuously adjust and optimize them.

In conclusion, there is a significant positive correlation between self-efficacy and innovative behavior. Improving individuals' self-efficacy, organizational support and work motivation can promote their innovative behavior. Enterprises should focus on cultivating employees' sense of self-efficacy, and provide necessary support and incentives to stimulate employees' innovative potential.

The subject's organizational innovation incentives can directly and positively predict individual innovation behavior, and can indirectly positively predict individual innovation behavior by affecting innovation self-efficacy. This is similar to previous research findings. Organizational innovation incentives can be obtained through active exploration or observation, successful experience or alternative reinforcement. Actively building interpersonal relationships will allow individuals to gain more social support. The social support, successful experience and

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vicarious reinforcement obtained by individuals can improve the general self-efficacy of individuals to a large extent. In general, individuals with higher self-efficacy are more likely to respond to various events in life with positive cognition and coping styles and an optimistic attitude. They are more likely to overcome difficulties and challenges, reap the joy of success, and achieve higher goals. individual innovation behavior.

In addition, in the relationship between organizational innovation incentives and individual innovation behavior, there may be some other intermediary or moderating variables, which need to be studied in the future.

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