# Study on the Intermediary Mechanism of Organizational Quality Specific Immune to Innovation Performance

DOI: 10.23977/infse.2020.010104

ISSN 2523-6407

Li Bing<sup>1,a,\*</sup>, Liu Qiang<sup>1,b</sup>, Li Xue<sup>1,c</sup>, Tang Shulin<sup>2,d</sup>, Guo Yu<sup>2,e</sup>

<sup>1</sup>School of Economics and Management, Liaoning University of Technology, Jinzhou, Liaoning, <sup>2</sup>School of Economics and Management, Harbin Engineering University, Heilongjiang, Harbin a. 1301126500@qq.com, b. xq1986625@163.com, c. 1412378368@qq.com, d. 313686302@qq.com, e.gyu1991@163.com
\*corresponding author 1301126500@qq.com

**Keywords:** Organizational Quality Specific Immune, Intermediary, Innovation Performance.

Abstract: This study studies the mechanism of the impact of organizational quality specific immune on innovation performance, and explores whether dynamic capabilities and knowledge sharing play an intermediary role between the two. Construct a theoretical model based on theoretical analysis. This study refers to the study of relevant scholars, using bootstrap method to conduct empirical analysis on the 264 valid data collected by questionnaire survey, and explores the intermediary mechanism of knowledge sharing and dynamic ability in organization quality specific immune and innovation performance. The analysis results show that: (1) organization quality specific immune has a direct impact on innovation performance; (2) knowledge sharing plays an intermediary role between the two; (3) dynamic capabilities are both between organization quality specific immune and innovation performance Intermediate role.

#### 1. Introduction

Today, under the new economic normal, innovation plays an important role in the process of economic development. From the perspective of the development status of domestic enterprises, technological R&D and innovation have become an important factor in determining corporate profitability and development. Only by focusing on innovative R&D and innovation can we ensure that enterprises are in a leading position in the market and avoid being eliminated by the market. At the same time, it can be seen that there are many reasons for the quality safety incidents that occur today, and a large proportion of them are due to the lack of organization quality specific immune functions. Quality is the key for enterprises to gain an advantage in continuous competition. Enhancing unique organization quality specific immune of enterprises can help enterprises improve innovation performance and occupy a favourable position in the market. Therefore, this study intends to focus on the study of the impact of organization quality specific immune on innovation performance while adding intermediary factors, and to further study the mediating effect of

knowledge sharing and dynamic capabilities in the impact of organization quality specific immune on innovation performance. Through the survey in this study, it can provide a certain theoretical reference for improving the innovation performance of enterprises, ensuring high-quality R&D input and output levels, and promoting the long-term profit and development of enterprises.

#### 2. Theoretical Basis and Assumptions

This section mainly introduces the theory of each variable and related scholar's study, and makes assumptions based on the survey in this study.

### 2.1 Organizational Quality Specific Immune and Innovation Performance

Organization quality specific immune is the monitoring, processing and summary of the factors that affect the quality of the enterprise. Xie Yongheng <sup>[1]</sup> and others said in the study that there is also innate non-specific immunity and specific immunity obtained by active or passive acquisition in the corporate body's immune system. The corporate body forms organization immune under the stimulation of antigens. Both Lu Ping <sup>[2]</sup> and Jiang Tao<sup>[3]</sup> mentioned in the study that the first step of tissue surveillance, the subsequent tissue defense and the resulting tissue memory constitute specific immunity.

Scholar Tomas and others have studied the impact of innovation on corporate performance <sup>[4]</sup>. Yang Xiaojie and Zhang Xindong studied the performance of enterprises and the improvement path of technological innovation <sup>[5,6]</sup>. Zhao Hongyan and others believe that innovation performance is the use of technological innovation to enhance corporate value<sup>[7]</sup>. Yang Hongtao and others expressed that innovation performance refers to the effect of product output during product or process innovation<sup>[8]</sup>.

Organizational quality monitoring is to monitor all internal and external factors that threaten the quality of products or services and submit the monitoring results to the quality defense link for processing. The effective implementation of organizational quality monitoring can intercept the pathogens that hinder the normal operation of the enterprise, while ensuring the normal operation of the enterprise and the innovation activities of the enterprise. Organizational quality defense can deal with some parts that have caused problems in a timely manner, further ensuring the smooth operation of the enterprise's production and operation. When enterprises carry out product innovation, service innovation or technological innovation, there will be more or less various problems, and quality defense is to deal with various quality problems generated in the process of carrying out innovation activities, so that innovation activities can be carried out smoothly. Organizational quality memory can record the process and content of quality monitoring and quality defense during innovation activities, and summarize, learn and use, so that we can learn from dealing with similar issues in innovation activities. Enterprises can realize the innovation of knowledge through the use and update of the original knowledge in organizational quality memory, thereby achieving innovation and improving innovation performance. While carrying out product innovation or technological innovation, enterprises must also meet the basic quality requirements of the country. Only when the basic requirements are met can greater innovation be achieved. In summary, this study makes the following assumptions.

H1: Organizational quality specific immune has an impact on innovation performance.

# 2.2 Knowledge Sharing

Lee believes that knowledge sharing is that individuals or organizations transfer or share knowledge to other individuals or organizations<sup>[9]</sup>. Runfen and others believe that the process of knowledge sharing is that employees transform their ownership into organizational ownership through knowledge sharing and communication<sup>[10]</sup>. Tan Dapeng and others believe that under certain circumstances, the process of transferring knowledge to recipients is knowledge sharing, and that specific situations can minimize differences caused by heterogeneity<sup>[11]</sup>. Xu et al. believe that the performance of knowledge sharing among organizations is the sharing of information between organizations and partners<sup>[12]</sup>. Senge's definition of knowledge sharing is not only limited to the process of information dissemination, but also includes the information sharer to help the recipient to deeply understand and understand the shared information, and extract useful knowledge processes from it<sup>[13]</sup>. Ardichvili and others believe that knowledge sharing should include two aspects, namely, providing new knowledge and demanding new knowledge<sup>[14]</sup>. Lin Dongqing believes that knowledge sharing is the process of employees sharing knowledge through internal and external communication, thereby promoting the update, transformation and absorption of knowledge<sup>[15]</sup>. Li Jingnan et al. (2010) also studied knowledge sharing from the perspective of learning, and believed that knowledge sharing is a process in which knowledge flows and spreads among individual employees, and finally forms a common knowledge cognition through fusion<sup>[16]</sup>. In addition, from the perspective of market transactions, Li Jun et al. (2013) believe that knowledge is a tradable resource, and knowledge sharing is the process by which people conduct knowledge transactions in the market. Such transactions can promote the generation and creation of knowledge<sup>[17]</sup>. From the perspective of organizational knowledge exchange, Fan Zhiping and Sun Yonghong (2006) define knowledge sharing as a process in which employees or teams within an organization or between organizations exchange knowledge through a certain form, and the goal of knowledge sharing is to exchange and integrate knowledge to promote the organization to better create and use knowledge<sup>[18]</sup>.

Enterprises can eliminate threats from surveillance through organizational quality defense behaviors. When defending, enterprises need to analyze the threats that emerge and find reasonable solutions. If the company's existing knowledge reserves are not sufficient to deal with the crisis, it is necessary to obtain new knowledge from the outside or internal employees to study new methods. No matter what kind of solution requires knowledge exchange between employees in the organization, knowledge exchange has the knowledge sharing of the organization influences<sup>[19]</sup>. At the same time, the process of organizing quality memory to sort and store new knowledge also requires knowledge sharing. The knowledge sharing between enterprises can improve the innovation performance of enterprises; the knowledge flow within the enterprise promotes the mutual learning and cooperation of employees, but also enhances the innovation ability of the organization<sup>[20-24]</sup>. In summary, this study makes the following assumptions.

- H2: Organizational quality specific immune has a positive effect on knowledge sharing.
- H3: Knowledge sharing has a positive impact on innovation performance.
- H4: Knowledge sharing plays an intermediary role between organizational quality specific immune and innovation performance.

# 2.3 Dynamic Capabilities

Teece pointed out that dynamic capabilities are the ability of enterprises to integrate and restructure in order to cope with changing environments<sup>[25]</sup>. Dynamic capabilities can help companies create, update, and protect existing resources<sup>[26]</sup>. Winter and Teece pointed out that dynamic capability can help the company's conventional capabilities such as functions and capabilities to evolve better, and determine the speed at which the conventional capabilities are changed<sup>[26]</sup>. Eisenhardt and Martin believe that dynamic capability is to use the internal and external resources of the enterprise to adapt or even create the company process that leads the market change<sup>[27]</sup>. The enterprise uses dynamic capabilities to reconfigure strategic practices and resources<sup>[28]</sup>.

Organizational quality specific immune is to monitor the internal and external environment, eliminate the threats generated, and gain experience and learn by integrating, recording monitoring, and defense content. Learning runs through the entire immunization process, and every link needs to be learned. The capacity growth theory believes that capacity and learning are equivalent, and that capacity changes, and develops with the development of effort, experience, and learning. With the continuous quality-specific immunization of the three links of the enterprise, the enterprise's enterprises continue to learn and their capabilities are constantly improving. Dynamic capability is a stable and collective model developed by enterprises through the development of effort, experience and learning<sup>[29]</sup>. Organizational quality specific immune behaviors enable companies to obtain collective learning. Through continuous interaction of collective models, their capabilities are continuously improved. This ability, which continues to develop with the efforts, experience, and learning of the enterprise, will be carried out on the resources of the organization. Adjust, reconfigure and create to adapt to rapid changes in the external environment. The organization's strong dynamic capabilities mean that the organization has strong environmental adaptability, resource integration capabilities, and learning capabilities. Some capabilities help companies update, adjust, and integrate existing resources to create new technologies, new rules, and new methods. These will have a positive impact on innovation performance. In summary, this study makes the following assumptions.

- H5: Organizational quality specific immune has a positive effect on dynamic ability.
- H6: Dynamic capabilities have a positive impact on innovation performance.
- H7: Dynamic capabilities play an intermediary role between organizational quality specific immune and innovation performance.

### 2.4 Integration model

In summary, the theoretical model of this study shown in the following figure 1.

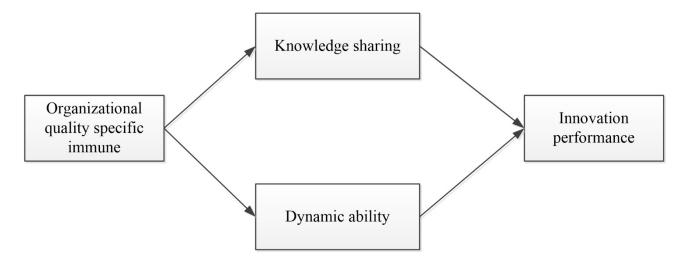


Figure 1: Theoretical model.

#### 3. Research Design

This section mainly introduces the research objects, questionnaire distribution, variable measurement, reliability, and validity test.

## 3.1 Research Objects and Questionnaire Distribution Analysis

This subsection mainly introduces the research objects and questionnaire distribution of this study.

### 3.1.1 Research Objects and Questionnaire Distribution

The data in this study comes from manufacturing companies in the eastern region, and the research object is middle-level leaders. Considering the survey characteristics of the questionnaire and the convenience of the interviewees, the questionnaire has three methods of distribution. The three methods of distributing the questionnaire are complementary. The field survey selects the representative through the teacher's social network relationship and academic experience. Company as the subject of investigation. The two methods of making electronic questionnaires through the questionnaire website and searching the yellow pages and emails of the company's website randomly selected to ensure the randomness of the survey data.

### 3.1.2 Questionnaire Recovery

One hundred twenty questionnaires distributed through field survey. Among the returned questionnaires, there were two invalid questionnaires due to failure to meet the recycling standard. The remaining valid questionnaires were 82, and the effective recovery rate was 68.33%. One hundred eighty questionnaires distributed through the questionnaire star website. Questionnaires, there are 121 valid questionnaires remaining, and the effective recovery rate is 67.22%; find 100 yellow questionnaires and emails issued on the company's website through the Internet, and retrieve 65, 4 invalid questionnaires due to failure to meet the recycling standards, and 61 remaining valid questionnaires, The effective recovery rate is 61%. Two hundred sixty-four valid questionnaires

were finally form through this method, which theoretically met the requirements of the sample size for analysis.

#### 3.2 Variable Measurement

In this study, for the measurement of variables, the Linker seven-point scoring method adopted. The measurement of organizational quality specific immune is based on the study of Shi Liping<sup>[30]</sup> and Ma Jing <sup>[31]</sup>, including 15 items. The measurement of innovation performance refers to the study results of Han <sup>[32]</sup>, including five items. The measurement of knowledge sharing refers to the study results of Chen Tao<sup>[21]</sup>, including six items. The measurement of dynamic ability refers to the study results of Jin Xin<sup>[33]</sup>, Teece<sup>[34]</sup>, Garud<sup>[35]</sup> and Tan<sup>[36]</sup>, including 13 measurement items.

# 3.3 Reliability and Validity Test

This study first uses the SPSS software to check the reliability and validity of the data. The results shown in the table 1 below.

Variable	KMOvalue	Bartlett chi square	Р	CITC	Cronbach's coefficient	Factor load	CR	Ave
Organizational quality specific immune	0.943	5648.439	0.000	0.950	0.975	0.833-0.882	0.7407	0.9772
Knowledge sharing	0.900	954.828	0.000	0.876	0.910	0.797-0.854	0.6906	0.9305
Dynamic capabilities	0.907	3985.681	0.000	0.939	0.962	0.807-0.866	0.6887	0.9664
Innovation Performance	0.886	736.416	0.000	0.964	0.895	0.829-0.874	0.7086	0.924

Table 1: Reliability.

The table gives the results of the reliability and validity analysis of the scales. The Cronbach's coefficient of each scale is above 0.85, the KMO value of each scale is greater than 0.8, and the significance level is 0.000, which means that these indicators have reached Acceptable level. The factor load value is between 0.79-0.89, and the CR values are all greater than 0.7, indicating that the convergence validity is good.

### 4. Data Analysis and Hypothesis Testing

This section mainly analyzes the collected data and tests hypotheses.

# 4.1 Descriptive Statistical Analysis of Samples

In the survey sample, it can be seen that are 134, 103, and 27 basic, middle, and senior management personnel, respectively. The number of men and women is 145 and 119 respectively, accounting for 54.92% and 45.08%, and the majority of people are between 26 and 45 years old. The number of undergraduates is 82, accounting for the largest proportion, 72 are majors, 51 are high school, below and 59 are postgraduate, and above, which is 31.06%. The number of employees under the age of one year is 62, accounting for 23.48%. The number of employees with the age of 1-3 years is 50, accounting for 18.94%. The number of employees with the age of 3-5 years is 55, Accounting for

20.82%. The number of employees with a working age of 5-10 years is 47, accounting for 17.80%. The number of employees with a working age of more than 10 years is 50, accounting for 18.94%. In the survey sample, 54 people work in state-owned enterprises, accounting for 20.45%, 55 people work in other enterprises, and accounting for 20.83%. The results shown in the table 2 below.

Table 2: Descriptive Statistical Analysis of Samples.

Feature	Category	People	Proportion (%)	Feature	Category	People	Proportion (%)
Canadan	Male	145	54.92		High school and below	51	19.32
Gender	Female	119	45.08	Education	Education Specialist		27.27
	18-25	66	25.00	level Undergraduate  Graduate student and above		82	31.06
A	26-35	61	23.11			59	22.35
Age	36-45	80	30.30		State-owned enterprise	54	20.45
	46 and up	57	21.59	Business	Private Enterprise	103	39.02
	Less than one year	62	23.48	nature	Joint venture	52	19.70
	1-3 years	50	18.94		Other	55	20.83
Post age	3-5 years	55	20.83	C .	Primary manager	134	50.76
	5-10 years	47	17.80	Current	Middle managers	103	39.02
	More than 10 years	50	18.94	position	Senior management	27	10.23

# **4.2** Relationship between Organizational Quality Specific Immune and Innovation Performance

Table 3: Regression Coefficient of Innovation Performance and Innovation Performance.

Equation	Inspection		
	t	Sig.	
Y=0.948X	48.449	0.000	

Table 4: Model Summary 1.

Outcome: Y (innovation performance) Independent Variable: X (innovation performance)						
R	R-sq	MSE	F	df1	df2	p
0.948	0.900	0.058	2347.346	1	262	0.000

It can seen from the above table 3 and table 4 that the regression equation model of organizational quality specific immune and innovation performance has an R-sq value of 0.9, a mean square error MSE of 0.058.F statistic of 2347.346 and a P value of 0.000, indicating that the model is better. T value is 48.449 and Sig. is 0.000, indicating that the regression coefficient passes the test, H1 is established.

# 4.3 The Intermediary Role of Knowledge Sharing

Table 5: Intermediary Role of Knowledge Sharing.

Equation	Inspection	95% confidence interval
----------	------------	-------------------------

		T	Sig.	Lower limit	Upper limit
Step 1	Y=0.948X	48.449	0.000		
Step 2	Y=0.867M1	28.208	0.000		
Step 3	M1=0.719X	28.190	0.000		
		1.7825	0.0758	-0.0179	0.3594
Step 4	Y=0.7507X+0.2067M1+0.1708	4.7873	0.000	0.1217	0.2917
		20.9624	0.000	0.6802	0.8212

Table 6: Model Summary 2.

	Outcome: Y(Innovation performance) Independent Variable: M1(Knowledge Sharing)							
R	R-sq	MSE	F	df1	df2	p		
0.867	0.752	0.143	795.708	1	262	0.000		
Out	Outcome: M1(Knowledge Sharing) Independent Variable: X(Organizational quality specific immune)							
R	R-sq	MSE	F	df1	df2	p		
0.8672	0.7521	0.1098	794.6695	1	262	0.000		
	Outcome: Y(Ir	nnovation performa	nce)Intermediary Va	riable: M1(Knowle	dge Sharing)			
	independent Variable: X(Organizational quality specific immune)							
R	R-sq	MSE	F	df1	df2	p		
0.9527	0.9077	0.0536	1283.3201	2	261	0.000		

It can seen from the above table 5 and table 6 that for the regression equation of M1 to Y, the R-sq value is 0.752, the F statistic value is 795.708, and the P value is 0.000, indicating that the regression equation is established. The path coefficient of M1 to Y is 0.867, so assume H3 Established. The regression equation of organizational quality specific immune to knowledge sharing has an R-sq value of 0.7521. F statistic value of 794.6695 and a P value of 0.000, indicating that the regression equation is established. The path coefficient of X to M1 is 0.719, so Suppose H2 holds. When innovation performance is the dependent variable Y, knowledge sharing is the intermediary variable M1, and organizational quality specific immune is the independent variable X, the R-sq value of the regression equation is 0.9077, the mean square error MSE is 0.0536, F statistics is 1283.3201, and the P value is 0.000, indicating that the model is better. The intermediary path coefficient of knowledge sharing is 0.719\*0.2067, and it does not contain zero in the interval [0.1217, 0.2917], so the intermediary effect is significant, assuming that H4 holds. The specific path diagram is shown in Figure 2.

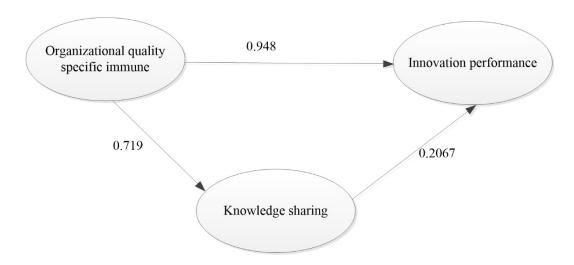


Figure 2: Intermediate Action Diagram of M1.

# 4.4 IntermediaryRole of Dynamic Capabilities

Table 7: Intermediary Role of Dynamic Capabilities.

	Equation	Inspe	ection	95% confidence interval		
		T	Sig.	Lower limit	Upper limit	
Step 1	Y=0.948X	48.449	0.000			
Step 2	Y=0.950M2	49.467	0.000			
Step 3	M2=0.798X	38.216	0.000			
		-1.9589	0.0512	-0.3071	0.0008	
Step 4	Y=0.4571X+0.5546M2-0.1532	12.8836	0.000	0.4699	0.6394	
		12.2591	0.000	0.3937	0.5305	

Table 8: Model Summary 3.

Outcome: Y(Innovation performance) Independent Variable: M2(Dynamic Capabilities)							
R	R-sq	MSE	F	df1	df2	p	
0.950	0.903	0.056	2446.976	1	262	0.000	
Outc	Outcome: M2(Dynamic Capabilities) Independent Variable: X(Organizational quality specific immune)						
R	R-sq	MSE	F	df1	df2	p	
0.921	0.848	0.073	1460.462	1	262	0.000	
	Outcome: Y(In	novation performan	ce)Intermediary Var	riable: M2(Dynamic	Capabilities)		
	independent Variable: X(Organizational quality specific immune)						
R	R-sq	MSE	F	df1	df2	p	
0.9688	0.9396	0.0357	1995.7606	2	261	0.000	

It can be seen from the above table 7 and table 8 that the F statistic value of the regression equation of dynamic capability to innovation performance is 244.6976, P value is 0.000, and R-sq value is 0.903, indicating that the regression equation is established. The path coefficient of dynamic capability to innovation performance is 0.950 (P < 0.05), so it is assumed that H6 is established. The

regression equation of organizational quality specific immune to dynamic ability, its R-sq value is 0.848, F statistic value is 1460.462, and P value is 0.000, indicating that the regression equation is established. The path coefficient of organizational quality specific immune to dynamic ability is 0.798 (P<0.05), so it is assumed that H5 holds. When innovation performance is the dependent variable Y, dynamic ability is the intermediate variable M2, and organizational quality specific immune is the independent variable X, the regression of R-sq value is 0.9396, the mean square error MSE is 0.0357, the F statistic is 1955.7606, and the P value is 0.000, indicating that the model is good. The intermediary path coefficient of dynamic capability is 0.798\*0.5546, which is within the 95% confidence interval [0.4699, 0.6394] does not contain zero, so the intermediary effect is significant, assuming that H7 holds. The specific path diagram is shown in Figure 3.

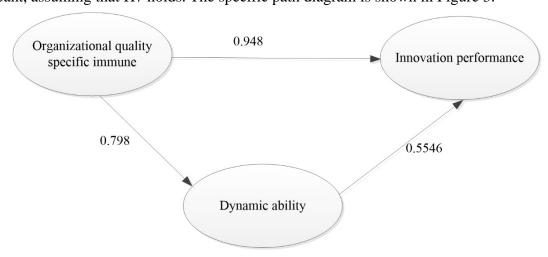


Figure 3: Intermediate Action Diagram of M2.

#### 5. Conclusion and Revelation

This section is mainly to introduce the survey conclusions of this study and the enlightenment.

#### **5.1 Conclusion**

(1)Organizational quality specific immune has an impact on innovation performance.

Organization quality monitoring is to monitor all internal and external factors that threaten the quality of products or services and submit the monitoring results to the organizational quality defense link for processing. The effective implementation of organizational quality monitoring can intercept pathogens that hinder the normal operation of the enterprise, while ensuring the normal operation of the enterprise and the innovation of the enterprise. The organizational quality defense can deal with some parts that have caused problems in a timely manner, further Ensure that the production and operation of the enterprise proceed smoothly. When enterprises carry out product innovation, service innovation or technological innovation, various problems will occur more or less, and quality defense is to deal with various quality problems generated in the process of carrying out innovation activities, so that innovation activities can smoothly carried out. Organizational quality memory can record the process and content of quality monitoring and quality defense during innovation activities, and summarize, learn and use, so that we can learn from

dealing with similar issues in innovation activities. Enterprises can realize the innovation of knowledge through the use and update of the original knowledge in organizational quality memory, thereby achieving innovation and improving innovation performance.

(2)Knowledge sharing plays an intermediary role between organizational quality specific immune and innovation performance

Enterprises can eliminate threats from surveillance through organizational quality defense behaviors. When defending, enterprises need to analyze the threats that emerge and find reasonable solutions. Either solution requires knowledge exchange among employees within the organization, or knowledge exchange has an impact on the organization's knowledge sharing. At the same time, the process of organizing quality memory to sort and store new knowledge also requires knowledge sharing. The knowledge sharing between enterprises can improve the innovation performance of enterprises; the knowledge flow within the enterprise promotes the mutual learning and cooperation of employees, but also enhances the innovation ability of the organization.

(3)Dynamic capabilities play an intermediary role between organizational quality specific immune and innovation performance

Learning runs through the entire immunization process, and every link needs to be learned. With the continuous quality specific immunization of the three links of the enterprise, the enterprise's enterprises continue to learn and their capabilities are constantly improving. Organizational quality specific immune behaviors enable companies to obtain collective learning. Through continuous interaction of collective models, their capabilities are continuously improved. This ability, which continues to develop with the efforts, experience, and learning of the enterprise, will be carried out on the resources of the organization. Adjust, reconfigure and create to adapt to rapid changes in the external environment. The organization's strong dynamic capabilities mean that the organization has strong environmental adaptability, resource integration capabilities, and learning capabilities. The capabilities help companies update, adjust, and integrate existing resources to create new technologies, new rules, and new methods. These will have a positive impact on innovation performance.

#### **5.2 Revelation**

This study studies the mechanism of the impact of organizational quality specific immune on corporate innovation performance, explores the intermediary role of dynamic capabilities and the intermediary role of knowledge sharing, which is conducive to a more systematic understanding of the mechanism of organizational quality specific immune on innovation performance. The theory of organizational quality specific immune is enrich at the level.

#### Acknowledgements

This research is funded by 2019 science research fund of department of education of Liaoning Province(JQW201915402, JFW201915401), Natural Science Foundation of Heilongjiang Province (G2018005), Scientific Research Project of Chinese Ocean Development Research Association(CAMAZD201911).

#### References

- [1] Xie Y. H., Zhou Y., Zhang Z. P., Guo X. T. (2018) Enterprise's "Nerve and Immune System". Manager, (282), 54-59.
- [2] Lv P., Wang Y. H. (2015) Research on tissue immune behaviour and mechanism. Journal of Management, 6(5), 607-614.
- [3] Jiang T., Xiong W. (2017) Research on multi-level distributed organization immune response model based on comprehensive perspective. Science Management Research, (14), 239-244.
- [4] Tomas M. H., Robert F. H., Gary A. K. (2003) Innovativeness: Its antecedents and impact on business performance. Industrial Marketing Management, 33(5), 429-438.
- [5] Yang X. J. (2015) Analysis of the status quo and optimization strategies of performance management of state-owned photovoltaic manufacturing enterprises. Enterprise Reform and Management, (11), 73-74.
- [6] Zhang X. D., Wu J. (2016) Can the returned overseas executives promote technological innovation of enterprises. Science and Science and Technology Management, (1), 115-128.
- [7] Zhao H. Y., Jiang S. X., Yang C.(2015) Stage evolution of absorptive capacity and enterprise innovation performance—Based on the empirical analysis of Shanghai's high-tech industry. Foreign Economics and Management, 37(2), 3-17.
- [8] Yang H. T., Yang P. X.(2015) The influence of openness, relationship network and knowledge sharing on innovation performance. Industrial Engineering and Management, (2), 68-73.
- [9]Lee J. N. (2001) The impact of knowledge sharing, organizational capability and partnership quality on IS outsourcing success. Information and Management, 8(5), 323-335.
- [10] Ruun F., Chen G. Q. (2002) Research on organizational knowledge sharing in implementing mass customization. Journal of Management Engineering, 16(3), 3944.
- [11] Tan D. P., Huo G. Q. (2005) Analysis of knowledge transfer and related concepts. Library and Information Service, 49(2), 7-10.
- [12]Xu Y., Liu J., Wu J. (2016) Improving supply chain performance through industrystandards use and community socialization: A perspective of standards consortia. International Journal of Physical Distribution Logistics Management, 46(8), 763-782.
- [13] Senge P.M. (2004) The leader's new work: Building learning organizations. Sloanmanagement review, 32(1), 439-457.
- [14] Ardichvili A., Page V., Wending T. (2003) Motivation and barriers to participation invirtual knowledge-sharing communities of practice. Journal of Knowledge Management, 7(1), 64-77.
- [15] Lin D. Q. (2005) Theory and Practice of Knowledge Management. Beijing: Electronic Industry Press. 67-78.
- [16] Li Z. N., Deng Y., Liu H. Y.(2010) A summary of the domestic and foreign knowledge sharing theory research Tian. Library Science Research, (4), 2-6.
- [17] Li J., Hu P., Li H. (2014) Research on the Impact of Human Resource Management Practice on Innovation Performance from the Perspective of Knowledge Sharing. Journal of Xiangtan University (Philosophy and Social Sciences Edition), 38(2), 46-50.
- [18] Fan Z. P., Sun Y. H.(2006) A review of knowledge sharing research. Journal of Management, 3(3), 371-374.
- [19] Li Q., Sun R.(2015) Research on social exchange relationship, knowledge sharing and innovative behaviour of enterprise employees. Science and Science and Technology Management, 36(10), 147-157.
- [20]Saenz J., Aramburu N. (2009) Knowledge sharing and innovation performance: A comparison between high-tech and low-tech companies. Journal of Intellectual Capital, 10(1), 22-36.

- [21] Chen T., Wang T. N., Zhu Z. L. (2013) Knowledge distance, environmental uncertainty and knowledge sharing among organizations: an empirical study with moderating effects. Science Research, 31(10), 1532-1540.
- [22]Tsai W. (2000) Social capital strategy relatedness and the formation of intra-organizational linkages. Strategic Management Journal, 12(9), 925-939.
- [23]Tsai W. (2001) Knowledge transfer in intra organizational networks: Effects of network position and absorptive capacity on business unit innovation and performance. Academy of Management Journal, 44(5), 996-1004.
- [24] Josune S., Nekane A., Carlos B. (2012) Knowledge sharing and innovation in Spanish and Colombian high-tech firms [J]. Journal of Knowledge Management, 16(6), 919-933.
- [25] Gupta A., Hoopes D., Knott A. (2015) Redesigning routines forreplication. Strategic Management Journal, 36(6), 851-871
- [26]Teece D. J. (2016) Dynamic capabilities and entrepreneurialmanagement in large organizations: toward a theory of the (entrepreneurial) firm. European Economic Review, 86(7), 202-216
- [27]Brauer M., Laamanen T. (2014) Workforce downsizing and firmperformance: An organizational routine perspective. Journal of Management Studies, 51(8), 1311-1333.
- [28] Feldman M. S., Pentland B., D'Adderio L. (2016) Beyondroutines as things: Introduction to the special issue onroutine dynamics. Organization Science, 27(3), 505-513.
- [29] Si M. Q. S. (2020) Research on the Impact of Endogenous Evolution Mechanism of Organizational Practices on Innovation Performance——Mediation of Dynamic Capability. Future and Development, 44(4), 71-79.
- [30] Shi L. P., Liu Q., Wu K. J., Du Z. W. (2013) The mechanism of the consistency of organizational quality specific immune construction elements on quality performance: an empirical analysis based on PP method, fit method and AHP. Industrial Engineering and Management, 18(3), 84-91.
- [31] Ma J. (2019) Research on the formation mechanism of quality-specific immunity in equipment manufacturing enterprises. Liaoning University of Technology.
- [32] Han Y., Li D. (2015) Effects of intellectual capital on innovative performance. Management Decision, 53(1), 40-56.
- [33] Jin X., Chen S. (2015) The effect of knowledge source strategy and dynamic capability on exploratory innovation performance: an empirical study based on knowledge-intensive service companies. Scientific Research Management, 36(2), 32-40.
- [34]Teece D. J. (2007) Explicating dynamic capabilities: The nature and micro foundations of sustainable enterprise performance. Strategic Management Journal, 28(13), 1319-1350.
- [35] Garud R., Nayyar P. R. (1994) Transformative capacity: Continual structuring by intertemporal technology transfer. Strategic Management Journal, 15(5), 365-385.
- [36]Tan J., Peng M. W. (2003) Organizational slack and firm performance during economic transitions: Two studies from an emerging economy. Strategic Management Journal, 24(13), 1249-1263.