

***Research Article (July – December 2020)*****A study on the effect of international situation factors on the cooperation performance  
of transnational alliance of private universities in China**

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**Abstract**

Many private universities in China are short of resources and lack of core competitiveness. For the sustainable development of Chinese private colleges and universities, an increasing number of Chinese private colleges and universities have established transnational alliances through international exchanges and cooperation to realize the rapid growth of Chinese private colleges and universities. However, in the process of transnational alliance cooperation, the performance of transnational alliance cooperation of Chinese private universities is not ideal due to the influence of transnational situational factors and the risks faced by the alliance cooperation in the transnational context. Therefore, this study intends to explore the effect of transnational situational factors and risks of alliance cooperation in Chinese private universities on alliance cooperation performance.

In this paper, based on strategic alliance theory and system theory, by choosing the Chinese private universities who has already set up the transnational alliance as samples and establishing the model and assumptions to analyze the influence of situational factors and risks on the cooperation performance of multinational alliances of Chinese private universities under the transnational context. The empirical results show that: first, the situational factors of multinational alliance cooperation in Chinese private universities are strongly correlated with alliance performance, and the differences between Chinese and foreign cultures are negatively correlated with alliance performance. System is negatively correlated with alliance performance; International experience is positively correlated with alliance performance. Second, in the process of testing the regulating variables, the opportunistic behavior of Chinese private universities in transnational alliance cooperation will make the operation of transnational alliance cooperation unstable, thus reducing the performance of alliance cooperation.

**Keywords:** *Transnational strategic alliance of Chinese, Private Colleges and Universities, Internet*

*International situation, Alliance Performance*

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## Introduction

The promulgation of China's new private education promotion law and the popularization of higher education provide good opportunities for the development of private universities in China, but also bring great challenges. With their own resources and development capabilities, many private universities in China have been unable to support and meet the diversified demands of serving the society. Multinational alliance cooperation of Chinese private universities is the demand of The Times for the development of Chinese private universities. The basic characteristic of China's private higher education is investment in running schools. The essential characteristics of investment in running schools at the present stage of China's private colleges and universities determine that their transnational alliance cooperation behavior has profit appeal fundamentally. The performance of transnational alliance cooperation is the core driving force of transnational alliance cooperation of China's private colleges and universities. The newly revised law on promotion of the people of China has made clear provisions for the for-profit running of Chinese privately-run colleges and universities, allowing the sponsor to obtain the benefits of running the schools, and the balance of running the schools can be handled and distributed in accordance with the company law and other laws and administrative regulations. The promulgation of the new regulations provides a legal basis for the market-oriented development of for-profit private education in China.

On one hand, the problems of education investment in Chinese private universities can be solved after the transnational alliance cooperation. On the other hand, it can introduce the advanced educational management ideas and methods from abroad and integrate with the international standards from all aspects. However, from the perspective of the practice of Chinese private colleges cross-border alliance cooperation, under the international situation, because of the difference of system and culture will be involved in cross-border alliance cooperation parties for their own interests to sacrifice the interests of the whole alliance, makes the operation of China's private colleges cross-border alliance cooperation instability, thereby reducing the phenomenon of alliance performance. In view of this, this paper chooses Chinese private colleges and universities that have established transnational alliance cooperation as the research object, and discusses how

Chinese private colleges and universities deal with cultural differences and institutional constraints in transnational context, as well as what kind of partners can improve the performance of transnational alliance cooperation. This paper analyzes the effect mechanism of the factors in the transnational context of the cooperation between Chinese private colleges and universities on the performance of the alliance cooperation, provides the management strategy of transnational alliance cooperation for the managers of Chinese private colleges and universities, and enriches the management theory of colleges and universities.

### Literature Review

According to Gulati (1998), the value created by the combination of multiple organizations is greater than the sum of their own. Sun (2015) defines the transnational alliance of universities as a cooperative behavior conducted by multiple organizations in order to achieve the goal of common development. Hu (2016) found that the organizations cooperating with the alliance are interdependent. Once good development and cooperation occur, the organizations within the alliance can effectively improve their competitiveness. Rabin Middle Hurst (2001) defines the transnational alliance of universities as an integrated and independent set created by multiple universities through negotiation and agreement in order to improve their overall competitiveness.

Spree Kversk (2002) argues that the institutional-based view makes up for the neglect of situational factors in the theory of industrial organization and the resource-based view. In terms of organizational sociology, system includes three systems, namely normative system, regulatory system and culture-cognition system, which are collectively referred to as the three-pillar system theory. Zhao (2001) added: the formal system corresponds to the control system in the three-pillar system theory, while the informal system corresponds to the other two systems. Zhou (2005) believed that the formal system is the rules that the relevant organizations must strictly abide by and supervise, reward and punish through the relevant authority; Informal system refers to the agreement formed privately or followed for a long time during the operation of an organization. Yang (2004) believes that strategic alliance lies between market and organization, and its development is determined by both system and institutional environment. Therefore, the study of strategic alliance belongs to the category of institutional theory.

Cheng (2013) believes that the risks of transnational alliance cooperation come from the instability and complexity brought by inside and outside the cooperative organization, and these uncertainties will bring certain losses, leading to the loss of competitiveness or even failure of the alliance. Zhan (2008) et al. summarized the risks in alliance cooperation, which mainly included relationship risks and performance risks. Relationship risk refers to the risk caused by speculative thoughts of members of the alliance. Performance risk refers to the risk caused by external environment or partner's lack of ability despite efforts made within the alliance.

Transnational alliance performance refers to the benefits obtained through alliance cooperation. In the process of literature review, it is found that, in general, the evaluation index system of the cooperation performance of transnational alliances of colleges and universities can be divided into two categories: subjective evaluation index and objective evaluation index. Allen (2000) constructed an evaluation index system of university internationalization, including 7 first-level indicators and 18 second-level indicators. Jiang (2009) summarized seven indicators earlier: educational concept, faculty, student composition, teaching process, school conditions and information, school running and scientific research, and international exchange of results. Porter (1985) believes that the subjective evaluation of alliance survival rate, alliance duration and alliance success is the main evaluation index of the performance of transnational alliances in universities. Ouchi (2004) established that the degree of alliance objectives and the satisfaction degree of alliance operation should be taken as the evaluation criteria for the performance of transnational alliances in universities.

In conclusion, the domestic and foreign research results on strategic alliance, system theory and transnational alliance cooperation performance lay a solid foundation for the discussion on transnational alliance cooperation of Chinese private universities. However, through literature review, it is also found that the research on the cooperation performance of transnational alliances of universities and colleges focuses on the evaluation system and general theoretical discussion, and there is no empirical research on the effect of transnational situational factors on the cooperation performance of transnational alliances of colleges and universities in the same research framework. In this paper, by constructing the model of "situational factors-alliance cooperation performance of China's private universities", the gap in the research on the cooperation performance of universities' multinational alliances is filled. The introduction of strategic alliance theory into Chinese private universities and foreign organizations to obtain new resources for development has attracted the attention of many scholars and is also an effective strategy for the sustainable development of Chinese private universities.

## 1. The Situation Factors of Transnational Alliance of Chinese Private Universities and the Direct Influence of Alliance Performance

Chen (2007) believes that the implementation of transnational alliance cooperation increases the cost of adapting to the new environment, laws and regulations for foreign alliance partners, which is positively correlated with the institutional distance of alliance members. The greater the distance, the higher the cost. Due to the differences in laws, regulations and common sense, there will be some differences in the decision-making and behavior of members in different regions. Uzzi (1997) believes that the resources and characteristics of alliance members depend on their respective environmental systems, and the institutional and cultural differences of alliance members also play a significant role in the overall cooperation of the alliance. Institutional constraints and the degree of cooperation of members are also key factors affecting the overall

performance of the alliance. Although system can bring certain disadvantages complement each other, but the income is not unlimited increase, if the difference reached a certain degree, complementary resources even for the whole cooperation bring larger inhibition, cause more conflicts, that is the member of complementary resources and common sense of difference if you can't arrested development will lead to alliance (Gilsing&Nooteboom, 2005). It can be seen that institutional constraints reduce the cooperation performance of transnational alliances. In terms of cultural cognition, the cultural and traditional differences of each member bring about the cultural and value differences within the alliance. If the differences are too large, the cooperation effect and trust relationship of the alliance will also be inhibited, which will have a negative impact on the cooperation performance of the alliance. Some activities and marketing strategies may be appropriate for one alliance member, but others may not understand and misunderstand the strategy. Cultural differences belong to informal institutional constraints, which have a subtle influence on the members of transnational alliances, often have a greater impact on the performance of transnational alliances cooperation, and even cause transnational alliances cooperation to deviate from the original goal. Cultural distance has more negative influence on the cooperation among the members of the transnational alliance. It is believed that the internationalization experience of transnational alliance partners directly affects the performance of transnational alliance cooperation, and organizations with certain internationalization experience are more likely to obtain legitimacy status and produce better alliance performance (Dyer & Singh, 1998).

From the conceptual definition, the performance of transnational alliance refers to the benefits gained by the alliance as a whole. However, it is very difficult to assess the performance of alliance cooperation, for example, whether the performance of transnational alliance cooperation refers to the performance created by alliance cooperation itself or whether alliance cooperation brings benefits and help to the parent organization (Cai, 2010). This study holds that the benefits gained by each member of the multinational alliance of Chinese private universities in the cooperation activities are the basis of the alliance performance. Therefore, it is one-sided to simply summarize alliance performance as entity profit or measure alliance performance through two levels. To sum up, the performance appraisal of multinational alliance cooperation must be based on the profits of each member of the alliance. The purpose of establishing a multinational alliance of Chinese private universities is more for its own development strategy. Therefore, the performance of transnational alliance cooperation of Chinese private universities should be the benefits and help brought by transnational alliance cooperation to Chinese private universities.

To sum up, this paper selects institutional constraints, cultural distance and international experience as situational factors influencing the performance of transnational alliances of Chinese private universities and puts forward the following hypotheses:

H1: Situational factors of multinational alliance of Chinese private universities will have a significant impact on the performance of transnational alliance of Chinese private universities.

H1a: The rich international experience among the members of the transnational of Chinese private universities is conducive to improving the performance of the transnational of Chinese private universities.

H1b: The cultural distance between the members of the transnational alliance of Chinese private universities is not conducive to the performance of the transnational alliance of Chinese private universities.

H1c: The institutional constraints faced by transnational alliance of Chinese private universities are not conducive to the performance of transnational alliance of Chinese private universities.

## 2. The Moderating Role of Opportunism in Transnational Alliance of Chinese Private Universities

Wu (2007) defines the experience of internationalization among members of a multinational alliance that enables alliance partners to obtain competitive advantages as resources. The more and better the quality of the resources touched and controlled by the members in the cooperation of different transnational alliances, the higher the performance of the alliance cooperation will be. However, some other scholars believe that highly irrelevant resources due to the high degree of supervision and control and information asymmetry cause the emergence of opportunistic behavior. The opportunistic behavior will lead to the decrease of alliance cooperation performance, which obviously leads to the failure of the organization members to achieve resource complementarity. Transnational alliance cooperation between members of international experience is with each other through economic activity makes the common social connection, can reduce the transaction cost, improve the performance of the multinational alliance cooperation, but caused by pushing organization connecting heterogeneous resources opportunism behavior between members of the international federation and weaken the influence of the international experience of alliance cooperation performance. It can be seen that opportunistic behavior reduces the benefits brought by heterogeneous resources to cooperative members of transnational alliances and weakens the overall improvement of alliance performance by the international experience of foreign members in transnational alliances. Therefore, based on the above literature analysis, this paper proposes the following hypotheses:

H2: The opportunistic behavior faced by the transnational alliance of Chinese private universities will weaken the overall improvement of alliance performance by the international experience of foreign members in the multinational alliance of Chinese private universities.

### Conceptual Model

Based on the five hypotheses proposed in the literature review above, the conceptual framework of this study is formed, as shown in figure 1.

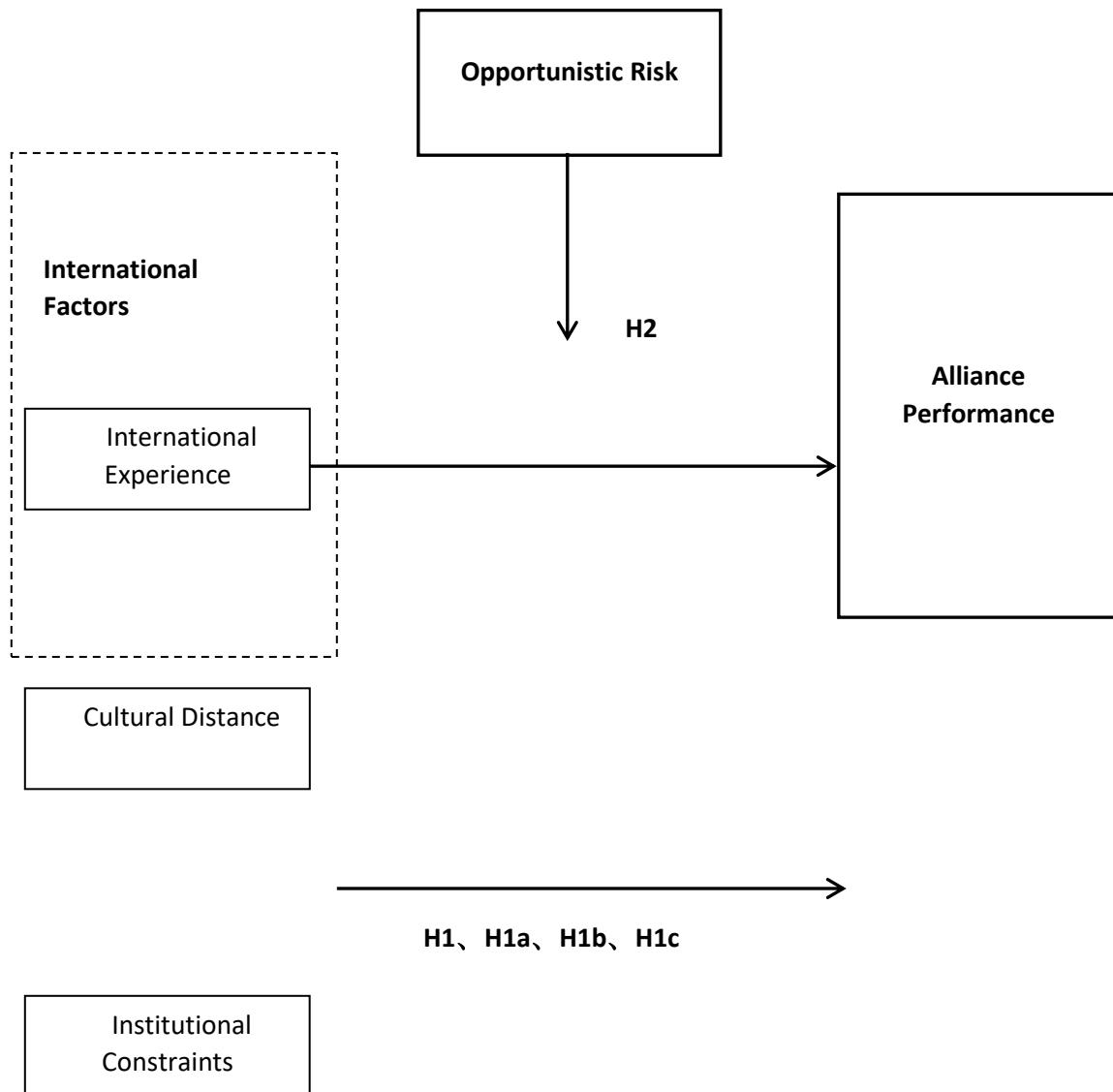


Figure 1 Theoretical Model

## EMPIRICAL ANALYSIS

### 1. Questionnaire Design and Questionnaire data Collection

#### 1.1 Questionnaire Design

The questionnaire survey method used in this study is based on the mature scale already studied by predecessors. At the same time, according to the specific scenarios involved in transnational development of Chinese private universities, some of their own designs are modified and added. This paper mainly refers to the research of scholars (Zollo& Meyer, 2008) on the measurement of multinational alliance cooperation performance of Chinese private colleges and universities and revises the scale contents according to the characteristics of Chinese private colleges and universities. On the measurement of situational factors and opportunistic behaviors faced by transnational alliances of private universities in China, reference is made to Batjargal& Liu, 2003; Chen, 2007) and modified the content of relevant survey items according to the cooperation of multinational alliance of Chinese private universities. Multiple item measurement and observation variables are set. Because if different measurement items can reflect observation variables and get the same result, setting up multiple measurement items to reflect observation variables can better get the correct conclusion (Tiwana, 2008). All scales were scored by liker 5-point scale.

#### 1.2 Questionnaire Distribution

Before carrying out the survey across China, 5 private universities in Yunnan province were selected for the preliminary survey. The preliminary survey results are not recorded in the final survey results and are only used to adjust the formal survey questions. First, the questionnaire is sent by E-mail to friends and classmates of Chinese private colleges and universities who have established transnational alliances and cooperation, and then forwarded to friends of other Chinese private colleges and universities who have established transnational alliances and cooperation. At the same time, I will confirm the Chinese private colleges and universities they may forward by phone in advance, and ask them to help indicate the name of the forwarded Chinese private colleges and universities, so as to prevent a Chinese private colleges and universities from repeatedly receiving multiple questionnaires. Second, through intermediary organizations on the Internet, private colleges and universities in the whole China were randomly selected and 350 questionnaires were finally distributed, of which 39 were invalid and 311 were valid, with a recovery rate of 88.9%. The respondents are mainly the presidents and presidents of Chinese private universities or their designated senior administrators. Therefore, the recovery rate of the questionnaire has reached a high level.

## Variables

According to the theoretical model and research hypothesis, the independent variable refers to the transnational situational factors of the transnational alliance cooperation of Chinese private universities, the dependent variable refers to the performance of the transnational alliance cooperation of Chinese private universities, and the regulating variable refers to the opportunistic behaviours faced by the transnational alliance cooperation of Chinese private universities.

## Results of Hypothesis Test

### Reliability and Validity Analysis

This study used SPSS24. software to analyze the reliability of each variable, and the results were as follows: the Alpha values of Alpha for performance, cultural distance, international experience, institutional constraint and opportunistic behavior were 0.928, 0.917, 0.880, 0.909 and 0.935, respectively, which were all greater than 0.7. Moreover, the Cronbach's  $\alpha$  function value of this variable did not change significantly after removing any items in the variable, which proved that the items had a strong correlation with the variables to which they belonged. Therefore, the questionnaire questions and results have strong credibility, meeting the research requirements, suitable for further analysis.

In this paper, AMOS21.0 software was used to conduct exploratory factor analysis on the situational factors, alliance performance and opportunistic behavior of transnational alliance cooperation among Chinese private universities, and the aggregation validity of these three factors was determined by factor loading. According to Hair et al. (1998), when the sample size is  $\geq 50$  and the factor loading coefficient is  $> 0.3$ , the item can be considered significant. Through exploratory factor analysis, the factor loads of the dependent variable, independent variable and regulatory variable above are all over 0.5, so the three factors have passed the test of aggregation validity. Exploratory factor analysis was also conducted for the three factors of international experience, cultural distance and institutional constraints in scenario factors. The statistical results showed that all factor loads exceeded 0.5, and the results showed that the aggregate of the three factors and the cumulative contribution of variance exceeded 78%, confirming that the above factors had strong construct validity. Confirmatory factor analysis is mainly to check whether the relationship between a factor and the tested item conforms to the theoretical relationship involved by the researcher. The results of confirmatory factor analysis model showed that the CMIN/DF value was  $1.878 < 3$ , RSMEA =  $0.054 < 0.1$ , and GFI, NFI, CFI and IFI values were all greater than 0.9, indicating that the model had good structural validity.

### Pearson Correlation Analysis

Correlation analysis is used to check whether there is a correlation between variables. The variables in this paper are distance variables, so Pearson's rank correlation coefficient is selected to evaluate the relationship between multiple variables. As can be seen from table 1, the correlation coefficient of each variable does not exceed 0.8, and the value range is 0.007-0.639, so there is no multicollinearity problem. A structural equation model can be established to further analyze the influence of each variable.

**Table 1** Pearson Correlation Coefficient Matrix (N=311)

	A1	A2	B1	B2	B3	C1	C2	Y	D1	D2
A1	1									
A2	.626**	1								
A3	.179**	.183**	1							
B	.055	.138*	.560**	1						
Y	.351**	.374**	.537**	.512**	.548**	-.445**	-.394**	1		

(Note: A1, A2, A3, B, Y respectively represent international experience, cultural distance, institutional constraints, opportunistic behavior and alliance cooperation performance)

### Main Effect Hypothesis Test

The structural equation model is used to analyze the influence of situational factors of multinational alliance cooperation among Chinese private universities on the performance of alliance cooperation. International experience, cultural distance, institutional constraints and alliance cooperation performance are incorporated into the structural equation model at the same time, and the model fitting is better. From the perspective of the structural equation model results of table 2, the Chinese private colleges' transnational alliance members who of rich experience in international cooperation and alliance performance a significant positive relationship of cooperation, and cultural distance and institutional constraints of alliance cooperation performance have a significant negative impact, the in conformity with the above research hypothesis, the standardized path coefficient of beta respectively  $\beta=0.245***$ 、 $\beta=-0.639***$ 、 $\beta=-0.425***$ ( $p<0.001$ ). Hypothesis H1 and its three sub hypotheses H1a, H1b and H1c are all valid.

**Table 2** Main Effect Hypothesis Test Results

Path Description			Direction	Regression Coefficient	P
Performance	<---	International Experience	+	0.245	***
Performance	<---	Cultural Distance	—	-0.639	***
Performance	<---	Institutional Constraints	—	-0.425	***

#### Adjustment Effect Hypothesis Test

This paper examines the effect of opportunistic risk adjustment internationalization experience on alliance performance through stepwise regression method. In international experience and the opportunism behavior of the regression equation, the significant variation of  $F = 0.148$ ,  $P < 0.05$  level significantly, it shows that when the Chinese private colleges cross-border alliance cooperation between members of the international experience to facilitate cross-border alliance cooperation development, the risk of opportunism can significantly inhibit the Chinese private colleges cross-border alliance cooperation between members of the international experience of transnational alliance cooperation performance. In other words, in the case of low opportunism risk, rich international experience has a greater impact on the performance of transnational alliance cooperation than in the case of high opportunism risk. Therefore, opportunistic behavior reduces the influence of international experience on the cooperation performance of transnational alliances and plays a moderating role. H2 is true.

#### Conclusions

It makes up for the lack of university transnational alliance cooperation research in the theoretical and empirical aspects.

First of all, the research on the assessment and evaluation of the cooperation performance of universities' transnational alliances at home and abroad is the theoretical support of this study. Current research prefer to build a performance evaluation index framework of alliance cooperation, and the object of study is the place where China's public colleges and universities, there is no research in the international situation of Chinese universities situational factors and the relationships between transnational alliance cooperation performance of literature, for China's private colleges cross-border alliance cooperation documents are much rarer. Therefore, taking Chinese private universities as samples, this paper puts transnational

situational factors in transnational alliance cooperation and transnational alliance cooperation performance under the same research framework, and deeply discusses the influence of transnational situational factors on alliance cooperation performance and the influencing mechanism, which is relatively absent in relevant researches at present. Based on the international experience, cultural distance and institutional constraints of the alliance members in the context of the cooperation scenario of China's private universities, this paper constructs the cooperation scenario-performance model of China's private universities. In the transnational context, the internationalization experience of the transnational alliance partners of Chinese private universities can effectively improve the performance of the transnational alliance. This shows that members with rich experience can deal with problems in cooperation and operation more effectively, reduce conflicts and contradictions among members, and deal with problems caused by system, culture, common sense and other problems. Organizations with certain international experience are easy to obtain alliance legitimacy status and produce better alliance performance. This is because the international experience of the transnational alliance partners of Chinese private universities is the experience gained by the members of the alliance in dealing with problems in the process of communication and cooperation. Cultural distance and institutional constraints have significant negative effects on the performance of alliance cooperation. That is to say, the Chinese private colleges multinational coalition partner, the greater the cultural distance between the Chinese private colleges international cultural exchanges and cooperation between alliance partners produce adverse effect, cause the loss of trust between members, make each member of the cooperation of clearance, which will be a negative impact on performance of the multinational alliance cooperation. When Chinese private colleges a multinational alliance cooperation, the Chinese private colleges multinational coalition partners need to adapt to the target area of laws and regulations, government control, the more social norms and moral restraint, and with the increase of institutional constraints, China's private colleges multinational coalition partners to adapt to the cost will increase rapidly, institutional constraints will lead to alliance partners on the code of conduct and guide the contradiction of the same against coalition of unity and cooperation among the member, thereby lowering the overall performance of the alliance.

Second, a lot of literature about alliance cooperation that opportunistic behavior will reduce the performance of alliance cooperation, for this reason, this paper studies the opportunism behaviors in multinational scene resources adequately to weaken the role of resources to promote cross-border alliance cooperation performance, can help us further understand multinational situational factors for China's private colleges cross-border alliance cooperation mechanism, extend the validity of the study. To be specific, the

appearance of opportunism will destroy the relationship between the transnational alliance partners of Chinese private universities, and the distrust among the partners will weaken the benefits of transnational alliance cooperation brought by the rich international experience of the transnational alliance partners of Chinese private universities.

All in all, this paper not only reveals the Chinese private colleges cross-border alliance cooperation system of situational factors and cultural distance constraint on China's private colleges cross-border alliance cooperation the adverse impact of the performance, also indicate the multinational coalition partner colleges and universities rich international experience of transnational alliance cooperation performance of positive influence, at the same time, considering the occurrence of opportunistic behavior on this resource for multinational alliance cooperation performance affects the weakening effect, has certain theory value and practice significance.

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