

Research on the Affective Mechanism of Authorized Leaders' Influence on the Innovation Performance of Knowledge Workers

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Abstract

In this paper, we have collected and processed 233 effective data of paired survey questionnaires for knowledge workers and their supervisors, and empirically studied the affective mechanism of authorized leaders' influence on the innovative performance of knowledge workers. The results show that authorized leadership can positively influence the positive emotion of knowledge workers; it has negative influence on the knowledge worker's negative emotion, and ultimately affects the knowledge worker's innovation performance. Meanwhile, the Leader-Member eXchange (LMX) plays a positive role in the positive relationship between the authorized leadership and the knowledge worker. It plays a negative moderating role in the negative affective relationship between the authorized leadership and the knowledge worker. On this basis, this paper posits that leaders need to manage the innovative behavior of knowledge workers by implementing the authoritative leadership style; meanwhile, the authorized leaders should have more and better communication and interaction with the knowledge workers, which will effectively promote the positive emotion of the knowledge workers by authorized leadership style. And also, to further on dissolve their negative emotion, and finally improve the knowledge-oriented staff's innovative performance, in order to give full play to the knowledge of staff in the role of enterprise innovation.

Keywords: Authorized leaders; Knowledge workers; Innovative performance; Trust mechanism

1. Introduction

Knowledge workers are the staff with rich knowledge, experience and skills, cognitive ability, the ability of self-management (Davenport, 2005). Therefore, in view of this the knowledge workers can't take the carrot and stick type of traditional management method, leaders need to use authorization type leadership style to promote knowledge workers to implement innovative behavior (Ahearne *et al.*, 2005). Authorized leadership can enable knowledge workers to generate psychological trust and influence their innovative behaviors. As an important feature of behavior subjects, emotion is closely related to trust (Pappas, *et al.*, 2013). Individual emotional state is directly related to its behavior. As a result, therefore, research on authorization leadership for the influence of the knowledgeable employees' emotional state, and finally how to influence the innovation behavior and innovation performance is important, but the related research is still inadequate. Therefore, this paper studies the emotional mechanism of the influence of authorized leadership on the innovation performance of knowledge-based employees from an emotional perspective.

From the existing research results, it can be found that authorized leaders can influence the innovation behavior and innovation performance of knowledge-based employees through their sense of self-efficacy and knowledge absorption ability (Zhang & Bartol, 2010). Authorized leadership performance as the leader: it emphasizes the significance of the work of the staff, authorizes the subordinate to promote their participation in decision making decisions independently, expresses their confidence for high performance of subordinate, at the same time, weaken traditional bureaucratic system constraints for the work of knowledge workers and continuous efforts to change (Srivastava *et al.*, 2006). Authorization type of leadership style can make subordinates feel trusted, and this trust will be accompanied by the staff's creation of emotional mood change, which will ultimately help the staff in the formation of positive emotions, at the same time, also can inhibit employees' negative emotions (Eftekhar, 2013). Individual studies have found that the internal state of the staff, the positive affection on its task performance and contextual performance will produce positive influence, while negative emotion will produce opposite performance results (JRowold & Rohmann, 2010).

There are differences in the influence of the management situation on the work performance of different individuals. Even if the same individual is under different situational factors, his work performance will show a great difference (Paxion *et al.*, 2014). Authorized leadership style as an important part of the management situation, shows how to influence positive affection and negative affection knowledge-type employees, and ultimately affect the innovation performance. We will delve into the emotional impact of authorized leadership type mechanism on the knowledge staff's innovation performance.

2. Theoretical hypotheses

2.1 Influence of authorized leadership on innovation performance of knowledge-based employees

Authorized leadership has positive influence on knowledge staff innovation behavior, knowledge staff innovation behavior will directly lead to innovation performance, that is to say, the objective of knowledge-based

employees to implement innovation behavior is to achieve innovation performance, however, there are also some uncertainties about whether the implementation of innovation behavior must produce innovation performance, for it both need innovative subject with the corresponding knowledge and ability, also need to managers and organizations to give corresponding support (Zeng *et al.*, 2010). Knowledge staff innovation is based on the stock of knowledge and the knowledge structure. On the basis of using the new way of thinking to create new technology and new activity processes, innovation performance is obtained after the occurrence of innovation behavior; generally performance is gained from the new thoughts, new ideas, new technology or new products. In the modern market with increasingly fierce competition, only through technological innovation and product innovation can enterprises meet market demands and win competitive advantages (Cheng & Lin, 2018). Enterprise innovation is implemented through employee innovation, especially in the innovation performance of knowledge-type employees, eventually to meet consumer demand for products and realize the values of, therefore, the enterprise leaders can take appropriate management ways and means to promote knowledge workers to take innovation behavior, improve the enterprise innovation performance (Wu & Zhao, 2010).

Leadership style as a knowledge-based employee innovative behavior and performance of the most important factors, existing research shows that in the authorization type, there is a significant relationship between leadership and staff work performance (Ishaq & Segoro, 2010), but the lack of authorized leadership impact in the existing research, the internal mechanism of knowledge staff innovation performance research. Some researchers by knowledge workers with the authorized leadership psychology into the study found that after the combination of authorized leadership behavior is through the knowledge staff external situation drives its internal psychological cognition, and eventually motivates knowledge workers themselves in the improvement of their learning ability, so as to promote the psychological mechanism of knowledge staff innovation performance improvement (Paschen & Dihmaier, 2014). When the knowledge staff cognition to their own work is not only interesting and meaningful, he/she devotes himself/herself to find solutions, thus increasingly getting satisfaction, then may produce higher job performance. When the knowledge staff realizes that their own work will have a significant impact on organizational decisions, they will pursue their own work and creative work method of high performance as a kind of responsibility, the pursuit to perfect the work and innovation performance, and thereby sharing to expand and improve the level of performance (Staff, 2011). Anyhow, authorized leadership through correspondence with knowledge staff psychological expectations, on the one hand, to promote knowledge staff constantly by learning to improve the stock of knowledge and knowledge structure, on the other hand, to promote knowledge workers based on trust in leadership and organization work to implement the innovation behavior, the combination of these two aspects can improve knowledge staff innovation performance, authorization for the leadership and organizational support accordingly (Alpkan *et al.*, 2010). Therefore, the following hypothesis is generated:

Hypothesis 1: Authorized leadership positively affects the innovation performance of knowledge-based employees.

2.2 Influence of authorized leadership on emotional state of knowledge-based employees

In this paper, the authors' studies on emotional state mainly refers to the state of mind, it refers to the state of calm held by the individual, weak and lasting emotional (Frijda, 1993), does not mean the instant outbursts of storm type, such as positive and optimistic attitude to make people confident, energetic; and the negative state of mind is easy to make people tired, self-doubt and so on. In the early research, most scholars believed that the dimensions of emotional state are single dimensional, and positive emotion and negative emotion are two ends of emotional dimension respectively (JJ Gross, RW Levenson, 1997). But as scholars go deeper, they show that positive and negative emotions can exist at the same time and are independent of each other. According to the theory of emotional dimension, people will show positive emotional states, such as excitement, enthusiasm, happiness, optimism and energy, when the valence is positive. When the degree of pleasure is negative, people show negative emotional states such as sadness, depression, fatigue and pessimism (Capps, 2015). Emotions have an important impact on individual's job performance, many studies have shown that transformational leadership and sincere leaders can cause subordinates positive emotional experience, and authorized leadership related research was inadequate (Ashkanasy, 2000). Authorization type leads to the four dimensions of meaning oriented work, promotes participation, expresses confidence in the high performance, dissecting the constraint. Therefore, all should be able to make knowledge workers have a positive emotional experience, such as: leadership on knowledge staff work, to make them realize the importance of their work, so as to arouse their working enthusiasm and motivation; Promoting the participation of knowledge-based employees in decision-making can help employees understand the decision-making background in the process of participation and generate positive feelings of trust and pleasure. Leaders' high-performance confidence in employees can stimulate their work motivation and passion. The reduction of bureaucratic constraints not only makes the communication between leaders and employees smoother, but also enables employees to generate positive emotions. At the same time, it can also timely eliminate the bad emotions of knowledge-based employees. All in

all, authorized leadership through to subordinate authorization, lead to more equal dialogue, high performance, weaken the dissecting constraints, such as confidence, able to work to create a more relaxed and comfortable atmosphere, thereby promoting the knowledge staff's positive emotional state(Wills *et al.*, 2013). In addition, the behaviors of empowering leaders, such as supporting, helping and motivating their subordinates, will make knowledge-based employees feel happy, satisfied, optimistic, confident and other positive emotions (Tuckey *et al.*, 2012). Guidance through communication and inclusive leadership behavior, authorization type of leader can through the way such as equal dialogue discovers the knowledge staff's bad mood and take appropriate measures to solve, so as to rid the knowledge staff of negative emotions, or gradually eliminate the accumulated knowledge staff negative affection, arouse their working enthusiasm and positive emotions. In conclusion, the hypothesis is proposed:

Hypothesis 2a: Authorized leadership has a positive effect on the positive emotions of knowledge-based employees.

Hypothesis 2b: Authorized leadership has a negative effect on the negative emotions of knowledge-based employees.

2.3 Influence of emotional state of knowledge-based employees on innovation performance

According to the theory of emotional events, individual mood emotion will be affected by the event and state of working environment, and the accumulation of emotion is due to the employee's job satisfaction, organizational commitment and employee performance such as the important basis of (Stratton, 2005). Fredrickson (2000) believes that positive emotions can expand individual thinking activity sequences, as a result, employees with high positive emotions are more likely to put forward new ideas and put forward the necessary for the implementation of the new thinking and behavior patterns. The Behavior main body of the positive emotions can make it work in pleasure, the pleasure can improve people's enthusiasm, activity ability and enterprising spirit, and beneficial to work positive working behavior, this positive working behavior including innovation behavior (Cardon *et al.*, 2009). George (2011) through empirical studies has found that employees' positive emotions such as innovative positive correlation with employees, when individuals are in a negative emotional state, they are more likely to show low work motivation, job burnout and the productivity of negative behavior. But also, the scholar thinks, when individuals are in a negative state, they will engage in earnings larger innovative behavior, because when individuals in a negative state, the fact that individuals perceive the gap between itself and the ideal state, the individual will choose by efforts to reduce the gap (George, 2007; Patzelt & Shepherd, 2011). These results also show the differences between emotion and employee behavior and performance relationship is relatively complex, with temporary and uncertainty, and emotions are relatively stable and have certain continuity, and the impact on employee behavior is relatively stable.

Generally speaking, when employees are in a negative emotional state, they are more likely to implement work withdrawal behaviors, while employees' positive emotions and emotions can effectively inhibit their work withdrawal behaviors. Davis (2009) confirmed through meta-analysis of relevant literature that positive emotions can promote creativity, while neutral and negative emotions are not significantly related to creativity. Based on the above research, it can be seen that emotional state will affect employees' innovation behaviors, but the direction of influence is different. Knowledge workers with high education background, cognitive ability, and high expectations, value of their own autonomy to better manage their emotions and feelings, and since emotion is a kind of persistent state of mind, emotions have more profound impact on people; hence the knowledge staff's emotion management level is relatively high. Therefore, their emotional experience and its deep influence on their innovation behavior of cognition and engagement are more sustainable (Zhou *et al.*, 2014). The positive emotion of knowledge-based employees will bring lasting motivation to their innovation activities and promote the improvement of innovation performance. On the contrary, the negative emotion of knowledge-based employees will affect their negative emotion for a long time and hinder their innovation performance. Therefore, the following hypothesis is obtained:

Hypothesis 3a: positive emotions of knowledge workers can positively influence their innovation performance.

Hypothesis 3b: negative emotions of knowledge-based employees can negatively affect their innovation performance.

Based on the above analysis, it can be thought of, that authorized leadership behavior can not only directly impact on innovation performance of the knowledge-type employees, but also indirectly by promoting knowledge staff positive emotion or inhibit its negative emotions, and ultimately affect the innovation of the knowledge workers performance. Therefore, we propose the following hypothesis:

Hypothesis 4a: the positive emotions of knowledge-based employees play a mediating role between authorized leadership and their innovative performance.

Hypothesis 4b: the negative emotions of knowledge-based employees play a mediating role between authorized leadership and their innovative performance.

2.4 Adjustment mechanism of leader-member exchange relationship (LMX)

LMX was first proposed in 1976 by George Graeo and Uhl - Bien , its main ideas are: the way leaders treat subordinates is distinct, members of the organization includes a small number of high quality in the relationship between the exchange relationship, including most of the exchange relationship of low quality. LMX relationship in both the leadership and organizational relationship between individual members have leadership and organizational interaction relationship between team members, etc., LMX relationship as an important part of organization atmosphere, for leadership and employee behavior result has different effects on (Liao *et al.*, 2017). Bauer & Green (1996) studies suggest that some sort of leadership --"vertical duality" between members of the formation and development of exchange relationship is not achieved overnight, needs contact and assessment, understanding and action, feelings and trust in three stages. In different stages, leadership and through contacts and exchanges of information between members, mutual learning and understanding, and based on this produce certain feelings and trust, form relatively stable - members of the leadership of the exchange relationship, reveals the leader members behavior, in turn, influences the performance of members working effect. In a word, the formation of LMX is formed in the process of interaction with staff and will further impact on the leader and employee behavior, then leader and employee behavior and will form a new kind of LMX, cycling (Botero & Van, 2009). LMX as an important part of organization atmosphere, this relationship will be affected by the organizational culture and organizational structure, including the values held by the leader, management consciousness and management style. If employees consistent with leadership goals and values easily form a relationship between them based on affection and trust, the higher the quality of leader - member exchange relationship, at the same time, the good information communication LMX can also help the organization and the formation of team cohesion.

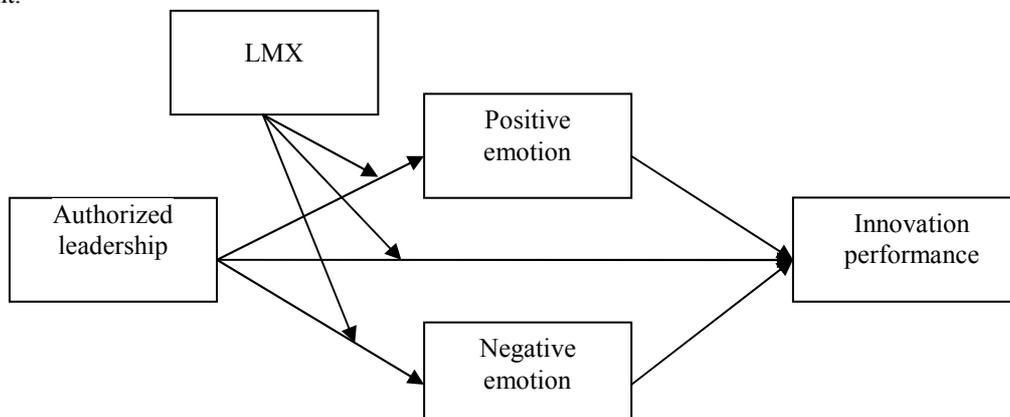
LMX between leadership and knowledge workers are different from the LMX between leadership and ordinary employees, due to the strong desire by knowledge staff for self-fulfillment, self-management, cognitive ability, between the organizational goals and individual goals to reach an agreement. In such a premise, they can communicate well with leadership. At a higher LMX environment, the communication between leaders and employees will be more frequent and equal, there will be a harmonious relationship, leadership delegation to the knowledge staff will be more trustful, thus, this trust is better able to promote communication between the two sides to reach a consensus, helps to form knowledge staff positive affection and negative affection of the knowledge-type employees, at the same time, the authorization type lead to the improvement of knowledge staff innovation performance is also more efficient. On the other hand, if the LMX quality is poorer, the leader and the exchange between knowledge workers exist certain obstacles, thus for knowledge workers can produce negative evaluation to the leadership, of course also form negative evaluation of the leaders of knowledge workers, this negative evaluation and the thorough exchange, will affect both sides of the relationship, in turn, can make the authorized leadership style has promoting effect to the accumulation of knowledge staff negative affection. Based on the above analysis, the following hypotheses are proposed:

Hypothesis 5a: leader-member exchange relationship (LMX) positively adjusts the relationship between authorized leadership and innovation performance of knowledge-based employees.

Hypothesis 5b: leader- member exchange relationship (LMX) positively adjusts the relationship between authorized leadership and positive emotions of knowledge-based employees.

Hypothesis 5c: leader- member exchange relationship (LMX) negatively regulates the relationship between authorized leadership and negative emotions of knowledge-based employees.

Through the above literature review and research hypothesis is put forward, in this paper, the author studies on the theory of the model as shown in figure 1, the authorization type mechanism for knowledge staff innovation performance influence emotional leadership, and leaders-member relationship exchange (LMX) played by adjustment.



3. Research design

3.1 Sample selection and data collection

This article selected the multiple areas of central China city of more than 20 knowledge-based enterprises has carried on the questionnaire, surveyed companies involved in building, medicine, transportation, education, information and other different industries, with strong representation. Relevant authorized leadership, emotional state and exchange relationship between variables - staff questionnaire completed by the knowledge staff, while for knowledge staff innovation performance evaluation by the supervisor to fill in, so that can guarantee to a certain extent, control and reduce the homologous deviation. In order to realize the matching between managers and subordinates, we used the number of questionnaires in advance and assigned the specific number of questionnaires to specific scorers during specific operations. A total of 350 pairs of questionnaires were issued and 300 copies were recovered, with a recovery rate of 85.7%. After screening, 233 valid paired questionnaires were obtained, with an effective rate of 77.7%. Male employees accounted for 68.7% and female employees 31.3%. Employees aged 20 to 30 accounted for 50.2 percent, 30 to 40 years old accounted for 30.5 percent, 40 to 50 years old accounted for 14.6 percent, and those over 50 accounted for 4.7 percent. The working years of 3 years or less are 19.3%, 26.6% from 3 to 5 years, and 15.5% from 5 to 8 years and 38.6% from 8 years or more. In terms of education degree, 66.6% were undergraduates or below, and 33.4% were undergraduates or above. In terms of the number of team members, the proportion of team members ranging from 1 to 5 is 12.9%, which of 6 to 10 is 29.2%, that of 10 to 15 is 27%, and that of 15 or more is 30.9%.

3.2 Measurement of variables

This research adopts the scale from the domestic and foreign existing literature development and repeatedly use the maturity scale, before the formal investigation, questionnaire of English project carefully back to back translation and research, ultimately form a standard questionnaire. The questionnaire uses the Likert 5-point scale, with 1 representing complete disagreement and 5 indicating complete agreement.

Authorized leadership measurement using Ahearne (2005) people such as the development of scale, including the significance of improving work, increase the participation in decision making, express confidence, high performance to the four dimensions, dissecting the constraint each dimension problem 3, a total of 12 items. The dimension of the typical items such as: "my supervisor would help me understand my aim, and the relevance of team", "my manager often let me participate in decision making", "my manager fully believes I can complete the task well" (1 = completely disagree, 5 = completely agree). Cronbach's α in this scale was 0.912.

Positive emotions and negative emotions adopt the emotional scale developed by Watson (1988) and others. Positive emotions and negative emotions each have 10 items. Positive emotions scale of typical items such as: "in the team, I am always interested in what", "in the team, I am always excited", "in the team, I am always enthusiastic", "in the team, I am always thinking agile", "in the team, I always have creative" (1 = completely disagree, 5 = completely agree). Cronbach's α in this scale was 0.954. Negative emotions scale of typical items such as: "in the team, I always feel upset", "in the team, I always feel ashamed", "in the team, I always fear", "in the team, I am always nervous", "in the team, I am always frustrated" (1 = completely disagree, 5 = completely agree). Cronbach's α in this scale was 0.968.

Leader-member exchange relationship (LMX) is a seven-item scale developed by T Rockstuhl et al. (2012). Typical questions are: "I usually know on what issues should be consistent with the head", "the head is full of trust to me, even if I do not maintain and prove their own decision, director will help me to do so", "no matter how many competent authority, he/she will be willing to from a personal point of view, try their best to help me to solve difficult", "I usually know on what issues should be consistent with the director", "I can keep good relationship and supervisor" etc (1 = completely disagree, 5 = completely agree). Cronbach's α in this scale was 0.912.

Innovation performance by Tierney and Farmer (2002) the nine - item questionnaire study design, typical questions such as, "I work in to new ideas and take risks", "I find new uses for currently used methods and tools", "I show originality in the work", "I try to use new ideas and methods to solve the problem", "I'm a good example of creative" (1 = completely disagree, 5 = completely agree). Cronbach's α in this scale was 0.901.

Due to some individual characteristics will affect employee creativity; some team characteristics may also affect employee creativity (Guo et al. 2002). Therefore, at the individual level, this article will control the gender, age, record of formal schooling and working fixed number of year, the team level, this article will control the team size.

4. Data analysis results

4.1 Reliability validity test and correlation analysis

The scales in the questionnaire were all mature scales. In this study, the reliability and validity of the scales were tested by using SPSS19.0 software. Using Cronbach's alpha coefficient to the reliability test of scale, all variables Cronbach's alpha coefficients were greater than 0.7 (see table 1), show that the correlation degree

between each item in the inventory is higher, and delete the item, scale of Cronbach 's alpha coefficients decrease. Meanwhile, the combined reliability of all the scales in this study is greater than 0.8, and the total explanatory variance is greater than 60%, indicating that the reliability and validity of the existing scales are good.

Table 1 Reliability test of the scale

Variable name	Cronbach's coefficient	α	Composite Reliability	Total variances that can be explained
Authorized leadership	0.912		0.914	65.10%
Positive emotion	0.954		0.956	71.48%
Negative emotion	0.968		0.952	78.51%
LMX	0.912		0.917	66.67%
Innovation performance	0.901		0.902	77.16%

The average value, standard deviation, correlation coefficient and reliability coefficient of each study variable are shown in table 4.2. Correlation analysis results show that the positive emotion and authorized leadership are related ($\beta = 0.572$, $p < 0.01$), negative emotions is negatively related to the authorized leadership ($\beta = 0.379$, $p < 0.01$), innovation performance related to the authorized leaders are ($\beta = 0.526$, $p < 0.01$), and innovation performance is associated with positive emotions are ($\beta = 0.685$, $p < 0.01$) and negatively correlated with negative emotion ($\beta = 0.384$, $p < 0.01$). It can be seen from the fact that AVE square root is greater than correlation coefficient that the scale has good discriminant validity.

Table 2 correlation, mean value, standard deviation, and discriminant validity

	M	SD	1	2	3	4	5
Authorized leadership	4.189	.530	(0.689)				
Positive emotion	3.856	.650	.572**	(0.827)			
Negative emotion	1.938	.623	-.379**	-.484**	(0.824)		
LMX	3.972	.534	.515**	.530**	-.433**	(0.782)	
Innovation performance	3.693	.730	.526**	.685**	-.384**	.586**	(0.837)

Note: 1.* stands for significance level $p < 0.05$, ** stands for significance level $p < 0.01$; The square root of AVE is the discriminant validity.

4.2 Hypothesis testing results

In the regression analysis, the selected control variables are classified variables, so they are virtualized. Gender (0 for female, 1 for male), educational background, working age, and team size were all virtualized. The educational background is divided into specialized subject, undergraduate course, master's degree and above. The working age is divided into 3 years or less, 3 to 5 years, 6 to 8 years or more. The working age of 1 is under 3 years as the reference, the working age of 2 is 3-5 years as the reference, and the working age of 3 is 6-8 years as the reference. The number of team members is 1-5, 6-10, 11-15 and above. The number of team members is 1-5, 6-10 and 11-15 respectively.

The relationship analysis of authorized leadership, positive emotion, negative emotion and innovation performance is shown in table 3. The results show that the regression coefficient of authorized leadership to innovation performance is 0.677 ($P < 0.001$, see model 5). Therefore, authorized leadership has a positive influence on the innovation performance of knowledge-based employees, and H1 has been verified. The second step is to analyze the influence of authorized leadership on positive emotion and negative emotion respectively. Results show that the authorized leadership to positive affection and negative affection of regression coefficients were 0.667 and 0.488 ($P < 0.001$, see model 1 and model 2), authorized leadership to the positive effects of positive emotions, while has negative effect to the negative emotion. Therefore, H2a and H2b are verified.

The third step is to analyze the influence of authorized leadership, positive emotion and negative emotion on innovation performance. Results show that the two regression models, positive affection and negative affection have significant impact on innovation performance coefficient, the coefficient of 0.735 and 0.415, respectively ($P < 0.001$), suggesting that positive affection to the positive impact on innovation performance, negative emotions have a negative effect on innovation performance, therefore, H3a and H3b. As can be seen from model 6 in table 3, after the addition of positive emotional variables, the influence of authorized leaders on innovation performance has decreased, but it is still significant. The coefficient has changed from 0.677 ($P < 0.001$) to 0.271 ($P < 0.01$). When negative emotions were added, the coefficient dropped from 0.677 to 0.557 (see model 7), but remained significant ($P < 0.001$). It can be seen that positive emotions and negative emotions play a part in mediating between authorized leadership and innovation performance. Therefore, H4a and H4b have been verified.

Table 3 Results of mediating effect of Positive emotion and Negative emotion

Dependent variables	Positive emotion		Negative emotion					Innovation performance		
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7			
Control variables										
Gender	0.074	0.141	0.241	0.372***	0.285*	0.239*	0.319			
Degree 1	0.056	-0.086	-0.013	0.054	0.058	0.024	0.037			
Degree 2	0.228	-0.202	-0.114	0.063	0.075	-0.064	0.025			
Degree 3	-0.006	-0.038	-0.086	0.171	0.049	-0.045	-0.058			
Length1	0.069	0.266	-0.143	0.042	0.109	-0.151	-0.044			
Length 2	0.223	-0.086	-0.003	0.193	0.116	-0.020	0.094			
Length 3	0.192	-0.130	-0.031	0.092	0.085	-0.031	0.054			
Education background 1	-0.218	0.007	0.043	0.067	-0.149	-0.016	-0.147			
Education background 2	-0.259	0.123	0.128	0.033	0.091	0.066	-0.061			
Education background 3	-0.598*	-0.040	-0.108	0.522	-0.576*	-0.212	-0.586			
Number of teams 1	-0.108	-0.145	-0.065	0.243	-0.120	-0.054	-0.155			
Number of teams 2	-0.012	0.053	-0.006	0.019	-0.022	-0.014	-0.009			
Number of teams 3	-0.068	0.037	0.051	0.045	-0.018	0.024	-0.009			
Independent variables										
Authorized leadership	0.667***	-0.488***			0.677***	0.271**	0.557***			
Positive emotion			0.735***			0.609***				
Negative emotion				-0.415***			-0.245***			
R ²	0.389	0.212	0.506	0.262	0.351	0.531	0.391			
Adjustment R ²	0.350	0.162	0.474	0.214	0.310	0.498	0.349			
F Value	9.931***	4.197***	15.942***	5.517**	8.430***	16.359***	9.303***			
D-W	1.727	1.590	2.087	1.902	2.098	2.161	2.083			

Note: * stands for significance level $p < 0.05$, ** stands for significance level $p < 0.01$, and *** stands for significance level $p < 0.001$.

The moderating effect analysis of leader-member exchange relationship (LMX) is shown in table 4. Innovation performance as the dependent variable, when authorized leadership variables in regression equations (1) model, authorized leadership on innovation performance of regression coefficient is 0.677 ($P < 0.001$), indicating that authorized leadership has significant effect on innovation performance. In the second step, when LMX is added into the regression equation of the first step, the influence coefficient of LMX on innovation performance is 0.083 ($P < 0.001$) and significant, indicating that LMX has a positive influence on innovation performance. The third step, when the type of leadership and LMX cross terms enter the regression equation, the results found that "authorized leadership * LMX" item coefficient was 0.221 ($P < 0.05$), positive and significant, which means that LMX of authorized leadership and innovation performance has a positive relationship between the adjustment of the reinforcement effect. So H5a is validated.

In order to verify the LMX in authorized the regulating role in the leadership and positive emotions, would authorize leadership, LMX and their product were to return to positive emotions (see table 4 4/5/6) model, the results show that the "authorized leadership * LMX" ($\beta = 0.182$, $P < 0.05$), showed the LMX to authorize the leadership and positive emotion has a positive relationship between strengthen regulation. So H5b is validated. Type in the same way, in order to verify the LMX in authorized leadership and the regulating role in the negative emotion, would authorize leadership, LMX and their product were negative affection for regression (see table 4 7/8/9) model, the results showed that "authorized leadership * LMX" ($\beta = 0.227$, $P < 0.05$), showed the LMX to authorize the leadership and negative emotions have a negative relationship between weakening. So H5c is validated.

Table 4 Analysis Moderating role of LMX

Dependent variables	Innovation performance					Positive emotion				Negative Emotion		
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8	Model 9			
Control variables												
Gender	0.285	0.244	0.242	0.074	0.047	0.045	0.141	0.173	0.175			
Degree 1	0.058	0.128	0.138	0.056	0.103	0.111	-0.086	-0.140	-0.151			
Degree 2	0.075	0.173	0.159	0.228	0.295	0.283	-0.202	--0.280	-0.265			
Degree 3	-0.049	0.001	-0.017	-0.006	0.028	0.023	-0.038	0.077	-0.058			
Length1	-0.109	-0.054	-0.056	0.069	0.106	0.104	0.266	0.223	0.225			
Length 2	0.116	0.085	0.057	0.223	0.202	0.179	-0.086	-0.062	-0.034			
Length 3	0.085	0.024	0.002	0.192	0.150	0.132	-0.130	-0.082	-0.060			
Education background1	-0.149	-0.104	-0.124	-0.218	-0.188	-0.204	0.007	-0.028	-0.008			
Education background2	-0.091	-0.111	-0.120	-0.259	-0.272	-0.280	0.123	0.138	0.148			
Education background3	-0.576*	-0.480*	-0.495	-0.598	-0.533*	-0.545**	-0.040	-0.115	-0.101			
Number teams1	-0.120	-0.045	-0.039	-0.108	-0.058	-0.053	-0.145	-0.203	-0.209			
Number teams 2	-0.022	-0.046	-0.045	-0.012	-0.028	-0.027	0.053	0.072	0.071			
Number teams 3	-0.018	0.013	0.036	-0.068	-0.047	-0.028	0.037	0.013	-0.011			
Independent variables												
Authorized leadership	0.677***	0.398***	-0.452	0.667***	0.477***	-0.223	-0.488***	-0.270	0.601			
LMX		0.083***	-0.377		0.386***	-0.392		-0.445***	0.523			
Authorized leadership *LMX			0.221*			0.182*			-0.227*			
R ²	0.351	0.466	0.477	0.389	0.456	0.466	0.212	0.295	0.309			
Adjustment R ²	0.310	0.429	0.438	0.350	0.419	0.426	0.162	0.246	0.258			
ΔR ²		0.114	0.011		0.067	0.010		0.083	0.014			
F Value	8.430***	12.610***	12.318***	9.931***	12.134***	11.777***	4.197***	6.057***	6.043***			
D-W	2.098	2.154	2.123	1.727	1.693	1.684	1.590	1.635	1.616			

Note: * stands for significance level $p < 0.05$, ** stands for significance level $p < 0.01$, and *** stands for significance level $p < 0.001$.

5. Conclusions and discussions

5.1 Conclusions

This paper takes 350 knowledge workers and their leaders as the research object, using multiple regression analysis method, studies the authorized leadership, positive emotion, negative emotion and leadership - member exchange relationship (LMX) and the relationship between the knowledge staff innovation performance. The research conclusions mainly include the following three points:

First, authorized leadership has a significant positive effect on the innovation performance of knowledge-based employees. When a leader for knowledge workers to participate in decision making, expresses confidence in the high performance and share information, reduce the difficulty in hierarchical authorization leadership behavior, based on the theory of reciprocal norms, knowledge workers will be made in accordance with leaders' desired behavior or performance, through ascension work in return for the authorized leadership and innovation performance. Under the authorized leadership style, the knowledge staff work more decision-making power, to master more information and their confidence fuller, also expressed more courage to try new things, new ideas, all of these actions contribute to the implementation of the knowledge staff innovation behavior, thus improve their innovation performance. The results showed that can give knowledge workers more authorization, able to motivate them be trusted and respected the psychological feeling and innovation potential, so as to work harder to repay the leadership and enterprise, in order to improve the innovation performance, achieve business goals.

Second, authorized leadership can influence the innovation performance of knowledge-based employees by influencing their positive and negative emotions. Authorized leadership can directly promote knowledge staff innovation performance and can be suppressed by stimulating positive affection of the knowledge-type employees, their negative emotions to indirectly promote the knowledge staff innovation performance. Authorized leadership style giving employees a good working atmosphere and experience the feeling, can not only make them fully realize the importance of their work, at the same time, to be able to make decisions themselves, equal communication, improve work enthusiasm and self value realization of desire. Under the authorized leadership style, the knowledge staff at work errors are leadership, the guidance of the performance will be led by the praise, these can make staff incentive work atmosphere, can promote positive affection of the knowledge-type employees, inhibition of knowledge-based employees negative affection of breeding, or weaken the negative affection spread and negative role. When knowledge-based employees are in a positive emotional state, they are more willing to engage in innovative work, which will also promote their innovation performance. The conclusion for authorization mechanism of emotional influence knowledge staff innovation performance leadership research provides a new analysis paradigm, and further reveals the knowledgeable employees' positive affection and negative affection on its individual innovation performance and organizational innovation

performance has important influence.

Third, the leader - member exchange (LMX) of authorized leadership to the knowledge staff innovation performance has obvious positive adjustment, the relationship between LMX of authorized leadership and the relationship between the knowledge staff positive affection and negative affection also plays an important role in regulating. Leader - member exchange relationship is to measure the quality of leadership and staff exchanges and communication between important indicators, leadership and communication between employees' high quality, will make knowledge workers to more fully understand the intention of the leadership, to better grasp the information, so that knowledge workers are more willing to contribute their own strength for the organization, innovative activities and innovation performance. Under the high quality of LMX, knowledge-based staff awareness to be respected and trusted, to participate in decision-making and access to information make work authorization and support the leadership, it can be a higher positive emotional experience, the sustainability and extent of negative emotional state has been weakened. The increase of positive emotions and the weakening of negative emotions of knowledge-based employees are conducive to the implementation of their innovative behaviors, which will eventually lead to higher innovation performance.

5.2 Theoretical innovation and management inspiration

This study reveals the emotional impact of authorization type mechanism on the knowledge staff innovation performance leadership, and leader - member exchange relationship with the leadership of the authorization type knowledge staff the regulating role in the relationship. Research conclusion theoretically support and encourage managers use authorized leadership style so as to inspire positive emotions of the knowledge-type employees, inhibit its negative emotions, so as to achieve the purpose of promoting knowledge staff innovation performance improvement, at the same time, the two sides equal exchange and communication is able to adjust the relationship of this kind of authorization and the emotion. Innovation of this research is to be authorized leadership to more fully the emotional part of the communication of digging, due to the exchange and communication of the emotion between leadership and subordinates can have a deeper emotional interaction, this kind of emotional interaction for emotion has a great influence of the knowledge-type employees, thus making the authorization of leadership behavior through strengthening the knowledge staff's positive emotions, or weaken the negative affection of the knowledge-type employees, which finally impact on the innovation performance of knowledge workers.

Therefore, managers need to deal with the emotion of knowledge-based employees and their related behaviors in the organization. In particular, they should pay attention to the emotional state of knowledge-based employees and conduct appropriate management.

First of all, managers should realize that their leadership style has an important influence on knowledge-based employees. In order to improve their style of leadership, improve innovation performance of the knowledge-type employees, leaders should focus on leadership behavior and implement authorization type, in the work, improve the authorization of the knowledge-type employees, deliver to them the importance of innovation, to encourage participation in decision-making, share information, equal communication, reduce the restrictions brought by the organizational hierarchical and communication disorders, give more humanistic care, inclusive, and motivate knowledge workers, etc., in the knowledge staff need help and support, the leader should be able to correct guidance and encouragement, and to promote their innovation behavior, improve the innovation performance.

Secondly, managers should pay attention to shaping the positive emotions of knowledge-based employees and prevent their negative emotions from breeding and spreading. In this study, it was found that the positive emotion of knowledge-based employees was beneficial to promote their innovation performance, while the negative emotion obviously negatively affected their innovation behavior and performance. Therefore, managers should take effective measures to promote the cultivation of positive emotions of knowledge-based employees and restrain the breeding and spreading of negative emotions. Managers can be authorized to motivate, praise, through communication and knowledge staff communication and guidance, make them fully cognitive significance of their work, inspire their creative work, master the sense of responsibility, and through the high-performance expectations give confidence, through communication and information sharing, etc to the knowledge staff good working atmosphere, cultivate positive emotions, prevent negative emotional feelings of boredom. In addition, it can also provide opportunities for knowledge-based employees to rotate posts, train and promote themselves, so as to improve their satisfaction with their work. Timely hold some group activities, promote communication, improve the enterprise internal cooperation ability and the cohesion between the employees, create a good team atmosphere, also contribute to the knowledge staff's own emotional experience positive feelings, weaken their negative emotional experience, promote continuous innovation behavior and performance improvement.

Finally, for the authorization model, the leader should play a leader - member exchange relationship for its leadership and the relationships between knowledge workers emotional adjustment, attaches great importance to

improve the quality of LMX and level. Within the enterprise, the leader needs through equal dialogue and communication with the knowledge staff to promote the communication between the two sides, due to the knowledge staff cognitive ability, less information communication obstacles, and hope to be able to get more information and authorization, managers for identification, through the communication with them to improve the quality of LMX, not only help their authorized leadership effect, also help to authorization for nurturing knowledge-based employees' positive emotions and negative emotions, to stimulate their innovation behavior happened and to increase the innovation performance. Specifically, managers can work through to the knowledge staff to provide support, information sharing, to encourage employees, pay attention to knowledge staff's career development, to provide more training opportunities and other measures to improve managers and knowledge workers LMX, for leadership role authorization type give full play to create a good atmosphere.

5.3 Deficiencies and prospects

This study discusses the authorization type mechanism for knowledge staff innovation performance influence emotional leadership, as well as LMX of authorized leadership and positive affection and negative affection relationship adjustment, but there is no psychological factors of managers and knowledge workers both sides more in-depth research, because emotion is based on the interaction and the psychological reaction of the inner emotional activity process, therefore, it is necessary through the knowledge staff more profound psychological factors, in-depth analysis of authorized leadership in the knowledge staff psychological reaction mechanism.

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