

A Study on the Effect of Transnational Strategic Alliance of Chinese Private Universities with Different Network Characteristics on Performance of the Strategic Alliance

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Abstract. An increasing number of private colleges and universities in China are cooperating with foreign universities to build a transnational strategic alliance to achieve rapid development. On the basis of the strategic alliance theory and network theory, this article analyzes on the influence of transnational strategic alliance that Chinese private universities with different network characteristics have on alliance performance from the perspective of network. Firstly, it analyzes on the network structure characteristics and network relationship characteristics of the alliance as well as the dimensions they consist. Secondly, it studies on the influence of different network characteristics on the alliance performance, and the regulation function of opportunism as it puts forward corresponding theories and propositions to build the theoretical model to study the performance of transnational strategic alliance of non-state colleges and universities in China with different network characteristics

1. Introduction

The basic assumption of strategic alliance is that the value created by the integration of resources among alliance organizations is greater than the sum of the value created by the resources of individual enterprises. ^[8] With their own resources and development capacity, Chinese private universities have been unable to support and meet their own development and serve the diverse demands of society. Chinese private universities need to engage with foreign organisations to secure new resources for development. Therefore, in recent years, Chinese private universities have shown a new trend of establishing transnational strategic alliances. The effective cooperation of strategic alliance partners can be promoted by the formation, development and effective cooperation among strategic alliance partners, which is conducive to realizing the synergy among alliance partners and improving the competitive advantages of alliance partners. ^[11] However, from the practice of transnational strategic alliance of Chinese private universities, how to choose cooperative partners and maintain stability and development under the transnational situation of co-existence of cooperation and competition is an issue worthy of consideration for the managers of China's private colleges and universities.

This article introduces the social network analysis method into the transnational strategic alliance network of Chinese private colleges and universities, and provides a set of scientific and effective tools for the characterization of transnational strategic network of Chinese private colleges and universities. The analysis of strategic alliance social network is that strategic alliance is a kind of social network, which is a kind of spontaneous behaviour among organizations, aiming at pursuing common economic interests and organizational goals, and forming exclusive barriers to entry of organizations through contractual relations. ^[15] “Strategic Network” points out that industrial Network is a conscious strategic behaviour to reduce transaction costs: it has a long-term relationship, but it does not mean that this relationship must be fixed. Industrial network connection

will adjust the structure of industrial network at any time for the consideration of each other's strategy, so that each member can obtain the necessary competitive advantage. This view is quite similar to the motivation of strategic alliance formation, which is actually the form of network theory.^[17] After Granovetter (1985) proposed the importance of relational embeddedness theory, most scholars accepted and verified Granovetter's views and began to discuss the governance and influence mechanism of network from the perspective of relational embeddedness.^[41] Then, the study of network governance has gradually formed three research paths: first, starting from the overall structure of the network, focusing on the network system conditions formed between network participants or nodes, such as network concentration, network scale, network heterogeneity and network openness; Second, research is conducted from the perspective of relationship, focusing on the degree of connection between network participants or nodes, such as relationship strength, relationship stability and relationship quality. Thirdly, the research is conducted from the perspective of location, mainly to distinguish the relative positions of each node, so as to analyse the locations of nodes in the whole network.^[18]

The suitability of strategic alliance partners directly affects the success or failure of the alliance. The value of strategic alliance comes from the complementarity and convergence of resources and capabilities of alliance partners.^[9] According to the resource dependence theory, strategic alliance should try its best to establish or maintain the alliance relationship with complementary resources of partners, so as to obtain the resources needed by partners and reduce the possibility of implementing opportunistic behaviours between partners.^[28] But other scholars argue that high irrelevance of resources can also lead to opportunism due to difficulties in supervision and control.^[33] On the other hand, scholars believe that the emergence of opportunistic behaviour makes it difficult to coordinate the relations among the members of the alliance, and at the same time comes with the emergence of internal competition problems such as technology disclosure, investment reduction and broken promises. Under the condition that opportunism minimizes and maximizes competition, the problem is solved through the strong trust relationship among alliance members in alliance governance.^[1]

Due to the negative impact of institutional distance on cooperative activities among members of transnational strategic alliances, alliance members need to adapt to the laws and regulations of target regions, government control, and organizations in different regions, often abide by different types of social norms and accept different moral constraints. At the level of cultural cognition system, different cultures, traditions and inheritance make the cognitive conflict between alliance partners seriously affect the establishment of mutual trust.^[2]

To sum up, in order to explore the Chinese private colleges in transnational strategic alliance partner selection and impact in the league, from social network perspective, this paper focuses on the Chinese private colleges characteristics of network and the relation of transnational strategic alliances for direct action alliance performance, and opportunism on the network characteristic and the alliance performance indirectly. At the same time, considering the different influences of situational factors on alliance performance under transnational strategy, in order to understand the mechanism of strategic alliance partnership selection on alliance performance more comprehensively.

2. Conceptual Model and Its Theoretical Basis

2.1. Network Characteristics of Transnational Strategic Alliance of Chinese Private Universities

Education, in essence, is an activity to enrich people's knowledge and skills, as well as to better their moral trait through information transmission. The process of education is the same as that of "manufacturing".^[37] Manufacturing refers to process raw materials into suitable products, while education is to cultivate students in schools into talented "products" adapting to social development. Transnational alliance cooperation of colleges and universities in China is equal to "cooperative

manufacturing”. The premise of network cooperation and network theory is that all nodes in the network are exposed to limited resources, capability and ability.^[21] Partners with limited resources would realize value through network.^[27] The basic logical premise of network theory of network combination and cooperation is that each node in the network has limited resources, capacity and capacity. Cooperative manufacturing can be considered as the integration process of various manufacturing resources at the organizational and social levels. Many theories on the formation and development of cooperation have emphasized the importance of social factors and intangible resources, which all belong to the category of culture and are related to culture, and cultural integration is the core process and foundation of cooperative manufacturing.^[23]

Strategy alliance cooperation is an association between an organization and some organizations in the existing social network by crossing the vertical or horizontal organizational boundaries, and the understanding of relevant features of social network is one of the prerequisites for an organization to form alliance cooperation. According to social network theory, modern enterprise is no longer an independent atom, and only embedded in social network can complete transaction activities.^[16] In the group of social network, different organizations will form horizontal or vertical association and interaction, which implies the potential social division of labor and cooperation. When organizations can smoothly enter the social network, they can obtain heterogeneous resources that are hard to get in the open factor market at a lower cost and risk. This not only provides more potential opportunities for the future of the organization, but also implies that enterprises can take a more active and proactive attitude to cooperate with foreign countries. Social networks can help organizations identify alliance opportunities and select suitable partners to facilitate the formation of alliances.^[32]

According to the above research of domestic and foreign scholars, this paper holds that the transnational alliance cooperation of Chinese private colleges and universities is carried out in the form of network and has network characteristics. Refers to Chinese private colleges cross-border alliance cooperation network on which China's private colleges for international exchanges and cooperation with the network, including participation in international exchanges and cooperation behavior main body (including foreign private and public universities, foreign enterprises, foreign training organizations and foreign governments), around different target of direct and indirect as well as formal and informal institutional arrangement or relationship combined, present the cooperation relationship of equality, boast skillful, benefit complementarity, such as multiple characteristics.

2.2. Network Characteristics and Alliance Performance of Transnational Strategic Alliance

Based on the existing literature, this research mainly expounds the influence of the network structure and relationship characteristics on the performance of strategic alliance from two aspects: the structural characteristics and the relationship characteristics.

2.2.1. The Network Structure Characteristics and Alliance Performance

The concept of “embeddedness” into the research of alliance cooperative network and divided it into “structural embedding” and “relational embedding”. The structural dimension focuses on the elements of the overall structure of the network, studying the concentration, size, heterogeneity and openness of cooperative members in the network, while the relational dimension mainly analyzes the strength, duration and quality of the relationship. The difference of network embeddedness will lead to the difference of alliance cooperation performance, that is, the network size, relationship strength and the position of alliance members in the network will affect the performance of alliance cooperation.^[39] The network structure analysis method focuses on the overall attribute and mainly analyzes the structural characteristics such as network size, network centrality, network openness and network heterogeneity, so as to facilitate managers to conduct governance and prediction. This method has been used in many industries, including biopharmaceuticals, software, electronics and communications.^[28]

Actors participating in the same alliance cooperative network would not produce the same performance, because their innate resource endowment and resources obtained through the network are different. Managers try to obtain a large number of heterogeneous or complementary resources to adapt to the complex and changeable external environment under the alliance cooperation network. Therefore, it is necessary to maintain large and heterogeneous network relationships in order to provide a continuous and diversified information. The “network resources” the heterogeneous resources brought by the network that can make the members who choose to establish the alliance and share the lease gain competitive advantages, and believed that different embedded network relationships would affect the quantity and quality of network resources touched and controlled by the cooperative members of the alliance, thus resulting in the difference in the cooperative performance of the alliance.^[38] The relationship between network structure and innovation performance of 11 strategic industrial alliances, and proved that enterprises with higher network clustering coefficient and shorter network average path have better innovation output (knowledge overflow). “Network resources” are defined as complementary resources transmitted among the actors participating in the enterprise innovation network, which will change with the transformation of network structure and network relations, and ultimately affect the difference of technological innovation performance. Network resources are embedded in the network structure and do not exist in isolation.^[19] Cowan(2004) used simulation method to simulate the influence of enterprise innovation network structure and knowledge diffusion. The results show that the level of knowledge will lead to the change of network structure. When the network has the characteristics of small world, the knowledge level among members is the highest.^[42] Similarly, Brigitte Gay & Bernard Dousset(2005) took the biological industry as an example, analyzed the structural characteristics of biological network, and concluded that the evolution process and structure of the entire network had a significant impact on the growth of core enterprises.^[43]

He Yaqiong (2005) designed the alliance cooperation network maturity evaluation index system, points out that should be from the network scale, network node density, the compactness of network openness, network connection, the stability of the network connection, network node degree of self selection, network localization index evaluation, and points out that these indicators affect the new organization alliance cooperation level of performance.^[44] Some researchs established the alliance cooperation organization of Hefei high-tech zone to investigation and study, the results show that the alliance cooperation organization is embedded network density, network resources abundance, relationship is the key to promote the innovation performance factors such as intensity, managers through strengthen the communication between members, acquisition and integration of resources fully, to achieve the success of the alliance cooperation.^[12]

Based on the existing theoretical achievements at home and abroad, this research holds that the structural characteristics of the transnational alliance cooperation network of private universities in China have two main effects on the alliance cooperation performance. First of all, influence of network scale on alliance cooperation performance. According to a large number of survey results in the manufacturing, pharmaceutical, electronics and communication industries, the larger the network scale is, the more cooperation objects the members of the alliance will have, and the more resources they will directly or indirectly grasp.^[24] Therefore, in the process of transnational alliance cooperation, the more extensive the contact with other foreign organizations, the more network connections China's private colleges and universities have. The larger the scale of the network, the more resources China's private colleges and universities usually have on behalf of choosing to establish transnational alliances and cooperation. Second, the influence of network heterogeneity alliance cooperation performance. Relevant studies show that organizations need more technical support, information input and complementary resources in the process of their business activities, which puts forward higher requirements for the diversification of partners of organizations that choose to establish alliance cooperation.^[5] Thus, this study suggests that diversified partnerships will inevitably lead to the diversity of Chinese private colleges cross-border alliance cooperation network resources, resources through a combination of different and configuration, be able to choose a multinational alliance cooperation of China for the management of private colleges offer

different perspective and methods, so as to improve the performance of Chinese private colleges transnational strategic alliance cooperation.

Based on the above analysis, the research proposed the proposition 1.

Proposition 1: The network structure characteristics of transnational strategic alliance of Chinese private universities exert an obvious positive significance on the performance of the transnational strategic alliance of Chinese private universities.

2.2.2. The Network Relationship Characteristics and Alliance Performance

The research on the characteristics and effects of network relationships began with Granovetter's (1973) classic article “the power of weak relationships” published in the American journal of sociology .^[45] Subsequently, it has aroused scholars' extensive attention to network relationship characteristics, and network relationship characteristics have gradually become a focus concept in social science and economic management research fields. In the field of sociology, scholars focus on the use of network relationship characteristics to analyze various problems of individuals and society, while in the field of management, domestic and foreign scholars pay more attention to the impact and consequences of relationship characteristics, especially the empirical demonstration of organizational performance and growth performance. With the deepening of relevant researches, relational embeddability theory has been applied at multiple levels, including individual, team and alliance cooperation, especially at the levels of inter-organizational cooperation, organizational innovation, resource exchange and work performance.^[10] Therefore, “relational embeddedness theory” has gradually been widely concerned by scholars at home and abroad. The relational dimension is mainly to analyze the “intensity”, “duration” and “quality” of the relations among the actors participating in alliance cooperation. At present, the research on network characteristics is in a stage of development, the scholars on the basis of the theory of relationship embeddedness in the field of sociology and economic management research has achieved fruitful results, especially the alliance cooperation network, the network is considered to be choose to establish alliance cooperation among the members of the collaboration or important characteristic variables of communication is set up, and the alliance cooperation network members get network resources type and quality has a strong correlation. However, scholars hold different views on the impact of “relational embeddedness”.

Through literature review, it is found that relationship strength is the most concerned characteristic variable to measure the impact of relationship characteristics on alliance cooperation performance. However, the correlation between relationship strength (strong and weak) and alliance cooperation performance is still under debate. Some scholars support that “the power of the weak link” point of view, the view is the weak link often leads to a loose network, tend to build large-scale networks, access to network resources widely, the role of the weak link is the new information, technology and knowledge transfer and sharing of resources, such as can reduce the redundancy of network resources and reduce the network resources stranded. The weak links between the alliance cooperation can not only improve the breadth of interactive content, but also can maintain the flexibility of the evolution of the network to improve organization operation flexibility, and strong ties can increase the depth of the interactive content, enable organizations improve operational efficiency, but it may cause network bondage and inertia, eventually forming network lock. Domestic scholars demonstrated that a significant positive correlation between weak links and alliance cooperation performance by taking IC industry as an example.^[13] An empirical study of hangzhou industrial and academic park by using social network analysis method, and the results showed that: contrary to the hypothesis of “strong relationship theory”, weak relationship between alliance cooperation is beneficial to network diversity and improves alliance cooperation performance. In addition, some scholars discussed the role of strong relationship on alliance cooperation performance, supporting the view of “the power of strong connection”. They believed that in a close network relationship, frequent transmission of information such as market demand, marginal profit and business strategy among organizations would have an impact on business management strategy and technological innovation ability.^[23] The empirical research shows that

strong connection brings benefits to cooperative growth of alliance, because it can make full communication among cooperative members of alliance, establish trust and tacit understanding, and promote efficient flow and absorption of resources. Strong relationship through different ways to improve the performance of alliance cooperation, one is the effective communication to ensure the access to a wider range of resources, more conducive to absorb and valuable resources, the second is to reduce the cost of each other's supervision, conflict and misunderstanding in the communication process can be processed in a timely manner, reduce the communication cost and potential risks.^[34] The research samples from Germany to measure the cooperation intensity between alliance members by technological interweavement show that stronger relationship connection will lead to higher alliance cooperation performance. Therefore, members who choose to establish alliance cooperation should maintain regular communication and establish a relatively smooth dialogue mechanism, which plays an important role in promoting the performance of alliance cooperation. Relationship intensity or frequency is an important variable reflecting the network characteristics of alliance cooperation, which is positively correlated with the performance of alliance cooperation.^[7]

In addition, relationship duration and relationship quality are also important variables to measure the network relationship characteristics of alliance cooperation. Stable and lasting cooperative relationship will promote the sense of identity and trust between each other, make more investment, effectively deal with various conflicts and conflicts, and reduce the cost of supervision. By comparing American and German companies the research found that the explicit or implicit complementary knowledge hidden between groups or organizations can be effectively integrated only by cultivating mutual trust and long-term relationship. If we say that we have established a long-term cooperation network, the longer the relationship lasts, the higher the mutual understanding will be, and the faster we can understand each other in the process of dealing with interface management issues, so as to improve work efficiency and obtain valuable resources for ourselves.^[30] By analyzing the characteristics of network relations among cooperative members in Germany, and pointed out that the more stable and lasting connections between alliance members could promote communication and collaboration among members, improve the sharing of resources in the network, and maximize the utilization efficiency of innovative resources. In addition, a lasting and stable relationship promotes the cultivation of trust among alliance members, which is conducive to a more solid and transparent relationship between alliance partners, effectively promoting the transmission and sharing of network resources, and alliance members often seek cooperation partners to solve problems together, thus improving the performance of alliance cooperation.^[22] The quality of inter-enterprise relations determines the innovation capacity and is the key factor affecting enterprise performance. However, a few scholars pointed out that the strong relationship of alliance cooperation often excludes foreign entrants, lacks access to diverse, heterogeneous and simple sources of knowledge, and lacks the introduction of new ideas and perspectives, leading to "knowledge stickiness" and thus reducing the performance of alliance cooperation.^[35]

It can be said that the theories of structural embeddedness and relational embeddedness and their influences and consequences are controversial, and different scholars have conducted beneficial exploration from different perspectives. In particular, the influence of the strength of the relationship among the members who have established the alliance cooperation on the alliance cooperation performance is still under debate. Through sorting out the relevant empirical researches and conclusions of scholars at home and abroad, this paper finds that from the empirical researches on the relationship strength and alliance performance of alliance cooperative network members, the mainstream conclusion is that the relationship strength has a positive impact on alliance cooperative performance, so this research hypothesis also adopts this mainstream view.

Therefore, through the review of domestic and foreign literatures, this study believes that the relationship characteristics of the transnational alliance cooperation network of Chinese private colleges and universities play an important role in three aspects. First, relationship strength will be conducive to communication, increase the sense of trust, promote the absorption of explicit and

implicit knowledge, avoid opportunistic behavior and other problems, and have a significant positive impact on the performance of alliance cooperation.^[10] Second, establishing a stable and long-term connection relationship between partners of alliance cooperation is conducive to enhancing mutual trust and tacit understanding, reducing supervision cost and improving alliance cooperation performance. Moreover, the more stable the cooperative relationship is and the longer the cooperation lasts, the more members of the alliance can understand each other based on the sense of trust, and deal with conflicts in cooperation quickly, which is conducive to the improvement of the cooperation performance of the alliance.^[30] Third, the results of a survey of electronics industry alliance cooperation and high technology industries of transnational alliance cooperation shows that the relationship between alliance members quality has a positive significant influence on alliance cooperation performance, in the good relations of cooperation, more willing to share information and resources between alliance partners, has provided the new mentality for the alliance cooperation, share, advanced equipment, joint development projects, and be able to more actively to live up to its promise to effectively integrate the resources, reasonable resolve conflicts.^[32] Thus it can be seen that Chinese private universities with multinational coalition partners build a sense of loyalty, trust and commitment between the characteristics of the union of good cooperation, can help Chinese private colleges to obtain access to the partner market channels, and have competitive partners to establish good relations of cooperation, to improve the performance of the transnational strategic alliance of Chinese private universities plays an important role.

Based on the above analysis, this paper proposes the research proposition 2.

Proposition 2: The network relationship characteristics of transnational strategic alliance of Chinese private universities exert an obvious positive significance on the performance of the transnational strategic alliance of Chinese private universities.

2.3. Opportunism in the Transnational Strategic Alliance of Chinese Private Universities

Opportunistic behavior from the perspective of transaction cost, holding that opportunistic behavior means that investors cannot get the value increment generated by their investment, while the other party does not need to threaten by transaction in order to obtain relative benefits.^[14] From the perspective of resource dependence theory that any organization participating in alliance cooperation can be called as speculative behavior as long as it infringes on the core assets of the partner in any way.^[2]

To bring the network to make cooperation alliance members to gain a competitive advantage of complementary resources is defined as a network resources, network resources embedded in the network structure, do not exist in isolation, different alliance cooperation network structure will affect the alliance cooperation network members to touch and control the number of network resources, the more the better the quality, then the higher the performance of alliance cooperation.^[2] However, other scholars believe that opportunistic behavior is caused by the highly irrelevant “network resources”, which bring about the high difficulty of supervision and control and information asymmetry.^[20] Opportunistic behaviors would negatively affect the performance of alliance cooperation, and opportunistic behaviors would inhibit the improvement effect of resource complementarity among alliance members on alliance cooperation performance.^[25] Alliance cooperation network structure is characterized by economic activity with common social connection, each other can reduce transaction costs and improve the performance of alliance cooperation, but caused by pushing organization connecting heterogeneous resources of opportunistic behavior will weaken the alliance cooperation network structure characteristics on the impact of alliance cooperation performance.^[16] It can be seen that opportunistic behaviors reduce the benefits brought by heterogeneous resources to cooperative members of the alliance, and at the same time weaken the positive influence of the structural characteristics of the alliance cooperative network on the cooperative performance of the alliance.

The network relationship characteristics of alliance cooperation reflect that the trust formed by the transaction and interaction between alliance cooperation members makes the relationship

between alliance cooperation members gradually close, and then, based on reciprocity, it promotes the cooperation relationship between related parties, and affects the subsequent resource exchange and the improvement of alliance cooperation performance.^[22] The emergence of opportunistic behavior makes it difficult to coordinate the relations among members in the alliance, and at the same time, it is accompanied by the emergence of internal competition problems such as technology disclosure, investment reduction and breach of commitments.^[41] Opportunistic behaviors damaged the trust between alliance members and partners, decreased the quality of relations, and affected the stability and duration of alliance cooperation.^[1] Opportunism and the pursuit of self-interest would weaken the mutual commitment among the cooperative members of the alliance, and then it would evolve into the preferential choice of one member.^[6] It can be seen that opportunistic behavior will affect the relationship intensity, relationship quality and relationship learning of alliance cooperation, and weaken the positive impact of relationship characteristics of alliance cooperation network on alliance cooperation performance. Based on the above literature discussion established the following proposition.

Proposition 3: Opportunistic behaviors in the transnational strategic alliance in non-state colleges and universities in China can adjust the structure characteristics of the strategic alliance network, and exerts an obvious negative influence on the alliance performance.

Proposition 6: Opportunistic behaviors in the transnational strategic alliance in non-state colleges and universities in China can adjust the relationship characteristics of the alliance network, and exerts an obvious negative influence on the alliance performance.

2.4. Situational Factors of the Transnational Strategic Alliance of Chinese Non-state Colleges and Universities

Cultural distance among organizations in different countries is key factors to decide the stability of strategic alliance cooperation.^[36] The international experience of alliance members directly affects the cooperation and transnational alliance and alliance stability. Organizations with a certain international experience are easier to gain alliance legitimacy and bring better alliance performance. Therefore, this article chooses the above control variables to discuss the influence of research results to extend the study's external validity.^[31] Based on the above analysis, proposition 7 and 8 are proposed in this study.

Proposition 5: Different cultural distances among transnational strategic alliance members lead to different alliance performance.

Proposition 6: Different international experiences of transnational strategic alliance members in private colleges and universities in China lead to different alliance performance.

3. Conclusion and Enlightenment

This article introduces strategic alliance theory into international management of private colleges and universities in China. It analyzes network characteristics of the transnational strategic alliance from a network perspective, and the influence of opportunism after the establishment of the alliance on the alliance performance, and proposes corresponding theoretical statements. It's found in the analysis that the network of the strategic alliance is composed of structure characteristics and relationship characteristics. In it, network structure characteristics are constituted by network scale and network heterogeneity, while network relationship characteristics are composed of relationship intensity, duration and quality. The network structure and relationship characteristic of the alliance exert an obvious positive influence on alliance performance. Situational factors in the alliance, such as cultural distance and international experience, will lead to different alliance performance. The theoretical model of alliance performance with different network characteristics is built on this foundation. As show in figure 1.

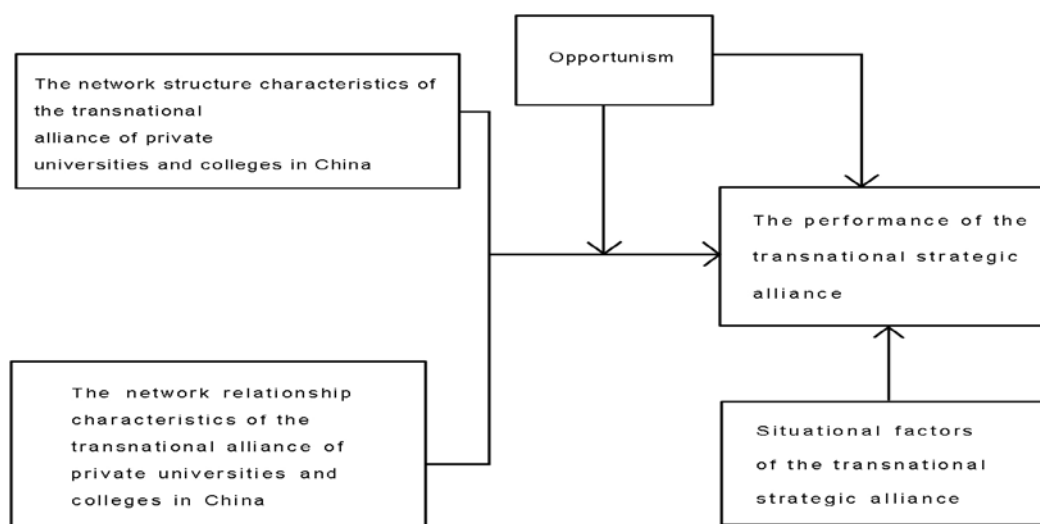


Figure 1 Theoretical model of the influence of different network characteristics on alliance performance of Chinese private universities.

Based on strategic alliance theory, this article starts from the network perspective to analyze the influence of different network characteristics of the strategic alliance on alliance performance, and the regulation of opportunism in it. By discussing the relationship between alliance network characteristics and alliance performance from a theoretical perspective, this article enriches the theoretical system of international study on higher education, and provide strategic analysis framework and decision reference for the international development of private colleges and universities in China. It provides a set of feasible management strategies and improving paths for the transnational alliance cooperation. Scholars in related fields can expand from multiple perspectives.

Firstly, this article focuses on theoretical analysis to propose related propositions. In future study, it can further validate the theoretical propositions and theoretical models raised in this article. The alliance performance and actual data related to the alliance network can be collected to verify theoretical models in this article. It can make use of analog simulation and experiments etc. By changing the value of certain parameters in the simulation model, or changing control elements of the experiment, it perfects the performance mechanism theory of transnational strategic alliance with different network characteristics.

Secondly, this article mainly analyzes the influence on strategic alliance performance from network characteristics, which is a static analysis. However, private colleges and universities in China and the educational environment keep developing and changing, so do the alliance relationship and alliance network attributes etc. The influence of various elements of alliance network characteristics on the alliance performance will also evolve along with it. Therefore, time dimension can be considered in future study to analyze the change of relationship among transnational alliance members and the overall structure of alliance network with the development of the education industry. It can also reveal the coevolution mechanism of the strategic alliance network and development of private colleges and universities in China.

Thirdly, combining net theory with strategic theory, this article analyzes the relationship between transnational strategic alliance of private colleges and universities in China and alliance performance. In future study, the research mode in this article can be extended to other fields of social network analysis. For example, it can be applied to analyze strategic alliance partner selection and the partnership, esp. the dynamic evolution mechanism of the influence of partnership on alliance performance.

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