

Impact of Complementary Fit on Repatriates' Innovation Behavior

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Abstract

This research aims to examine the influence mechanism of complementary fit on repatriates' innovation behavior. This research builds a theoretical model on complementary fit, knowledge transfer and innovation behavior, recognizes the moderating variable, creative self-efficacy. The empirical analysis data is collected from 260 repatriates from Multinational Corporations Xi'an, Nanjing, Shanghai, Guangzhou and Shenzhen by using questionnaire. Hierarchical regression analysis results suggest that: needs-supplies fit and demands-abilities fit have significant positive impacts on repatriates' idea generation and idea implementation; knowledge transfer does work as a full mediator between complementary fit and repatriate's innovation behavior; Creative self-efficacy moderates the positive relationship between knowledge transfer and repatriates' innovation behavior.

Keywords

repatriates, innovation behavior, knowledge transfer; complementary fit, creative self-efficacy.

1. Introduction

In the era of economic globalization and management internationalization, innovation is the key to create a durable competitive advantage in Multinational Corporation (MNC). International knowledge transfer has long served as facilitator for innovation behavior in MNC. Repatriates with valuable international knowledge and overseas experience related to the Multinational Corporations' global operations must be retained if the Multinational Corporations are to obtain innovation. Repatriates can be defined as employees who complete their international assignments and return to subsequent positions at their parent companies [1]. They play an important role in promoting innovation in Multinational Corporations. To improve repatriates' innovation behavior is the foundation of innovation in Multinational Corporations. The acquisition of international knowledge and skills, therefore, would arguably depend on an MNC's policies and practices related to knowledge management [1]. MNC, however, do not always succeed in establishing policies and practices to make good use of these expensive employees [2]. Career pathing and guidance for repatriates are not always available at corporations, and many repatriates find themselves placed in positions below their level of aptitude and experience. High turnover rates are often occur among repatriates, with approximately 20 percent to 50 percent of repatriates leaving their corporations within one year of termination of the international assignment [3]. In addition, according to the Global Relocation Trends Survey Report in 2012, 24 percent of expatriates leave their firm within one year after repatriation, and 26 percent leave within two years. Studies also suggest the high repatriate turnover can often be attributed to the lack of career counseling and insufficient repatriation programs [4]. Moreover, the loss of an internationally proficient employee often indirectly translates into providing advantage to direct competitors, as

repatriates are likely to find jobs with competitors, thus providing the competitors with valuable human assets. The Multinational Corporation lost the opportunity for using repatriates' value knowledge [5]. The research shows that there are many factors causing repatriates turnover, mainly include: being arranged in no challenging jobs, the lack of opportunities for advancement, loss of status and autonomy, lack of occupation guidance and planning, lack of occupation support and the slow development of occupation. Many repatriates, for example, view expatriate assignments as a bellwether for career advancement. However, enterprises do not always regard expatriate as a commitment of repatriates' career advancement. This cognitive contrast results in repatriates' dissatisfaction on the job and their intention to remain in the corporation. In this context, it is necessary to study the impact of demand-ability fit on the repatriates' innovation behavior.

The interaction between individuals and environment can explain the individual's work attitude and behavior. Person-job fit helps individuals achieve positive job outcomes. These studies show that individuals' work attitudes and behaviors are influenced person- environment fit. In view of the above, some scholars examine individual innovation behavior from the perspective of demand-supply fit. For example, Martin [6] indicated that intrinsic demand-supply fit can make individuals do higher innovation behavior. Ramamoorthy [7] indicated that external demand- supply fit had no significant influence on individual innovation. Wang Zhen and Sun Jianmin [8] found that demand-supply fit as one dimensional construct had no significant effect on individual innovation from the perspective of interaction between individual and environment. Afsar also indicated demand- supply fit and demands-abilities fit can actively affect individual innovation from the interactive perspective. However, there are three shortcomings in these studies: First, there is no unified research conclusion about the relationship between complementary fit and individual innovation. Second, the relationship between complementary fit and repatriates' innovation behavior in the context of repatriation management isn't studied. Third, the influence process of complementary fit on repatriates' innovation behavior isn't deeply analyzed.

Knowledge transfer can sustain innovation. A large number of literatures have studied the relationship between knowledge transfer and innovation, especially innovation behavior. For example, Kamaşak and Bulutlar indicated that employees share their work experience and knowledge with other employees in the organization to enhance their innovation and believe that knowledge sharing is the basis for innovation behavior. Zhou and Li [9] believed that knowledge sharing can broaden the depth and breadth of knowledge, promote combinations of new knowledge and innovation behavior. In addition, many studies have shown that repatriates possess rich international knowledge and experience, and their knowledge transfer can effectively enhance the innovative ability and competitiveness in Multinational Corporation. For example, Wang Juanru [10] suggested that knowledge transfer has a significant positive impact on repatriates' exploratory innovation and exploitative innovation, and that intermediary relationship between repatriation support, exploratory innovation and exploitative innovation. Although the research shows that knowledge transfer plays an important role in promoting individual innovation behavior, it does not study the influence of complementary fit on knowledge transfer and repatriates' innovation behavior. In view of the important role of knowledge transfer, this paper takes knowledge transfer as an intermediary variable to study the influence mechanism of complementary fit on repatriates' innovation behavior. In addition, the knowledge transfer and repatriates' ambidextrous innovation may also be affected by the situational variables. For example, the repatriates' individual factors may influence the role direction of knowledge transfer on repatriates' innovation behavior. Based on social cognitive theory, this study will analyze the moderating effect of creative self-efficacy on the relationship between knowledge transfer and repatriates' innovation behavior.

This paper takes repatriates in Multinational Corporations as the research object. The influence factors of repatriates' knowledge transfer have been researched in the early research stage, a model including knowledge transfer intermediary role and creative self-efficacy regulation is built, and the function

mechanism between complementary fit and repatriates' innovation behavior is analyzed. In theory, this study can deepen and perfect the knowledge management theory and innovation theory system, deepen the theoretical understanding of the relative mechanism of repatriates' innovation behavior; in practice, to provide some theoretical guidance for repatriates' innovation behavior practice in Multinational Corporations.

2. Theory and Hypothesis

According to the innovation theory, knowledge is the key resource for innovation. Knowledge transfer is an important source of individual successful innovation. The essence of innovation is the creation of new knowledge. According to the individual creative strength and the knowledge base, we can divide the repatriates' innovation behavior into the idea generation and the idea implementation. The person-environment fit theory holds that the person-environment fit has a positive impact on individual behavior and attitudes. At the same time, the social exchange theory holds that employee's demand satisfaction is the premise of employees' positive behavior and result. Thus, we can infer that complementary fit is the premise of knowledge transfer and repatriates' innovation behavior. In addition, according to social cognitive theory, individual innovation is influenced by individual variable. As an important individual difference variable, creative self-efficacy plays an important role in the regulation repatriates' innovation behavior. Innovation, especially idea generation, is fraught with risks and uncertainties. Failure is often unavoidable. Therefore, innovation behavior requires repatriates to be confident of their creativity, that is, repatriate should have creative self-efficacy in the process of innovation. Creative self-efficacy refers to an evaluation of the success of innovation confidence, is an important psychological variable of individual creativity and innovation activities, affect the individual's emotion, the selection process, creativity and innovation.

Comprehensive innovation theory, social exchange theory and social cognitive theory, we believe that complementary fit can directly affect the innovation behavior, also can through the intermediary role of knowledge transfer indirectly affect innovation behavior, and creative self-efficacy regulates the relationship between knowledge transfer and repatriates' innovation behavior.

Based on this, this paper proposes a relationship model between complementary fit, knowledge transfer and innovation behavior, which is shown in Fig. 1. In this model, we identified two dimensions of complementary fit: need-supply fit and demand-ability fit; identify two dimensions of innovation behavior: explorative innovation and idea implementation; the two dimensions of innovation behavior (explorative innovation and idea implementation) as the dependent variable, complementary fit (complementary fit and demand-ability fit) as independent variables, and put forward the research hypotheses about the influence of independent variables on the dependent variables; knowledge transfer as an intermediary variable, to explore the mediating role of knowledge transfer relationship between person-organizational fit and repatriates' innovation behavior; creative self-efficacy is introduced as the moderating variable between knowledge transfer and repatriates' innovation behavior. Next, the internal relation of this theory model is discussed in detail.

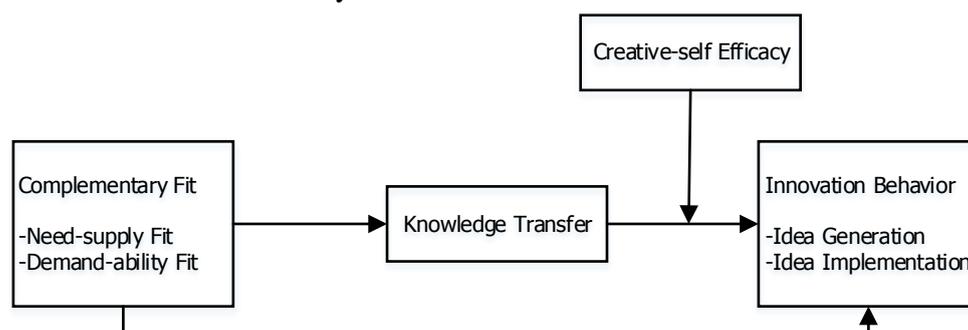


Fig. 1 Theoretical model

2.1 The impact of complementary fit on repatriates' innovation behavior

Innovation is an important strategy for Multinational Corporations to survive and develop in a dynamic environment. Repatriates' innovation behavior is the foundation of innovation in Multinational Corporations. Repatriates' innovation behavior refers to the behavior of simultaneously pursuing both idea generation and idea implementation in the course of work. Idea generation is the behavior of repatriates' creative idea generation relying on new and existing knowledge; idea implementation is the behavior of repatriates' implement generated idea.

The individual's positive cognition of the environment can help the individual to develop work attitudes and behaviors that are conducive to the development of the environment. Individual innovation behavior, as an important way of individual behavior, is produced by the individual' positive cognition to environment. The complementary fit can make the person produce positive organizational cognition, and thus can stimulate the individual innovation behavior to the maximum extent. Complementary fit refers to repatriates' occupation expectation can be satisfied by the organization supply or organization requirements can be satisfied by repatriates' knowledge, skills and abilities. That is, the organization's strengths can make up for the repatriates' weak and demand or repatriates' advantage can make up for organization's weakness and requirements. It is divided into two dimensions: need-supply fit and demand-ability fit.

Need-supply fit can stimulate repatriates' work motivation to return their parent company, make repatriates produce active portfolio improvement ideas using existing knowledge and technology, in order to promote idea implementation; on the other hand, also can make repatriates produce novel or valuable ideas by learning advanced knowledge and technology to promote idea generation. For example, Wiesenberger [11] pointed out that employees are willing to return to their organizations that provided convenient for them. Choi's [12] research shows that the more the individual's ability meets the environment needs, the stronger the individual's creativity is. Verquer [13] believed that job satisfaction can lead to positive work motivation. Yu [14] also pointed out that intrinsic motivation based on individual cognition and extrinsic motivation based on job feedback have significant positive effects on individual innovation. The repatriates' environmental adaptation, job satisfaction and organizational commitment are closely related to their positive work attitude and behavior. Therefore, need-supply fit has a significant positive impact on the repatriates' idea generation and idea implementation.

Demand-ability fit can reduce the conflict and misunderstanding of both sides, improve interpersonal relationship, and make repatriates do idea generation and idea implementation in a positive and healthy working mood and attitude. Demand-ability fit can make repatriates win the respect and trust of the internal members in the parent company, make repatriates carry out in-depth communication and exchange with the internal members in the parent company, generating new ideas and solutions through cooperation to promote idea generation. Demand-ability fit can also bring understanding and communication for repatriates and the internal members in the parent company, break the repatriates' inertial thinking, strengthen the use of existing knowledge and technology, and generate improved ideas, and promote idea implementation. At the same time, the repatriates with perceiving demand-ability fit can quickly adapt to the work environment of the parent company, with higher organizational commitment to the parent company, and willing to do explorative innovation and idea implementation for their common goal. Edwards and Cable [15] believed that demand-ability fit can improve communication, predictability, interpersonal relationship and trust among employees, and increase job satisfaction and organizational identification. Christensen and Wright [16] believed that demand-ability fit enabled employees to have higher organization commitment for organizations. Bright et al. [17] found that demand-ability fit can better explain employee innovation. Therefore, Demand-ability fit has a significant positive impact on repatriates' idea generation and idea implementation. We thus hypothesize the following:

H1. Need-supply fit has positive effects on repatriates' idea generation.

H2. Demand-ability fit has positive effects on repatriates' idea implementation.

H3. Need-supply fit has positive effects on repatriates' idea generation.

H4. Demand-ability fit has positive effects on repatriates' idea implementation.

2.2 The impact of complementary fit on knowledge transfer

Knowledge is embedded in personal experience. Within the organization, because of self-interest and lack of trust, employees are reluctant to transfer knowledge to others. Szulanski et al. [18] argued that lack of motivation and reliability toward others is a major obstacle of knowledge transfer for knowledge sources. According to motivation theory, the satisfaction of individual psychological needs is the main driving force for individual work attitude and behavior. Martin [6] suggested that individual without enough motivation is unlikely to transfer knowledge. Based on the theory of motivation, this study suggests that complementary fit has a positive impact on repatriates' successful knowledge transfer. The reasons are as follows:

Need-supply fit promotes successful knowledge transfer by enhancing repatriates' knowledge transfer motivation. This is because Need-supply fit means that the parent company' supply can meet the repatriates' career needs, the expected promotion opportunities, salaries and incentives, etc. According to the principle of reciprocity, employees will take positive work attitude and behavior to repay the organization. When the organization supply matching their internal demand, employees will have higher affective commitment and job satisfaction, and be willing to transfer knowledge to reply organizations. Gagn [19] believed that job satisfaction promotes successful knowledge transfer by enhancing the extrinsic motivation of employee knowledge transfer. Organization supplies, such as promotions, bonuses and higher salaries, have a positive impact on employees' frequent knowledge contribution. The repatriates have greater likelihood of knowledge transfer to an internal member of the parent company when they obtain their expected external reward within the parent company. In addition, Need-supply fit means that the repatriates' knowledge, ability and skills can meet the job requirements of the parent company.

Demand-ability fit can make the repatriates be competent for the job offered by the parent company, improve their work interest, satisfaction and achievement, and then enhance the intrinsic motivation of their knowledge transfer. On the contrary, when the repatriates' contribution, effort, knowledge and competence are not recognized and appreciated by the parent company, they are unlikely to have the intrinsic motivation to transfer knowledge within the parent company. For example, Nery-Kjerfve and McLean Lin [2] believed that unless the parent company arranges a suitable position for the repatriates, they will not better disseminate international knowledge within the organization. Oddou et al. [20] believed that when the parent company value and use the repatriates properly, the motivation of repatriates' transfer knowledge is stronger. Lazarova and Tarique [21] suggested that when the career opportunities offered by Multinational Corporations match the repatriates' career goals, the motivation repatriates' knowledge transfer is stronger. Oddou et al. believed that the opportunities for career development offered by Multinational Corporations match the repatriates' professional considerations, and the possibility of repatriates' knowledge transfer is greater.

We thus hypothesize the following:

H5. Need-supply fit has positive effects on repatriates' knowledge transfer.

H6. Demand-ability fit has positive effects on repatriates' knowledge transfer.

2.3 The impact of knowledge transfer on repatriates' innovation behavior

Knowledge is the key resource for repatriates' innovation. Knowledge transfer creates conditions for repatriates' to acquire the parent company members' knowledge and disseminate their knowledge. Knowledge transfer refers to repatriates and the parent company members transmit their knowledge between each other by appropriate channels in the particular context, and absorb, applicate, develop and innovate knowledge, including knowledge collecting and knowledge donating. Among them,

knowledge collecting refers repatriates obtain the parent company members' knowledge through certain knowledge transfer channels. Knowledge donating refers repatriates disseminate their knowledge to the parent company members through certain knowledge transfer channels. Knowledge transfer can promote repatriates' innovation behavior. The reasons are as follows:

Knowledge collecting can make repatriates acquire and absorb the knowledge of the parent company members, increase the repatriates' diversity of knowledge and experience, and make up their knowledge gaps. Crossover of different kinds of knowledge and experience can make repatriates break through their existing thinking limitations and "competence trap", improve the repatriates understanding of the technology, products, processes and customer needs in existing and emerging market, promote idea generation and idea implementation. The process of knowledge collecting is the interaction process, this process can improve the ability of repatriates' to learn, understand, digest and absorb the knowledge of others, to broaden the repatriates' thinking to solve a problem, and then generate new ideas and the new scheme about solving problems. In addition, repatriates' knowledge collectiong also can enhance their heart's goodwill and reputation in the parent company members, but also to enhance the repatriates' trust toward others, and willing to collect knowledge from others to conduct innovation behavior. On the contrary, the behavior of unwilling to collecting knowledge from others may be considered unsafe or too arrogant, lack of humility and respect for others, thus affect the repatriates' interpersonal relationship, is not conducive to the repatriates' innovation behavior.

Knowledge donating can strengthen the cooperation and communication between repatriates and the parent company members, and deepen understanding of their own knowledge and improve their own work. Knowledge donating, mainly through knowledge imparting, others' knowledge feedback and their knowledge contours' revealing and other self-learning mechanism to improve innovation. First of all, knowledge donating can't do without teaching function of the knowledge source. In order to make full use of their own knowledge and experience by others, the repatriate must develop their knowledge and experience before imparting knowledge. The process of externalization of knowledge and experience is also a process of self reflection training, which, in turn, helps them to better understand and use knowledge and innovate. Therefore, knowledge donating can promote the repatriates' innovation behavior. Second, the repatriate can accept the knowledge feedback from the knowledge receiver through knowledge donating. This feedback can assess the knowledge quality of repatriates. If the knowledge receiver encounters some problems in the process of applying the repatriates' knowledge into their task situation, there is likely a heated discussion between the knowledge receiver and repatriates. This discussion can help the repatriate to deepen understanding and improve the original knowledge, thus stimulate their innovation behavior. Finally, the repatriates' knowledge donating can make the knowledge receiver understand their knowledge outline. According to the principle of reciprocity, the knowledge receiver will be introduced in time to the repatriate when they encounter more relevant and valuable knowledge. Therefore, knowledge donating can reduce the internal cost of repatriates' trying to understand, encode, absorb and transfer knowledge, and improve the relevance and quality of the subsequent knowledge transfer. Therefore, knowledge donating is beneficial to reveal the repatriates' knowledge outline toward others, increase the relevance and valuable knowledge feedback, and promote their innovation behavior. We thus hypothesize the following:

H7. Knowledge transfer has positive effects on repatriates' idea generation.

H8. Knowledge transfer has positive effects on repatriates' idea implementation.

2.4 The moderating effect of creative self-efficacy

The creative self efficacy is the internal drive for individual innovation behavior. It refers to the individual's confidence in his ability of successful innovation. Innovation behavior, especially idea generation is a long-term, complicated and risky activity. Repatriates' innovation needs the power of internal support. This power manifests the creative self-efficacy based on the employees basic knowledge, skills and abilities. Creative self-efficacy can motivate repatriates to generate and

implement innovative ideas, and actively cope with the difficulties, setbacks as well as the uncertainty and risk of the results encountered in the process of innovation. This study suggests that the relationship between knowledge transfer and innovation behavior can be adjusted by creativity and self-efficacy. The reasons are as follows:

First of all, knowledge transfer and innovation behavior mainly describe individual behavioral characteristics, which are influenced by some different variables of individual perception and evaluation. According to social cognitive theory, individual self-efficacy is an important factor to determine individual differences in psychology and behavior. Therefore, creative self-efficacy as an important individual difference variable, was valued by many researchers in recent years, which can moderate the relationship between knowledge transfer and innovation behavior.

Secondly, the moderating effect of creative self-efficacy in Chinese context has been proved. Chen [22] proposed that managerial support could enhance employee innovation, and internal motivation does work as a mediator between managerial support and employee innovation, general self-efficacy moderates intermediary relationship of internal motivation between managerial support and employee innovation. Xie et al. also suggested that individual characteristics should be applied to further investigate the adaptability of job characteristics models to individuals with different characteristics, and to explore the moderating effects of individual traits (e.g., locus of control, self-efficacy). Anderson et al. [23] found that employees with high creative self-efficacy, whether faced with challenging work situations or barrier work situations, would have more innovation than that with low creative self-efficacy. Employees with high creative self-efficacy can actively respond to the difficulties and setbacks, the uncertainty and risk from the process of innovation, and quickly mobilize the knowledge innovation potential, so as to produce and implement new ideas. Lu et al. [24] believed that employees with higher creative self-efficacy have confidence in their ability to produce and implement innovative ideas. they will take the initiative to share and integrate professional knowledge and information, stimulate their knowledge sharing, encourage employees to actively cope with the complexity, uncertainty and risk of innovation activities, thus showing more innovation. Employees with higher creative self-efficacy firmly believe that knowledge transfer can bring new ideas, have more power to enhance their innovation behavior through knowledge transfer.

Finally, the effect of knowledge transfer on innovation behavior is different for individuals with different levels of creative self-efficacy. Specifically, for those with lower creative self-efficacy, their knowledge transfer may have less impact on repatriates' innovation behavior. In the context of a higher level of knowledge transfer, the repatriate has known, understood, digested the transferred knowledge, but lack of confidence and courage of creativity, may result less innovation. In the lower level of knowledge transfer, the repatriate hasn't adequately known, understood and digested the transferred knowledge, and lack of creative confidence and courage, may result less innovation. For employees with higher creative self-efficacy, knowledge transfer may have a greater impact on repatriates' innovation behavior. Repatriates with higher creative self efficacy are confident in their ability to accomplish innovative activities. They believe they can accomplish their assigned tasks as well as demonstrate positive work attitudes and behaviors. Therefore, no matter in the higher level of knowledge transfer situations, or low level situation of knowledge transfer situations, repatriates with higher creative self-efficacy when faced complexity, uncertainty and risk of innovation, they will take the initiative to find problem solutions. Therefore, repatriates with higher creative self-efficacy are inclined to manifest innovation. Based on this, the following hypotheses are proposed:

H9. Creative self-efficacy plays a moderating role between knowledge transfer and idea generation. The higher the repatriates' creative self efficacy is, the more positive influence of knowledge transfer on idea generation.

H10. Creative self-efficacy plays a moderating role between knowledge transfer and idea implementation. The higher the repatriates' creative self efficacy is, the stronger the positive influence of knowledge transfer on idea implementation.

3. Methods

3.1 Research sample and data collection

Participants in this study were repatriates in Multinational Corporations in China (such as HUAWEI, ZTE and Volkswagen). Three ways of data were collected to reduce potential common method bias. These ways are as follows: investigate 16 Multinational Corporations in China; filled in and collected the questionnaires by the MBA students, classmates, relatives and friends; distributed and collected questionnaire by using the internet platform, such as knowing, QQ group and WeChat the circle of friends. In survey, we strictly screened the questionnaire in order to ensure repatriates with more than half a year. In that case, the repatriates has accumulated a certain amount of international knowledge and experience. The final questionnaire is divided into two parts: the basic situation and the measurement scale. The designed of the basic situation helps us understand the basic information of repatriates, such as the gender, age, position, expatriate life and the education level, including 10 items; the measurement scale is the main content of the questionnaire, is the measurement items about all the research variables, including 27 items. We used Likert-type scales ranging from 1 (strongly disagree or not at all) to 5 (strongly agree or to a very great extent) for all measures. From December 2015 to November 2016, We received 550 repatriates questionnaires from four cities, such as Xi'an, Nanjing, Beijing, Shanghai and Shenzhen. After deleting incomplete cases, we retained 260 usable questionnaires, for a valid response rate of 47.3%. Of these respondents, 56.9 percent were male, percent 91.5 is below 40 ages, 90.9 percent had obtained a college or above education, 30.8 percent had above 2 years of expatriate life, 56.9 percent were general employee.

3.2 Non-response bias and common method variance test

In this study, we asked subjects to subjectively evaluate all constructs, including their knowledge transfer and innovation behavior. To check for the potentially common methods bias, we took the following steps. First, we utilized the Harman's one-factor method, as suggested by Podsakoff [25], and all the questionnaire items were combined in a factor analysis. An unrotated factor analysis extracted five factors with eigenvalues greater than one. The first factor explained 30.253 percent of the variance-under the crucial 50 percent level-suggesting that the common method variance was not a problem (Hair et al., 1998). Second, we conducted a confirmatory factor analysis (CFA) that assigned all variables to a single latent variable as the null model. The results indicated that the single-factor model did not provide a good fit to the data ($\chi^2=1956.235$, $Df=324$, $\chi^2/df=6.04$, $CFI=0.34$, $RMSEA=0.20$, $TLI=0.28$). Third, we compared the measurement model corresponding to the theoretically derived factor structure of measurement instruments that contained six latent constructs. The χ^2 difference test also demonstrated a significant difference between the null model (single-factor model) and the six-factor model ($\Delta\chi=519.95$, $p<0.001$). The evidence from the above tests showed that the common method variance did not seriously distort the analytical results.

3.3 Measurements

In order to ensure the reliability and validity of the measurement scale, this study measured this variables by drawing on the existing research results and combining with the appropriate improvements purpose of this study to make.

1) Complementary fit. A eight-item scale developed by Cable and DeRue [26] was used to measure complementary fit. The items of need-supply fit scale reads such as "After repatriated, what the the parent company provided for me is fit I am looking for. The items of demand-ability fit scale reads such as "After repatriated, the job requirements that provided by the parent company match very with my knowledge, skill and ability".

2) Knowledge transfer. We used an six-item scale that De Ridder developed to measure repatriates' knowledge transfer. The items of knowledge transfer Scale read: "I can get the knowledge I need from the parent company members", "I can effectively absorb the knowledge transferred from the parent

company members”, “I can effectively transfer my integrated international knowledge to the parent company members”, “I can transfer my international knowledge to the parent company members by using the most effective channels”, “the results of knowledge transfer between I and the parent company members are good”.

3) Innovation behavior. We used an eight-item scale that He and Wong and Jansen [27] developed to measure repatriates’ innovation behavior. The items of idea generation Scale read: “After repatriated, I actively looking for new knowledge, technology and tools”, “After repatriated, I often can produce many creative ideas”, “After repatriated, I actively improve the knowledge and skills of the parent company existing products (or service)”, “After repatriated, I often generate a lot of improved ideas” The items of idea implementation Scale read: “After repatriated, I will solve problems produced in the product (or service) development process of the parent company with new knowledge, technology and tools”, “After repatriated, I can implement creative ideas systematically in the development of the parent company's product (or service)”, “After repatriated, I will improve the existing products (or services) of the parent company by using improved knowledge and skills”, “After repatriated, I will designedly improve the existing products(or services) of the parent company by using improved idea”.

4) Creative self-efficacy. We used an six-item scale that Carmeli and Schaubroeck [28] developed to measure repatriates’ creative self-efficacy. The items of creative self-efficacy Scale read: “compared to the parent company members, I can creatively perform most of the tasks”, “when I am faced with a complex task, I believe I can use a creative method to complete it”, “I believe I am good at generate new and creative ideas”, “I can creatively accomplish many different tasks”, “I can achieve most of my goals in a creative way”, “I can be creative even if things are tough”.

5) Control variables. We controlled for repatriates demographics, including gender, age, job rank, expatriate life and education. Use dummy variables to indicate gender and job rank, for example, 0 stands for female, 1 stands for male, and natural logarithm means age. In order to ensure the English variable items Chinese translation accuracy, invite the Department of foreign languages and organizational behavior of professional teachers and students of relevant items of English Chinese translation for many times, and ultimately determine each item Chinese expression.

3.4 Reliability and validity

In this study, the maturity scales are used as reference to fully guarantee the content validity of each constructs. SPSS19.0 software was used to analyze the reliability, and the reliability of six latent constructs was evaluated by Cronbach's Alpha. The recommended value of Cronbach's Alpha is [0.7, 0.9]. The Cronbach's Alpha of each item is more than 0.7, which means that the questionnaire has high reliability and consistency. In terms of composite reliability, the values for complementary fit, supplementary fit, knowledge transfer, idea generation, idea implementation and creative self-efficacy are 0.842, 0.827, 0.843, 0.800, 0.866, 0.973 and are greater than the recommended value of 0.7. That means the measures of the constructs are highly reliable internal consistency.

Table 2 shows the means, standard deviations, and zero-order Pearson correlations of the study variables. As indicated, Need-supply fit was found to be positively correlated with supplementary fit($r=0.565$, $p<0.01$), knowledge transfer($r=0.425$, $p<0.05$), idea generation($r=0.412$, $P<0.01$) and idea implementation ($r=0.422$, $P<0.01$). At the same time, knowledge transfer was found to be positively correlated with employees' idea generation ($r=0.502$, $P<0.01$) and idea implementation ($r=0.487$, $p<0.01$). In addition, gender, age, job rank, expatriate life and education has no significant correlation with Need-supply fit and demand-ability fit, which indicates that the Need-supply fit and demand-ability fit have litter difference in gender, age, job rank, expatriate life and education level. Indicating that these measures have good discriminant validity.

Table 1. Means, standard deviations, and correlations

Variable	Person correlations coefficient											
	1	2	3	4	5	6	7	8	9	10	11	
1. Gender	1.00											
2. Age	-.17	1.00										
3. Job rank	-.14	.46**	1.00									
4. Expatriate life	-.04	.39**	.19*	1.00								
5. Educational level	-.17*	-.02	-.06	.02	1.00							
6. Need-supply fit	.10	.04	.16	-.03	.05	1.00						
7. Demand-ability fit	-.01	-.01	.11	.03	.07	.57**	1.00					
8. knowledge transfer	.05	.01	.24**	.12	.12	.43**	.44**	1.00				
9. Creative-self efficacy	-.12	.01	.07	.00	.06	.10	.10	.09	1.00			
10. Idea generation	.07	-.00	.16	-.0192	.17*	.412*	.37**	.50**	.16	1.00		
11. Idea implementation	-.08	.17	.36**	-.04	.15	.422*	.41**	.49**	.04	.56**	1.00	
Means	1.43	3.58	3.75	5.05	5.33	3.10	3.31	3.72	3.37	3.72	3.83	
Standard Deviations	.50	.69	1.03	1.57	.94	.77	.71	.65	1.24	.60	.73	

Notes: n=260; * p < 0.05; ** p < 0.01.

3.5 Results and discussion

We followed Cohen et al.’ [29] procedures by conducting a five-step hierarchical multiple regression analysis to test our hypotheses. The control variables (repatriates gender, age, job rank, expatriate life and education) were entered first, followed by idea generation or idea implementation in the second step. Need-supply fit or demand-ability fit were entered in the third step. Three two-way interaction terms. The variables used in the interaction terms were centred to reduce any multicollinearity.

Table 2. Results of hypotheses testing

	Knowledge transfer		Idea generation						Idea implementation					
	M1	M2	M3	M4	M5	M6	M7	M8	M9	M10	M11	M12	M13	M14
Control variables														
Gender	.09	.06	.13	.09	.07	.08	.10	.04	.02	-.03	-.05	-.04	-.04	-.08
Age	-.17	-.15	-.07	-.06	-.00	.01	.01	.03	.06	.08	.12	.13	.13	.14
Job rank	.32	.23	.23	.15	.07	.08	.08	.03	.37	.29	.22	.23	.23	.20
Expatriate life	.13	.14	-.03	-.03	-.07	-.10	-.09	-.12	-.14	-.13	-.17	-.20	-.20	-.21
Educational level	.14	.10	.21	.19	.13	.14	.14	.14	.18	.14	.11	.12	.12	.12
Independent variable														
Need-supply fit		0.23*		.26**	.18					.23*	.15			
Demand-ability fit		0.27**		.20*	.10					.25**	.17			
Mediator														
Knowledge transfer					0.36**	0.47**	0.47**	0.50**			.31**	.44**	.45**	.47**
Modetator														
Creative self-efficacy							0.12	0.10					-.03	-.03
Interaction														
Knowledge transfer x Creative self-efficacy								0.24**						.15*
Parameter														
R2	.11	.30	.08	.24	.33	.28	.30	.35	.17	.34	.41	.35	.35	.37
F	3.10	7.54**	2.26	5.55**	7.50**	8.11**	7.36**	8.14**	5.18**	9.04**	10.40**	10.92**	9.32**	8.87**
ΔR2	.11	.19	.08	.16	.09	.20	.01	.05	.17	.17	.07	.18	.00	.02
ΔF	3.10	16.68**	2.26	12.70**	16.04**	34.32**	2.30	9.90**	5.18**	15.62**	13.50**	32.96**	0.13	4.10*

Notes: n=260; * p < 0.05; ** p < 0.01.

Table three presents the results of the hierarchical multiple regression analysis. Hypothesis 1 to Hypothesis 2 predicted that Need-supply fit had positive effects on the idea generation and idea implementation. The results demonstrated that demand-ability fit was positively related to idea generation ($\beta=0.259$, $p<0.01$) and idea implementation($\beta=0.223$, $p<0.05$), supporting Hypotheses 1 and 2.

Hypothesis 3 to Hypothesis 4 predicted that Need-supply fit had positive effects on the idea generation and idea implementation. The results demonstrated that demand-ability fit was positively related to idea generation ($\beta=0.198$, $p<0.05$), and idea implementation ($\beta=0.250$, $p<0.01$), supporting Hypotheses 3 and 4.

Hypothesis 5 to Hypothesis 6, which predicted that Need-supply fit and demand-ability fit had positive effects on the repatriates' knowledge transfer. The results demonstrated that Need-supply fit was positively related to repatriates' knowledge transfer ($\beta=0.234$, $p<0.05$), Need-supply fit was positively related to repatriates' knowledge transfer ($\beta=0.269$, $p<0.01$), supporting Hypotheses 5 and 6.

Hypothesis 7 to Hypothesis 8, which predicted that knowledge transfer had positive effects on the repatriates' idea generation and idea implementation. The results demonstrated that knowledge transfer was positively related to repatriates' idea generation ($\beta=0.474$, $p<0.01$), demand-ability fit was positively related to repatriates' idea implementation ($\beta=0.443$, $p<0.01$), supporting Hypotheses 7 and 8.

Hypothesis 9 to Hypothesis 10, which predicted that creative self-efficacy moderate the relationship between knowledge transfer and repatriates' innovation behavior(idea generation and idea implementation). As shown in Table three, the interaction term proved to be significantly related to idea generation($\beta=0.242$, $p<0.01$) and idea implementation($\beta=0.153$, $p<0.05$), supporting Hypotheses 9 and 10.

In summary, because all hypotheses are confirmed, the results provide substantial evidence that demand-ability fit affect the knowledge transfer, which ultimately affect repatriates' innovation behavior.

4. Conclusion and implication

4.1 Conclusion

The repatriates' innovation behavior plays an important role in establishing the core competitive advantage of Multinational Corporations. In this paper, back office personnel as the research object, based on the review of the research literature, starting from repatriation management and social exchange perspective, the research paradigm of complementary fit --knowledge transfer--innovation behavior". The relationship model between complementary fit, knowledge transfer and innovation behavior was built. The theoretical model was verified by using multiple hierarchical regression analysis method. The intermediary effect of knowledge transfer was tested by using Bootstrap sampling technology. The results of this study are as follows: (1)complementary fit has positive impact on repatriates' innovation behavior, which is need-supply fit has positive impact on repatriates' idea generation and idea implementation; Need-supply fit has positive impact on repatriates' idea generation and idea implementation. (2)complementary fit positively influences repatriates' knowledge transfer, that is, Need-supply fit and demand-ability fit have a positive impact on repatriates' knowledge transfer. (3) knowledge transfer does work as a full mediator between P-O fit and repatriate's innovation behavior. (4)Creative self-efficacy moderates the positive relationship between knowledge transfer and innovation behavior.

4.2 Limitations and suggestion

There are some limitations in this study: (1) the limitation of data collection. The sample size of this study is narrow, and the sample is almost from the repatriates in multinational corporations in China. If

the scope of sample collection is extended to other countries or regions, the results of the study will be generally better. In addition, if the sample size is limited, if the time and conditions permit, the sample size and sample type can be expanded, so that the actual data collected can better test the model. (2) the selection of control variables. The study did not control the repatriates' repatriation years. In view of the repatriates with different repatriation years may have different perception and understanding of variable items, the future research needs to control this variable. (3) although the hypothesis model has been tested empirically, the model is not comprehensive and needs further expansion. For example, this study initially did not classify the variables of knowledge transfer due to limited time and capacity. Later researchers can divide the dimensions of knowledge transfer according to the needs, and study the relationship between the dimensions of knowledge transfer and these variables. In addition, this study studies the influence mechanism of complementary fit on innovation behavior from the perspective of individual employees. If the research angle is transferred to the organizational level, are these findings consistent? Moreover, in the management implications of this study, learning tendency can influence creative self-efficacy. Therefore, future research scholars can research the impact of repatriates' complementary fit on organizational ambidexterity innovation, learning orientation as the moderating variable, organization size and organizational age as control variable join into the research model.

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References

- [1] HUANG M-C et al.. "Knowledge governance mechanisms and repatriate's knowledge sharing: the mediating roles of motivation and opportunity", *Journal of Knowledge Management*, 2013, Vol. 17(5), p677–694.
- [2] NERY-KJERFVE T, MCLEAN G N. Repatriation of expatriate employees, knowledge transfer, and organizational learning: What do we know?, *European Journal of Training and Development*, 2012, Vol. 36(6), p614–629.
- [3] YEATON K, HALL N. "Expatriates: Reducing failure rates", *Journal of Corporate Accounting & Finance*, 2008, Vol. 19(3), p75–78.
- [4] JOHNSON E C et al.. "Expatriate social ties: Personality antecedents and consequences for adjustment", *International Journal of Selection and Assessment*, 2003, Vol. 11(4), p277–288.
- [5] LAZAROVA M, CALIGIURI P. "Retaining repatriates: The role of organizational support practices", *Journal of World Business*, 2002, Vol. 36(4), p389–401.
- [6] MARTÍN HERNÁNDEZ P et al. "Job demands, job resources and individual innovation at work: Going beyond Karasek's model?", *Psicothema*, 2007, Vol. 19(4), p621–626.
- [7] RAMAMOORTHY N et al.. "Determinants of innovative work behaviour: Development and test of an integrated model", *Creativity and Innovation Management*, 2005, Vol. 14(2), p142–150.
- [8] Wang Z, Sun J M. "Person organization fit and employee's innovative work behavior--in three type fit model perspective", *Economic management Journal*, 2010, Vol. 25(10): p74-79.
- [9] ZHOU K Z, LI C B. "How knowledge affects radical innovation: Knowledge base, market knowledge acquisition, and internal knowledge sharing", *Strategic Management Journal*, 2012, Vol. 33(9), p1090–1102.
- [10] Wang J R. "The effect of repatriation support on ambidexterity innovation", *Chinese Journal of Management*, 2015, Vol. 12(7), p976–983.
- [11] EISENBERGER R et al.. "Reciprocation of perceived organizational support", *Journal of Applied Psychology*, 2001, Vol. 86(1), p42–51.

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- [12] CHOI J N. "Person–environment fit and creative behavior: Differential impacts of supplies–values and demands–abilities versions of fit", *Human Relations*, 2004, Vol. 57(5), p531–552.
- [13] VERQUER M L et al.. "A meta-analysis of relations between person–organization fit and work attitudes", *Journal of Vocational Behavior*, 2003, Vol. 63(3), p473–489.
- [14] YU K Y T, DAVIS H M. "Autonomy's impact on newcomer proactive behaviour and socialization: A needs–supplies fit perspective", *Journal of Occupational and Organizational Psychology*, 2016, Vol. 89(1), p172–197.
- [15] CABLE D M, EDWARDS J R. "Complementary and supplementary fit: a theoretical and empirical integration", *Journal of Applied Psychology*, 2004, Vol. 89(5), p822–834.
- [16] CHRISTENSEN R K, WRIGHT B E. "The effects of public service motivation on job choice decisions: Disentangling the contributions of person-organization fit and person-job fit", *Journal of Public Administration Research and Theory*, 2011, Vol. 21(4), p723–743.
- [17] BRIGHT L. "Does person-organization fit mediate the relationship between public service motivation and the job performance of public employees?", *Review of Public Personnel Administration*, 2007, Vol. 27(4), p361–379.
- [18] SZULANSKI G. "Exploring internal stickiness: Impediments to the transfer of best practice within the firm", *Strategic Management Journal*, 1996, Vol. 17(S2), p27–43.
- [19] GAGNÉ M. "A model of knowledge-sharing motivation", *Human Resource Management*, 2009, Vol. 48(4), p571–589.
- [20] ODDOU G et al.. "Repatriates as a source of competitive advantage", *Organizational Dynamics*, 2013, Vol. 42(4), p257–266.
- [21] LAZAROVA M, TARIQUE I. "Knowledge transfer upon repatriation", *Journal of World Business*, 2005, Vol. 40(4), p361–373.
- [22] CHEN Z X, ARYEE S. "Delegation and employee work outcomes: An examination of the cultural context of mediating processes in China", *Academy of Management Journal*, 2007, Vol. 50(1), p226–238.
- [23] ANDERSON N et al.. "The routinization of innovation research: A constructively critical review of the state-of-the-science", *Journal of Organizational Behavior*, 2004, Vol. 25(2), p147–173.
- [24] LU L et al.. "Managerial knowledge sharing: The role of individual, interpersonal, and organizational factors", *Management and Organization Review*, 2006, Vol. 2(1), p15–41.
- [25] PODSAKOFF P M et al.. "Common method biases in behavioral research: a critical review of the literature and recommended remedies", *Journal of applied psychology*, 2003, Vol. 88(5), p879-903.
- [26] CABLE D M, DERUE D S. "The convergent and discriminant validity of subjective fit perceptions", *Journal of Applied Psychology*, 2002, Vol. 87(5), p875–884.
- [27] HE Z-L, WONG P-K. "Exploration vs. exploitation: An empirical test of the ambidexterity hypothesis", *Organization Science*, 2004, Vol. 15(4), p481–494.
- [28] CARMELI A, SCHAUBROECK J. "The influence of leaders' and other referents' normative expectations on individual involvement in creative work", *The Leadership Quarterly*, 2007, Vol. 18(1), p35–48.
- [29] COHEN J et al. "Applied multiple correlation/regression analysis for the behavioral sciences", UK: Taylor & Francis, 2003.