

The Impact of Engineering Manpower's Innovative Behavior: Comprehending Psychological Capital as Mediator Variable

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Abstract

As employees' direct managers and work reporters, the empathetic ability and emotional support of the superior managers will have a crucial impact on employees' emotions and behaviors. Based on the perspectives of social exchange theory, leader-member exchange theory and resource conservation theory, this quantitative paper takes the empathy ability of managers as an independent variable, the innovative behavior of employees as a dependent variable, and psychological capital and role pressure as intermediary variables. The leader-member exchange is a moderating variable. Quantitative analysis method was used for data collection, and SPSS 26.0 and AMOS 26.0 were used for statistical analysis. Through descriptive statistical analysis, reliability and validity analysis, correlation analysis, regression analysis, etc., the conclusion is that the empathy of managers has a direct and positive impact on employee 'innovative behavior; The empathy of managers plays an intermediary role in promoting employee 'innovative behavior through psychological capital to some extent. Leadership-member exchange negatively regulates the positive impact of managers' empathy on role pressure; The relationship between managers empathy and psychological capital has not been significantly regulated by role pressure on employee 'innovative behavior. According to the research results and conclusions, some feasible suggestions are put forward for enterprises and management practitioners to provide new ideas for modern management practice. Enterprises should pay attention to the cultivation of managers' empathy ability, thus enhancing managers' psychological capital and enhancing employees' willingness to innovate and managers should pay attention to proper emotional expression and try to avoid the pressure of employee 'role.



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Introduction

With the rapid development of the economy and society and the increasing uncertainty of economic situation, especially after the outbreak of the novel coronavirus epidemic at the end of 2019, the world economic development is facing enormous challenges, making it more difficult for enterprises to survive and develop. In this uncertain situation, in order to ensure stable and long-term development, we must attach importance to the role of innovation and coordinate the relationship between innovation and enterprise development. Innovation is an important driving force for the development of enterprises, and also the key to enhance their own strength and competitive advantages (Cartagena-Gutiérrez et al., 2021). Employee innovation is an important component of enterprise innovation. Management empathy is defined as the personality and psychological characteristics of managers who accurately identify and understand the emotional reactions and changes of their followers or other stakeholders, and is considered to have the potential to promote positive emotions of others and stimulate positive behaviors (Stremersch et al., 2021). Previous studies have shown that managers' empathy has a positive effect on employees' innovative behavior, but the understanding of its inhibition mechanism is relatively limited. Based on social exchange theory and the leader-member exchange theory, we can see that when employees correctly feel the empathy ability of managers, accepting the recognition, trust and respect of managers will strengthen positive psychological and emotional factors such as self-confidence (Rant, 2020).

Problem statement

Leadership empathy is favored by scholars for its ability to provide emotional support and a sense of security while encouraging employees to experiment with innovative ways to accomplish their day-to-day tasks (Nguyen et al., 2022). Compared with previous literature focusing on the empathy effects of negative emotions, (Raju, 2021)proposes a factor that existing research has paid less attention to, the extent to which those working in stressful occupations in high-change environments empathize with their colleagues' positive emotions (Raju, 2021). The trend of technology in the future will inevitably aggravate the original role pressure of employees and affect their innovative behavior. Then, when employees experience unbearable role pressure, does the manager's empathy help alleviate this negative working state and indirectly affect their subsequent innovative behavior? In addition, under the established compensation mechanism, how to stimulate employees' achievements and promote the emergence of more innovative behaviors is an organizational management dilemma that enterprises generally face. For employees who are in the tide of trans-generational changes, the innovation of enterprises is to transfer the survival pressure of enterprises to employees. It is a typical role overload phenomenon to realize the leap-forward development of organizational performance by expecting employees to have higher achievement performance (Raju, 2021).

Research questions

This paper designs the relationship model between authorized leaders and technical employees' innovative behavior under the background of iron and steel enterprises, and studies and constructs the innovative behavior model of authorized leaders and technical employees by using the research methods of literature research, questionnaire surveys and data statistics, to provide guidance for iron and steel enterprises in theory and practice. On this basis, this study puts forward research questions. According to the problem statement, the specific problems of this dissertation are as follows: (1). Will managers' empathy affect employees' innovative behavior? (2). Whether the managers' empathy affects his psychological capital?

Research objectives

Exploring the influence of authorized leadership on the innovative behavior of skilled employees plays an obvious role in improving the economic benefits of iron and steel enterprises. Based on this, this study puts forward research objectives for the specific organizations in China iron and steel enterprises. Based on social exchange theory, leadership-member exchange theory and resource conservation theory, this dissertation takes ordinary employees of enterprises as the research object. The research objectives are thus established to achieve as: (1). Empathy of managers has a positive impact on employees' innovative behaviors and (2). Manager's empathy has a positive impact on the manager's psychological capital.

Significance of Research

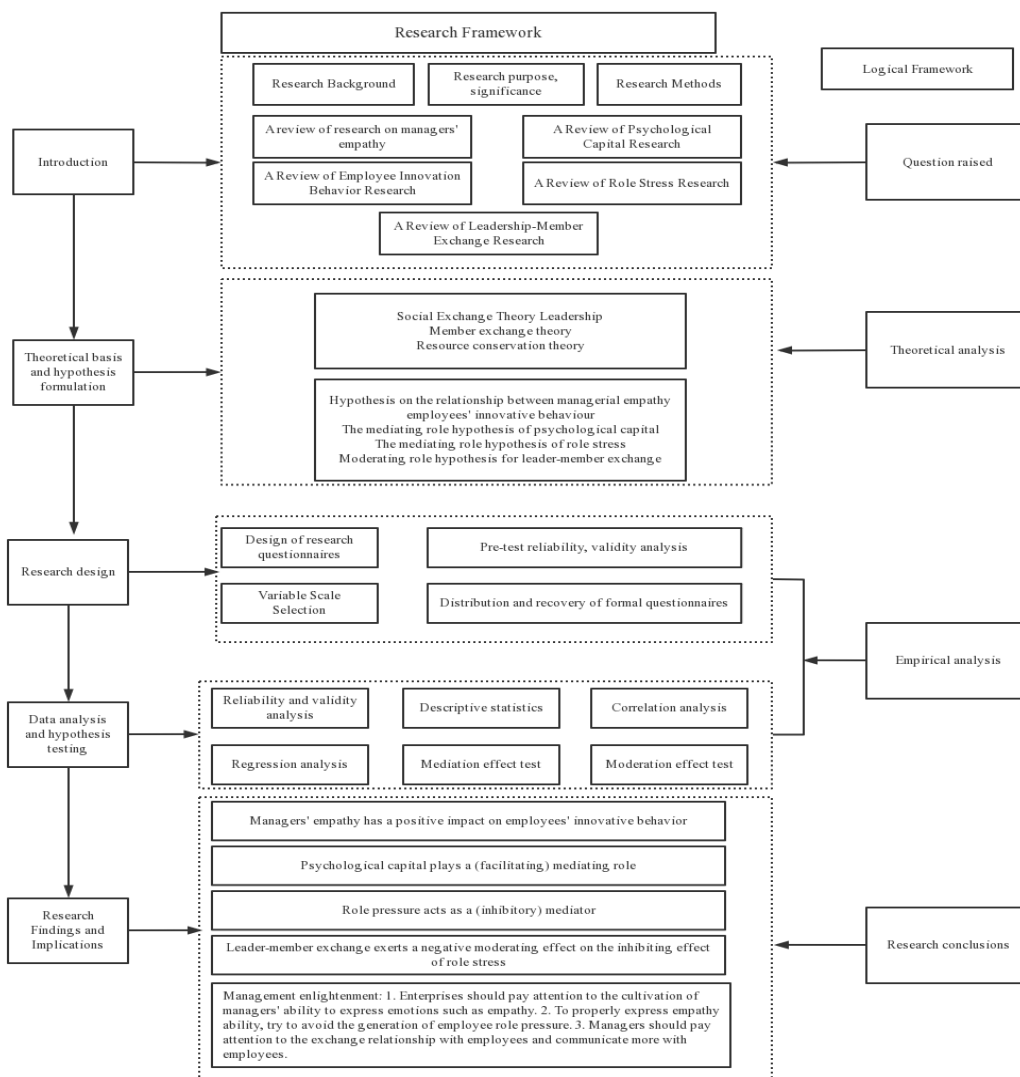
On the other hand, the discussion of psychological capital and role pressure not only expands the antecedent variables of employee 'innovative behavior in the organization, but also enriches the theoretical achievements in this field, providing a broad research space for the follow-up study (Law et al., 2019). This dissertation studies the internal influence mechanism of managers empathy on employees' innovative behavior, hoping to provide help for future management practice. On the one hand, it will help enterprises and their managers better understand today's increasingly diverse workforce and promote employees' innovative behavior in a targeted way (Law et al., 2019). Facing the complex working environment and the increasing innovation demand of enterprises, managers should not only restrain employees in the system, but also empathize with employees emotionally, that is, they must have the ability to empathize with employees in order to better understand them (Raju et al., 2021). Employees' true emotional state and needs, so as to provide targeted support and encouragement, enhance employees' willingness to innovate, and achieve the effect of promoting their innovative behavior and improving their work performance. On the other hand, the management enlightenment put forward in this dissertation provides feasible suggestions for enterprises to train and select management talents, and provides strong support for enterprises to train versatile managers and improve management efficiency (Raju, 2021).

Literature review

Empathy is a process of emotional contagion, in which the perceiver experiences an emotion similar to or the same as the emotional state that the subject is feeling or expecting to feel. Empathy is the ability to perceive and re-experience the emotions of others, including cognitive, affective, and behavioral tendencies. Empathy is usually regarded as an important feature of excellent managers, focusing on emotional contagion and its influence on others' cognition, emotions and behaviors. (Raju & Phung, 2020) Research shows that empathy not only leads to an individual's relational identification with a goal, but also the experience of others-oriented emotions, making it more likely to consider problems from the perspective of others and to empathize with others in a way of empathy and understanding. Communicate more with people instead of performing tasks mechanically. Empathy of leaders can better realize emotional connection, understanding and support between leaders and employees, and realize an emotional interest community through the display of empathy. (Law et al., 2020) the empathetic leader is measured by learning from and adjusting the empathetic component of the Motivation Language Scale, which focuses on how managers express emotional support to their followers. Managers are assessed by their followers (Chetty & Phung, 2018). This scale has high reliability and validity in this study, which demonstrates that empathetic managers improve their followers' job satisfaction and promote their innovative behavior. Improve the performance of employees. This scale is consistent with what this study wants to express. The

employee's innovative behavior referred to in this dissertation refers to the employee's daily innovative behavior (Raju, 2018). "the difference between daily innovation and high-level innovation is that high-level innovation is the focus of one's work, such as technical talents. Through high-level innovation, strategic technologies and processes can be created. Although daily innovation takes place outside a person's job responsibilities and belongs to the category of employees' normal work role behavior, daily innovation behavior can create minor improvements in daily work tasks. In the long run, employee 'innovative behavior may eventually benefit organizations and individuals, but in the process of evolving from innovative ideas to innovative behaviors, employees may face a situation that their personal work performance will not be significantly improved in a short time. Therefore, it may have a negative impact on employees' mental health and job performance, and have a negative impact on employees' personal development (Raja et al., 2021). On this basis, taking psychological capital and role pressure as intermediary variables and leader-member exchange as moderating variables, a theoretical framework model of managers' empathy affecting employees' innovative behavior is constructed (Naseer et al., 2019).

Research methods



The theory of leader-member exchange and the theory of resource conservation are summarized in order to provide a clear picture of the relationship between the variables studied in this dissertation. Based on the existing theoretical basis and management practice,

this dissertation puts forward the research hypo dissertation and constructs the corresponding theoretical framework model (Arvidsson et al., 2021). The statistical research part of this dissertation mainly uses SPSS 26.0 software and AMOS software to make descriptive statistical analysis, reliability and validity test, correlation analysis, main effect test, intermediary effect test and moderating effect test on the sample data respectively. Finally, the hypotheses put forward in the study is verified and the corresponding conclusion is drawn. According to the research content and purpose, this dissertation organizes the technical route of the research (Mikalef et al., 2021).

Questionnaire design

In this dissertation, the method of questionnaire survey is used to collect data, and according to the research content and research purpose, the research object is determined as the enterprise (Jabbar et al., 2020). According to the definition of variables, on the basis of extensively consulting the relevant scales of each variable, starting from the situational adaptability of the scales, under the guidance of professionals, a questionnaire is formed in combination with the research objects, research content, and research purposes. The questionnaire is divided into two parts. The first part is to fill in basic personal information, which is related to personal information and basic information of the company, including gender, age, education level, working years, average monthly income, and professional employees. For the accuracy of the research, employees in different industries as well as in different positions are included in this research category etc (Tolstoy et al., 2021).

3.3 Measurement of variables

All the questionnaires were scored by Likert's 5-point system. "1" means very different, "5" means very consistent. The following is the scale selection of the questionnaire.

(1) Managerial empathy. Adapted from the Empathy Part M1 of the Motivation Language Theory of Kock and Mayfield, etc. (2019). This scale pays special attention to how superiors express emotional support and understanding to their subordinates. This scale is used by employees to evaluate their supervisors. The scale includes: my supervisor praised my good work, and my supervisor encouraged me to work hard.

(2) Innovative behavior of employees. Using the scale compiled by Scott and Bruce (1994), employees choose EI according to their own perception. This scale was demonstrated by Yang Fu et al. (2012) in the context of China. Contents include: I always seek to apply new techniques, technologies or methods; I always come up with creative ideas and ideas.

(3) Psychological capital. The four-dimensional scale developed by Luthans and others. (2007) small, with a total of 24 questions. It includes 6 problems in the dimension of self-efficacy, 6 problems in the dimension of hope, 6 problems in the dimension of resilience and 6 problems in the dimension of optimism. The sample questions of the scale are: Believe that you can analyze long-term problems and find solutions; At present, I'm working with energy. No matter what problems I encounter at work, I will solve them. I always see the positive side of work and so on.

(4) Role stress. Role stress scale is selected from the role stress questionnaire compiled by Peterson and others. (1995), which was revised and translated by Li Chaoping and Zhang Yi (2009) BI. The role stress scale includes three dimensions: 3 items for role conflict, 5 items for role ambiguity and 5 items for role overload. The contents of the scale are: I often face situations of conflicting goals. I have clear and planned goals and objectives in my work (reverse grading); At work, I feel overwhelmed.

(5) Leader-member exchange. Using the 7-question scale of Law et al. (2005) translated by Zhao Khan, Jia Liangding et al. (2014). The contents of the scale is: Generally speaking, I am

very clear whether my supervisor is satisfied with my work performance; I have a good working relationship with my supervisor and others (Saura, 2021).

Pre-test

In order to ensure the rigor and credibility of the research and improve the quality of the questionnaires used in this study, a small sample prediction test was conducted to verify and analyze the questionnaire design before the analysis of large sample data. In this study, the questionnaire was designed and published through the questionnaire star platform, and a total of 175 small sample questionnaires were distributed, which snowballed. 168 questionnaires were collected, and 8 questionnaires that were too short to fill in and were not standardized were screened out and deleted. Finally, 160 valid analytic questionnaires were obtained, and the effective recovery rate of pretest analysis was 91.4%. This study tested the reliability and validity of the pre-test questionnaire data. The result of analysis is as follows.

Pre-test reliability analysis

Reliability analysis the stability and internal consistency of the response scale are usually tested by Cronbach's α coefficient in existing literature studies to verify whether the reliability of the scale meets the research criteria.

Table 1 - Scale reliability test results (N = 160)

It can be seen from the above table that the reliability of each variable scale and each

Variable	Dimension	Cronbach's α	Number of items
Managers' empathy ability		0.927	5
Psychological capital		0.898	24
	Self-efficacy	0.926	6
	Hope	0.943	6
	Toughness	0.875	6
	Optimistic	0.890	6
Role pressure		0.895	13
	Role conflict	0.910	3
	Role ambiguity	0.937	5
	Role overload	0.844	5
		0.915	6
		0.913	7

The validity analysis of the questionnaire is mainly to examine whether the measured results can accurately reflect the research objectives. In this study, exploratory factor analysis was carried out on each scale of the pre-test (Arvidsson et al., 2021). The specific steps are as follows: First, factor analysis was carried out on the data. When the KMO value in the result was > 0.7 , the Bartlett spherical test result was significant (ie Sig. < 0.05), it indicates that the standard is met, and the research can proceed to the next exploratory factor analysis; the second step is to analyze the principal components, and the test standard is that the cumulative variance interpretation rate of the factors is greater than 60%. If the research belongs to the social sciences, then the cumulative variance interpretation rate of the analysis is greater than 50%, which is also acceptable; the last step is to analyze the factor load coefficient of each variable. If each variable or each dimension only has a factor load coefficient greater than 0.5 on one main component, it indicates that the measurement results meet the validity test standard. The analysis results are shown in Table 2.

Table 2 - KMO value test and Bartlett spherical test

Variable name	KMO value	Bartlett spherical test		
		X2	Df	Sig
Managers' empathy ability	0.880	610.891	10	0.000
Employees' innovative behavior	0.902	609.186	15	0.000
Psychological capital	0.891	2656.248	276	0.000
Role pressure	0.875	1464.837	78	0.000
Leader-member exchange	0.906	696.315	21	0.000

(N=160)

It can be seen from the above table that the KMO values of each scale in the prediction test are all > 0.7 , the sig values are all < 0.05 , and they have passed the Bartlett spherical test, so it shows that the above scale is suitable for further factor analysis. According to the above results, further exploratory factor analysis is carried out on each scale. The specific analysis results are as follows.

Table 3 - Leader-Member Exchange Component Matrix

Title	Factor 1
LMX1	0.839
LMX2	0.884
LMX3	0.753
LMX4	0.799
LMX5	0.868
LMX6	0.759
LMX7	0.776

(N = 160)

From the results of the above pre-test analysis, it can be seen that all scales have good reliability and validity. Therefore, these scales can be used as formal questionnaires. The formal questionnaire used in this study is composed of three parts. The first part is the instructions for the respondents, the second part is mainly to investigate and understand the basic information of the respondents, and the third part is the content of the official scale used in this study. The basic information in the second part mainly includes: demographics variable information such as age, gender, education level, working years, occupational category and average monthly income level of the subjects. The third part of the scale has a total of 55 questions, including: 5 questions about managers' empathy, 6 questions about employees' innovative behavior, 24 questions about psychological capital, 13 questions about role pressure, and 7 questions about leaders' exchange.

Data Analysis

This study collected 720 valid official questionnaires for descriptive statistical analysis, and sorted out and statistically analyzed the basic information of all samples. The sorting results are shown in the following table 4.

Table 4 - Summary Table of Sample Characterization Result

Variable	Category	Frequency	Percentage (%)
Gender	Male	376	52.2
	Female	344	47.8
Age	Under 25 years old	254	35.3
	26-35 years old	202	28.1
	36-45 years old	200	27.8
	Over 45 years old	64	8.9
Education level	High and below	80	11.1
	Junior college	344	47.8
	Undergraduate	208	28.9
	Master degree or above	88	12.2
	1 year or less	166	23.1
Years of service	1-5 years	170	23.6
	6-10 years	202	28.1
	11-15 years	150	20.8
	16 years and above	32	4.4
Occupational category	Professional technology	128	17.8
	Sales/service category	152	21.1
	Production engineering operation	316	43.9
	Others	124	17.2
Average monthly income	Under 3000 yuan	58	8.1
	3001-5000 yuan	92	12.8
	5001-8000 yuan	172	23.9
	8001-10000 yuan	206	28.6
	More than 10,000 yuan	192	26.7

(N = 720)

4.1.2 Descriptive statistical analysis of core variables

This study also conducted descriptive statistical analysis on five core variables, mainly from the mean, standard deviation, skewness, and kurtosis to analyze the five variables of managers' empathy, psychological capital, role pressure, employee innovation behavior, and leader-member exchange. See Table 5 for the analysis results.

Table 5 - Descriptive statistical analysis of samples.

Variable name	Average	Standard deviation	Skewness	Kurtosis
Managers' empathy ability	3.152	0.905	-0.005	-0.716
Psychological capital	3.497	0.603	-0.330	-0.296
Role pressure	2.446	0.753	0.762	0.430
Employees' innovative behavior	3.368	1.042	0.024	-1.012
Quality of leader member exchange	2.752	0.788	0.298	-0.072

(N = 720)

From the above table, it can be seen that the respondents scored the average, skewness and kurtosis of the questionnaire items. Among them, the average value of managers' empathy is 3.152, the average value of psychological capital is 3.497, and the average value of role pressure is 3.446. The average value of employee innovation behavior is 3.368, and the average value of leader-member exchange is 2.752. Therefore, this study can preliminarily judge the research subjects' perceptions of variables such as managers' empathy ability, psychological capital, and employee innovation behavior.

Correlation analysis

In this study, SPSS26.0 software was used to perform statistical correlation analysis on the five variables of the study. From Table 6, it can be seen that the correlation coefficients between the independent variable manager's empathy ability and the intermediary variables psychological capital and role pressure, the dependent variable employee innovation behavior, and the regulating variable leadership-member exchange are: 0.568, 0.234, 0.390, and 0.167, respectively, and all At the 0.01 level, there is a significant positive correlation; the correlation coefficient between psychological capital and employee innovation behavior is 0.442, which is significantly positively correlated at the 0.01 level; the correlation coefficients between role pressure and employee innovation behavior and leader member exchange are: -0.423, 0.134, respectively, and the score is significantly correlated at the 0.01 and 0.05 levels; the above correlation statistical results lay an important foundation for this research hypothesis. Moreover, the correlation coefficients between the two variables are both less than 0.7, so there is no obvious collinearity between managers' empathy, employees' innovative behavior, psychological capital, role pressure, and leader-member exchange.

Table 6 - Correlation Analysis

Variable name	Managers' empathy ability	Psychological capital	Role pressure	Employees' innovative behavior	Leadership member exchange
Managers' empathy ability	1				
Psychological capital	0.568**	1			
Role pressure	0.234**	0.058	1		
Employees' innovative behavior	0.390**	0.442**	-0.423**	1	
Leadership member exchange	0.167**	0.058	0.134*	0.023	1

** . Indicates a significant correlation at the 0.01 level (bilateral).

* . Indicates a significant correlation at the 0.05 level (bilateral).

Regression analysis

The regression analysis between the research variables is used to verify the assumptions put forward in this dissertation. First, the regression analysis of managers' empathy ability on employees' innovative behavior is carried out, and the demographics of research samples such as gender, age, education, working years, occupational category and average monthly income are used. The variable is used as the control variable of this study, and the manager's empathy ability is used as the independent variable, and the employee's innovative behavior is used as the dependent variable. The analysis method of multiple linear regression is used to verify the assumption of the influence relationship between managers' empathy ability and employees' innovative behavior. The specific analysis results are shown in Table 7:

Table 7 - Regression Analysis of Psychological Capital on Employee Innovation Behavior

Variable		Model 1			Model 7		
		Beta	T	P	Beta	T	P
Control variable	Gender	0.028	0.264	0.792	-0.027	-0.271	0.786
	Age	-0.099	-1.543	0.124	-0.084	-1.429	0.154
	Education level	0.031	0.448	0.655	-0.004	-0.055	0.956
	Years of service	0.052	1.032	0.303	0.026	0.568	0.571
	Occupational category	0.243	4.278	0.000	0.142	2.656	0.008
	Average monthly income	0.040	0.883	0.378	-0.001	-0.017	0.987
Independent variable	Psychological capital				0.705	8.280	0.000
Fitting index	R ²		0.068			0.220	
	ΔR ²		0.068			0.152	
	F		4.265***			14.148***	

Dependent variable: employee innovation behavior. It can be seen from the above table that in Model 1, the occupational categories in the demographic's variable have a significant positive impact on employee innovation behavior, with a correlation coefficient of 0.243 and a significant positive correlation at the 0.01 level. Model 7 is based on Model 1 and incorporates psychological capital as an independent variable into the model. It can be seen from Model 7 that the correlation coefficient of psychological capital on employee innovation behavior at a significant level of 0.01 is 0.705, and R² is 0.220, ΔR² is 0.152. The above analysis results show that psychological capital has a significant positive impact on employee innovation behavior, so Hypothesis 4 proposed in this study is verified. For the regression analysis of the impact of role pressure on innovative behavior, first, the basic information of employees, such as sex, age, education, working years, occupational category, and average monthly income, are used as control variables, and the independent and dependent variables are divided into roles. Stress and employee innovation behavior, in order to verify the hypothesis proposed in this study, the results are shown in Table 4-15 below:

4.5.2 Mediating Effect Test of Role Stress

In this study, role stress is regarded as one of the mediating variables, From Table 8, we can see that model 2 takes employees' innovative behavior as dependent variable, and the analysis results show that managers' empathy ability has a significant positive impact on employees' innovative behavior, while model 6 takes role pressure as dependent variable, and the results show that managers' empathy ability has a significant positive impact on role pressure. Model 10 takes employee innovation as dependent variable, On the basis of model 2, role pressure, an intermediary variable, is added, The results show that the correlation coefficient between role pressure and employees' innovative behavior is-0.736 at 0.001 level, and the correlation coefficient between managers' empathy and employees' innovative behavior is 0.578 at 0.001 level, which means that managers' empathy has a direct impact on employees' innovative behavior while negatively affecting employees' innovative behavior through role pressure. From the above analysis, we can see that role stress plays a partial mediating role between managers' empathy ability and employees' innovative behavior, so Hypothesis 7 proposed in this dissertation has been verified.

Table 8 - The moderating effect of leader-member exchange on the relationship between managers' empathy and role stress

		Model 5	Model 6	Model 13	Model 14	
Variable		Role pressure				
Control variable	Gender	0.082	0.048	0.063	0.080	
	Age	0.072	0.057	0.045	0.044	
	Education level	0.057	0.031	0.011	-0.023	
	Years of service	0.003	0.010	0.012	0.017	
	Occupational category	-0.037	-0.095*	-0.105*	-0.135***	
	Average monthly income	0.027	0.008	-0.004	-0.008	
Independent variable	Managers' empathy ability		0.213***	0.207***	0.161***	
Regulating variable	Leadership member exchange			0.096	0.131*	
Interactive item	Managerial empathy * Leadership member exchange				-0.213***	
Fitting index		R ²	0.027	0.083	0.092	0.172
		ΔR ²	0.027	0.057	0.008	0.081
		F	1.613	4.581***	4.430***	8.104***

* for p < 0.05, ** for p < 0.01, *** for p < 0.001

Findings

In recent years, employees' creativity has become a key factor affecting the innovation performance of enterprises, and managers' empathy ability is an important factor affecting employees' behavior in enterprise innovation activities. The research shows that managers with high empathy have a significant positive effect on employees' creativity in enterprise behavior and can use higher emotional intelligence to effectively improve managers' psychological capital; And managers' psychological capital plays an intermediary role between managers' empathy ability and employees' creativity. Employees' higher psychological capital can stimulate managers to play a higher emotional intelligence, manage and guide employees,

and then stimulate employees' creativity in their work to create higher enterprise performance. Therefore, this dissertation assumes that "psychological capital plays an intermediary role in promoting managers' empathy and employees' innovative behavior".

Conclusion

This dissertation takes psychological capital and role pressure as the dual juxtaposed mediating variables, and deeply studies the internal influence mechanism of managers' empathy ability on employees' innovative behavior in enterprise management practice. First, by reviewing and sorting out the relevant literature, the theoretical model of this study is constructed and relevant research hypotheses are put forward. This paper takes the influence of managers' empathy ability on employees' innovative behavior as the main effect of the study, and discusses the dual mediating effect of psychological capital and role pressure, as well as the leader-member exchange on managers' empathy ability and role pressure. The moderating effect between psychological capital and psychological capital. The data were collected and sorted in the form of questionnaires, and the valid data were statistically analyzed by the statistical software SPSS26.0 and AMOS, and then the model and research assumptions proposed in this study were verified. In this study, the relationships between authorized leaders and technical employees have been fully excavated, enriching the research on the emotional mechanism of empowering leaders and technical employees' innovation performance. Because of emotional exchange and communication, there can be more in-depth emotional interaction between leaders and subordinates. This emotional interaction has a greater impact on the emotions of technical employees, so that the leader's authorization behavior can strengthen the positive emotions of technical employees, or weaken the negative emotions of technical employees, and ultimately affect the innovation performance of technical employees. (Arvidsson et al. 2021; Jabbar et al. 2021))

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