A Study on the "Three-Dimensional Model" and Indicator System for Evaluating Chinese University Think Tanks (Postprint)

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Abstract

University think tanks, with their advantages of comprehensive disciplines, dense talent pool, independent status, and extensive external exchanges, have become an important component of the new-type think tank system with Chinese characteristics. This paper, starting from the theoretical significance and logical methodology of evaluating Chinese university think tanks, proposes a "three-dimensional model" for university think tank evaluation, namely: Dimension 1: evaluation of the relevance to the identification criteria and task requirements of new-type think tanks with Chinese characteristics is termed "congruence"; Dimension 2: from a quantitative perspective, evaluation through representation searches of university think tank institutions and chief experts on various public data information platforms is termed "activeness"; Dimension 3: from a qualitative perspective, evaluation based on the status of policy advice adoption, theoretical research achievements, and think tank talent cultivation is termed "contribution". It also studies the evaluation index system for university think tanks based on the "three-dimensional model", aiming to provide ideas and direction for the construction and development of Chinese university think tanks.

Full Text

Study on the Three-dimensional Model and Index System of Chinese University-affiliated Think Tanks Evaluation

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Abstract

[**Purpose/significance**] With the advantages of complete disciplines, intensive talents, independent identity, and extensive external communication, university-affiliated think tanks have become an important component of the new types of think tanks with Chinese characteristics. This paper constructs an evaluation index system for university-affiliated think tanks based on a "three-dimensional model" to provide ideas and direction for the construction and development of Chinese university-affiliated think tanks. [**Method/process**] Starting from the theoretical significance and logical methodology of Chinese university-affiliated think tank evaluation, this paper proposes a three-dimensional evaluation model. Dimension 1—*Fitness*: evaluates the alignment with identification standards and task requirements for new types of think tanks with Chinese characteristics. Dimension 2—*Activity*: quantitatively evaluates the visibility of think tank institutions and chief experts through public data information platforms. Dimension 3—*Contribution*: qualitatively evaluates the contribution through policy advice adoption, theoretical research output, and think tank talent cultivation. [**Result/conclusion**] Conducting evaluation of university-affiliated think tanks is an important means to enhance universities' conscious awareness of strengthening new-type think tank construction. The three-dimensional evaluation model proposed in this paper expands the horizons, dimensions, and methods of university-affiliated think tank evaluation.

Keywords: university-affiliated think tanks; three-dimensional model; evaluation index system

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1.1 Chinese University Think Tanks as an Important Component of New Types of Think Tanks with Chinese Characteristics

As is well known, the *Opinion on Strengthening the Construction of New Types of Think Tanks with Chinese Characteristics* classifies new think tanks into five categories: (1) national and provincial academies of social sciences; (2) party schools and administrative colleges at central and provincial levels; (3) university-affiliated think tank institutions (referred to as university think tanks); (4) science and technology innovation think tanks and enterprise think tanks; and (5) various independent social think tank institutions. Among these, Chinese university think tanks, with their distinctive features and obvious advantages, have become an irreplaceable and important component of new types of think tanks with Chinese characteristics.

University think tanks possess unique characteristics and advantages that other types cannot replace. First, they enjoy disciplinary advantages. Universities have complete disciplinary categories, prominent strong disciplines, and concentrated national and local key laboratories and research institutions, which

facilitate the integration of disciplinary resources and the leveraging of interdisciplinary strengths to conduct comprehensive, forward-looking, targeted, and reserve policy research around major issues urgently needed for party and government decision-making and the major tasks of governing the country according to law. Therefore, multidisciplinary and interdisciplinary features constitute important advantages for building think tanks in universities.

Second, they possess academic advantages. Universities excel in academic research and theoretical exploration, with a long history and profound professional research accumulation, as well as standardized and scientific research methods. They can provide specialized policy recommendations and comprehensive analysis ideas for national and government decision-making, and plan development strategies, thereby ensuring the professionalism, standardization, and scientific nature of strategic and policy research for the party and government.

Third, they possess talent advantages. Talent advantage is the fundamental foundation for building university think tanks. Universities gather a large number of outstanding talents, with a high concentration of high-end talents and a stable talent team. They have a complete cultivation system from undergraduates to doctoral students, concentrating more than 80% of China' s social science research talents. They also have a large number of exchange scholars with international perspectives, providing a solid talent prerequisite for think tank construction and development. In recent years, think tank teams led by chief experts (scholars) with significant influence have been rapidly formed, becoming an important force in new types of university think tanks with Chinese characteristics.

Fourth, they possess identity advantages. Compared with other types of think tank institutions, university think tanks have greater relative independence. The independent consciousness, critical spirit, and rigorous academic attitude of university think tank experts and scholars make it easier to reflect the fairness and scientific nature of "third-party" opinions. The exchange of different academic viewpoints and policy recommendations, as well as equal discussion, are the prerequisites and foundation for scientific decision-making, providing independent, fair, and rigorous expert suggestions and opinions for long-term, strategic, and forward-looking research.

1.2 Theoretical Significance of Evaluating Chinese University Think Tank Construction and Development

In recent years, Chinese university think tanks have developed rapidly, with various types emerging endlessly, driven both by the full promotion of government and management departments and by the self-construction requirements of university think tank institutions themselves. Therefore, exploring evaluation methods and indicator systems for university think tank construction and development can guide and regulate the healthy and orderly development of Chinese university think tanks. As is well known, Chinese university think

tank construction has its own advantages, but also faces certain shortcomings, such as dependence on traditional academic paths, constraints of institutional mechanisms, insufficient channels for achievement transformation, and significant differences between the government' s administrative discourse system and writing norms and universities' theoretical achievements and expression methods, requiring a transformation process for academic innovation achievements to become government policy recommendations. University think tank experts and scholars face high demands in all aspects: on the one hand, they must conduct in-depth field investigations to obtain first-hand information and data to provide strong data and methodological support for policy advice; on the other hand, they must utilize theoretical innovation achievements and academic research accumulation to provide strategic and directional suggestions for economic transformation, social transformation, and government transformation.

Currently, Chinese university think tanks present a diversified development trend, but mainly fall into three categories. The first is comprehensive disciplinary think tanks, which aim to leverage university disciplinary and talent advantages to comprehensively study and solve hot, difficult, and key issues in reform, development, and stability, as well as major issues facing global challenges. These university think tanks often integrate university-wide disciplinary and talent resources, mobilizing the entire strength of high-level universities to respond to and undertake major national strategic needs and tasks. How to build them into "substantive research institutions that comply with national laws and regulations, are relatively stable, and operate in a standardized manner" requires innovation and exploration in institutional mechanisms. The second is specialized characteristic think tanks, which evolve and form in two directions. One direction is the transformation from high-level academic research institutions in universities with strong theoretical innovation capabilities and disciplinary research teams, doctoral and master' s programs, and national key disciplines and research bases that have conducted long-term continuous research in certain fields, accumulated a large number of achievements and research data, and attracted attention and emphasis from national and government departments, thus making the transition to think tank research institutions relatively easy. The other direction is universities' active planning and construction in response to national potential and major strategic needs, forming their own characteristics and advantages through long-term accumulation, such as the African Studies Institute of Zhejiang Normal University, which has become a distinctive and advantageous university think tank after more than ten years of research accumulation on African issues, attracting national attention and emphasis. The third is government-cooperation think tanks, which are the product of cooperation between government and universities. While governments and relevant departments need intellectual support and think tank support for scientific decision-making, universities have the foundation of disciplines, talents, and achievements, finding cooperative "points, lines, and surfaces" in the process of planning research, strategic research, and policy research. Such government-university cooperative think tank institutions can often form

specialized, constructive, and practical policy recommendations.

Building new types of university think tanks with Chinese characteristics is a historical and exploratory task, representing a new mission for university development, a new expansion of university functions, and broadening and enriching universities' new function of serving society. Through research on evaluation methods and indicator systems, we can further guide and standardize university think tank construction, gradually forming a new type of university think tank system with clear positioning, distinctive features, moderate scale, and rational layout. By reforming the management systems and mechanisms of university think tanks, innovating organizational forms, and integrating high-quality resources, we can focus on building a batch of new university think tanks that the party and government can trust and utilize, providing high-level intellectual support for scientific decision-making by the party and government.

1.3 Evaluation Methods and Indicators for Chinese University Think Tank Construction at a Specific Development Stage

Chinese university think tank construction is currently in an exploratory and transitional period. To adapt to new situations and requirements for university think tanks, establish new development orientation, guide university think tanks to shoulder new responsibilities and missions, and reflect national target requirements and policy orientation needs, researching evaluation methods for Chinese university think tank construction at the current stage and constructing an evaluation indicator system for university think tanks has not only theoretical value but also practical significance.

The construction of Chinese university think tank evaluation methods and indicator systems adheres to "four major principles." First is the principle of orientation. Chinese universities are actively exploring the construction of new types of university think tanks with Chinese characteristics, and national and local governments and relevant departments also hope to select, cultivate, and fund university think tank construction and development. Therefore, evaluation methods and indicator selection have orienting functions, reflecting the direction of university think tank construction and development. The *Opinion on Strengthening the Construction of New Types of Think Tanks with Chinese Characteristics* proposes "giving play to the important functions of new types of think tanks with Chinese characteristics in providing policy advice, theoretical innovation, public opinion guidance, social services, and public diplomacy," while the Ministry of Education' s *Plan for Promoting the Construction of New Types of University Think Tanks with Chinese Characteristics* requires university think tanks to "play important functions in strategic research, policy advice, talent cultivation, public opinion guidance, and public diplomacy." Second is the principle of systematicness. University think tank evaluation methods and indicator systems require certain logical relationships among indicators. They

should not only reflect the main characteristics, status, and internal connections of university think tank construction and development from different perspectives, but also ensure that each subsystem—namely, first-level, second-level indicators, and micro measurement points—consists of a set of indicators that are both independent and interconnected, forming an organic unity. The indicator system construction has hierarchy, from top to bottom, from macro to micro, forming an inseparable evaluation indicator system. Third is the principle of scientificity. Evaluation methods and indicator design and selection must be based on scientific principles, objectively and truly reflecting the characteristics and status of university think tanks, and comprehensively reflecting the real relationships among indicators. Evaluation indicators in the fields of theoretical innovation, talent cultivation, and social services are also determined by the basic characteristics, features, and advantages of university think tanks. The setting of the evaluation indicator system, the distribution of weights among indicators, and the division of evaluation standards should all match the stage, level, characteristics, and features of university think tanks. Fourth is the principle of comparability, operability, and quantifiability. The calculation measures and methods for selected evaluation indicators must be consistent and unified, considering whether they can be quantitatively processed for mathematical calculation and analysis. Evaluation indicators should not be too numerous or detailed, nor cumbersome or overlapping. At the same time, they should not be too few or overly simple, avoiding information omission and errors or distortion. Observation point information and data should be easily obtainable, with simple and understandable calculation methods, strong micro-level characteristics, and full utilization of open public data resources, applying information technology, big data, and cloud computing technology for spatiotemporal mining, making concrete measurement and data collection highly practical, operable, and comparable.

Furthermore, university think tank evaluation methods and indicator systems should facilitate the development of high-quality, high-level university think tanks with significant social influence and international reputation, providing more high-quality and high-level research results and policy recommendations for the nation and government. They should emphasize university think tank planning and construction, scientifically allocate disciplinary and talent resources, encourage the formation of institutional arrangements for participating in decision-making consultation, innovate organizational forms and management methods of university think tanks, and cultivate more leading figures and outstanding talents in the think tank field.

2 Construction and Connotation of the "Three-Dimensional Model" for Chinese University Think Tank Evaluation

Since the reform and opening up, although the construction and development of Chinese university think tanks have consistently attracted attention from political and academic circles, they have remained in a state of "spontaneous spillover"

from university academic research, disciplinary achievements, and talent advantages. Some high-level universities, relying on national key disciplines and research base construction, have used research institutes (centers) as foundations and academic leaders as heads of teams to undertake projects commissioned by governments at all levels, assuming some decision-making consultation and policy advice functions of university think tanks and becoming explorers and pioneers in Chinese university think tank construction.

Since January 2015, when the General Office of the Central Committee of the Communist Party of China and the General Office of the State Council issued the *Opinion on Strengthening the Construction of New Types of Think Tanks with Chinese Characteristics*, university think tank development has begun to move from spontaneity to consciousness, presenting a flourishing and emerging state. How to scientifically evaluate, reasonably standardize, and orderly and healthily promote university think tank construction has not only theoretical value but also practical significance. Constructing a "three-dimensional model" for Chinese university think tank evaluation to evaluate university think tank institutions through three dimensions—fitness, activity, and contribution—is a beneficial exploration.

2.1 Fitness: Evaluation of Relevance to Think Tank Identification Standards and Task Requirements

Fitness is a method to judge the degree of causal connection between phenomenon and essence, form and content. The think tank function of university research institutions does not equal university think tank institutions. The former represents a new expansion and form of university social service functions, while the latter are specialized policy research institutions attached to or within universities. The central *Opinion on Strengthening the Construction of New Types of Think Tanks with Chinese Characteristics* provides a relatively authoritative and scientific definition of think tank institutions: new types of think tanks with Chinese characteristics should meet eight basic standards: (1) be substantive research institutions that comply with national laws and regulations, are relatively stable, and operate in a standardized manner; (2) have distinctive features and long-term focused decision-making consultation research fields and achievements; (3) have professionally representative figures and full-time researchers with certain influence; (4) have guaranteed and sustainable funding sources; (5) have multi-level academic exchange platforms and achievement transformation channels; (6) have functionally complete information collection and analysis systems; (7) have sound governance structures and organizational charters; and (8) have good conditions for conducting international cooperation and exchanges. From the perspective of international evaluation practices and domestic identification standards, many Chinese university think tanks are still in the transition period of the initial stage. Through evaluation of the relevance between think tank institution identification standards and task requirements, analyzing, comparing, and identifying from the dimension of fitness can help

university think tank institutions clarify construction goals, define development directions, improve institutional mechanisms, consolidate think tank foundations, and enhance policy consultation capabilities.

Most Chinese university think tank institutions have transitioned from traditional research institutions or are composed of multiple research institutions, and can be roughly divided into three categories. The first category consists of university think tank research institutions that have think tank forms and meet requirements, namely substantive research institutions with the connotation of new types of think tanks with Chinese characteristics, such as the "national high-end think tanks" established in Chinese universities in recent years based on national strategic needs, policy consultation capabilities, and foundations. The second category comprises universities promoting the transformation of traditional research institutions into new types of think tanks. Many universities have deepened the reform of university think tank management systems, innovated organizational forms, integrated high-quality resources, and built new think tanks that the party and government can trust and utilize, while some provincial and municipal governments have selected and cultivated university think tank institutions that meet local needs. The third category includes research institutions that have the function of providing policy advice but are not mainly engaged in policy research and policy consultation. The first two categories can be classified as university think tanks, while the third category should not be classified as university think tank institutions.

Regarding the functional positioning of Chinese university think tanks, the Ministry of Education' s *Plan for Promoting the Construction of New Types of University Think Tanks with Chinese Characteristics* (Jiao She Ke [2014] No. 1) clearly requires that university think tanks should play important functions in strategic research, policy advice, talent cultivation, public opinion guidance, and public diplomacy. These "five major tasks and requirements" also serve as important bases for evaluating the "fitness" of university think tank institutions. Through fitness evaluation, we can establish diverse and rationally structured organizational forms of university think tanks, build a batch of social science thematic databases and laboratories, and soft science research bases. Moreover, by leveraging university advantages and characteristics, we can build a batch of global and regional issue research bases and overseas Chinese academic research centers.

2.2 Activity: Evaluation Through Public Data Characterization Search of Think Tank Institutions and Chief Experts

University think tank evaluation faces two major difficulties: information asymmetry and information overload. The former raises doubts about the completeness, systematicity, and authenticity of evaluation data, while the latter makes it difficult to effectively define, hierarchically select, and scientifically evaluate massive amounts of disordered data. Fortunately, in today' s rapidly developing information society, new-generation information technology has made it

possible to conduct characterization searches of specific objects on public data information platforms. Major activities participated in by university think tank institutions and chief experts, media voices, and elaborated viewpoints will all leave traces and records, including major projects of national funds undertaken, major research projects commissioned by the government, academic papers published at home and abroad, theoretical viewpoints, and even influence (citation rates), all of which can be obtained through search results on public data information platforms.

Therefore, we have established the dimension of "activity" for university think tank evaluation as a method to compensate for the incompleteness of university think tank information data, and also to utilize public data information platforms and apply big data and cloud computing technology to conduct activity evaluation of university think tanks. As is well known, Baidu (Nasdaq: BIDU) is the world' s largest Chinese search engine, with a market share of 90% in China. Baidu search frequency can characterize the activity and influence of specific objects. Currently, Baidu is also exploring searches in specific fields, such as news, academia, forums, and conferences. Baidu search can conduct annual, monthly, and precision searches for specific objects, such as university think tank institutions and chief experts. Web crawler technology (Zoology) is a program that automatically obtains web content and is an important component of search engines.

Chief experts (chief scientists) of university think tank institutions—namely, professionally representative figures with certain influence—hold a pivotal position. Chief experts are not only academic leaders with profound academic attainments but also specially appointed experts of decision-making consultation committees at all levels of government departments. They can both represent individuals in expressing academic viewpoints and policy recommendations to society and the government, and lead research teams to undertake major planning, policy, and regulation thematic research projects commissioned by the government. Therefore, network characterization search of chief expert "activity" can, on the one hand, reflect the activity level on public data information platforms in a data-based and quantifiable manner, and on the other hand, enable comparative evaluation of network search frequencies of different chief experts in the same time period. Network search data show that university background, regional differences, and professional distinctions all affect "activity." Network search "activity" is not a constant but a variable. When university think tank institutions and chief experts have high social participation, frequent media voices, and are active in high-end forums and conferences, "activity" will increase by leaps and bounds in a pulsed manner. Otherwise, when chief experts are in the process of generational transition, "activity" will undergo new changes.

The "activity" of university think tanks also manifests in the research team and comprehensive strength, composed of full-time researchers and administrative staff, as well as many part-time researchers or visiting scholars, including assistant researchers and students such as master' s, doctoral, and postdoctoral

students, which are characteristics and advantages of university think tanks. Of course, the amount of funding for university think tanks also affects the construction of substantive think tanks, the overall level of full-time researchers and research teams, and their social influence and activity.

2.3 Contribution: Evaluation of Policy Advice Adoption, Theoretical Research Output, and Talent Cultivation

As is well known, contribution rate is an economic term and an indicator for analyzing economic benefits, referring to the ratio of effective or useful output quantity to resource consumption or occupation quantity, that is, the ratio of output to input. Contribution degree is a sociological term that evaluates the degree of leadership recognition, government adoption, social influence, and theoretical leadership of think tank research results. Therefore, evaluating the contribution degree of university think tanks mainly focuses on their performance in state governance, strategic planning, decision-making consultation, public policy, and public diplomacy, as well as the status of policy advice adoption, theoretical research output, and think tank talent cultivation.

The transformation of universities' natural science achievements into productive forces and the transformation of social science achievements into government state governance capabilities are both the requirements of the times and historical trends. University think tanks should leverage their own advantages and characteristics to contribute in three main areas. First, decision-making consultation contribution evaluation: focusing on major issues and tasks urgently needed for party and government decision-making, with serving party and government decision-making as the purpose and policy research consultation as the key direction, offering suggestions and policy advice with pertinence and operability. Second, theoretical research contribution evaluation: leveraging the advantages of university think tanks' solid basic research strength and complete disciplinary categories to conduct basic theoretical research and multidisciplinary comprehensive research on major practical issues concerning the country' s long-term development, providing solid theoretical support for scientific decision-making. Third, talent cultivation contribution evaluation: leveraging the advantages of university think tanks in talent cultivation to cultivate compound think tank talents with firm positions, profound theories, broad visions, familiarity with situations, and mastery of policies, providing strong talent guarantees for building new types of think tanks with Chinese characteristics. Simultaneously, accepting and undertaking foreign think tank talent cultivation tasks to achieve the internationalization of think tank talents.

In summary, the contribution degree evaluation dimension of university think tanks mainly evaluates whether they can conduct forward-looking, targeted, and reserve policy research, propose specialized, constructive, and practical policy recommendations, improve the comprehensive judgment and strategic planning capabilities of national government, actively clarify doubts and confusions regarding social hot issues to guide public opinion, and leverage extensive external

exchange advantages to actively conduct cultural exchanges and promote public diplomacy. Of course, the greatest advantages that distinguish university think tanks from other types are, first, long-term and unremitting professional and academic accumulation, continuous tracking and innovative theoretical research, comprehensive and interdisciplinary disciplinary advantages, and independence of thinking beyond institutional barriers, social fairness, and research rigor. Therefore, theoretical research and academic innovation remain important evaluation indicators and observation points in university think tank evaluation. Second, talent cultivation is the central work of universities. Scientific research, teaching, and social service are the three major tasks of universities and also the evaluation objects of university think tank contribution degree. Whether conducting planning research on global and strategic issues or thematic and policy research on key, hot, and difficult issues of government and society, chief experts lead think tank research teams to participate deeply, producing both achievements and talents, which is an effective way for university think tank talent cultivation. University think tanks' undertaking of international think tank talent cultivation is also an important indicator for evaluating contribution degree and represents contribution at the international level, which is an objective requirement for public diplomacy, cultural mutual learning.

3.1 Selection and Construction of University Think Tank Evaluation Indicators

(1) Fitness–X Dimension. The measurement of university think tank fitness is set according to the business undertaken by university research institutions and their establishment goals, focusing on three elements: (a) organizational structure; (b) research team; and (c) funding sources.

(2) Activity–Y Dimension. University think tank activity represents its dissemination capability in the media, which can be transformed into social influence. University think tank activity mainly includes three elements: (a) academic exchange activity; (b) network media activity; and (c) policy advice activity.

(3) Contribution–Z Dimension. University think tank contribution represents its benefits to society, with indicators mainly including three elements: (a) decision-making consultation; (b) theoretical research; and (c) talent cultivation.

3.2 Spatial Expression of the University Think Tank Evaluation "Three-Dimensional Model"

Based on the analysis of the three-dimensional elements of X-Y-Z, from a systematic perspective, the overall strength of a university think tank depends on the capabilities of the above three-dimensional elements. Its three-dimensional spatial expression is shown in Figure 1 [Figure 1: see original paper].

In the formula, X, Y, and Z represent fitness, activity, and contribution degree, respectively, while the weights of secondary indicators and tertiary indicators under each dimension are represented accordingly, with A, B, and C as secondary indicators and a, b, and c as tertiary indicators.

3.3.1 Strength Definition of University Think Tank Capability Evaluation

We use the variable T(X, Y, Z) to represent the three-dimensional spatial expression based on the comprehensive capabilities of university think tanks. Since X, Y, and Z are each composed of several constituent elements of think tank capabilities, these elements constitute the indicators for measuring university think tank capabilities. According to the designed relevant indicators and calculation methods, we can calculate the values and indices on each dimension, represented by jkAk, jkBk, and jkCk, respectively. The measurement of think tank capability strength quantitatively reflects the capabilities of university think tanks across the three dimensions.

3.3.2 Measurement Methods for University Think Tank Capability Evaluation

Each of the three dimensions is calculated according to the following formulas:

1. **Fitness**
2. **Activity**
3. **Contribution**

In the formulas, X, Y, and Z represent fitness, activity, and contribution degree, respectively, while the weights of secondary indicators and tertiary indicators under each dimension are represented accordingly, with A, B, and C as secondary indicators and a, b, and c as tertiary indicators.

3.4 Logical Relationship Analysis of Indicators at All Levels of the "Three-Dimensional Model"

There are various methods for think tank evaluation indicator systems. Based on the aforementioned "three-dimensional model" for university think tank evaluation, this paper designs evaluation indicators for the X dimension (fitness), Y dimension (activity), and Z dimension (contribution) and conducts measurements. There exists a progressive logical relationship among indicators at all levels, ultimately forming specific observation points that support effective measurement of the "three-dimensional model." The specific evaluation indicator system is shown in Table 1 .

3.4.1 Measurement Characteristics of X-Dimension (Fitness) Indicators at All Levels

The X dimension (fitness) reflects the essence and characteristics of a university think tank, namely the evaluation indicators for the "compliance" of new types of university think tanks with Chinese characteristics. Therefore, the integrity of organizational structure, the configuration of research teams, and the funding supporting think tank research work are important measurement indicators. Among them, whether the organizational structure relies on high-end platforms, the completeness of organizational structure settings, and the integrity of data information preservation jointly support the organizational integrity of university think tanks. Generally speaking, high-level universities have high-level disciplines, high-level research platforms, and high-influence experts and scholars and research teams, providing very superior foundations and conditions for transforming high-level research institutions into university think tanks, but this is not an inevitable result. There are essential differences between university research institutions with think tank functions and real university think tanks. Although many are currently in the process of transformation and exploration, the evaluation dimension and indicators of fitness will help research institutions transform into think tank institutions. Practice has proven that university think tanks with sound organizational structures can operate more efficiently, and complete data information can make university think tanks more advantageous in historical inheritance and external publicity. University think tanks are research-oriented, so the construction of research teams is very important. The social influence of chief experts can greatly amplify the social influence of their think tanks, while the number of full-time researchers and the stability of research teams can reflect whether the think tank can continuously produce high-quality think tank products. Funding support determines the development stability of university think tanks and can also enable them to expand their scale.

3.4.2 Relationship Analysis of Y-Dimension (Activity) Indicators at All Levels

The Y dimension (activity) characterizes the level and frequency of think tank products output and disseminated by university think tanks within a certain period. Policy advice refers to think tanks' product output to government departments, network media refers to product output to the general public, and academic exchange is the ideological output and absorption of university think tanks in the academic community. Among them, policy advice is divided into two modes: consultation reports and policy participation. The former is the indirect influence mode of think tank ideological products on policymakers, while the latter is the direct influence mode of think tank ideas on policies. Since the main goal of think tank construction is to provide support for government decision-making, university think tanks have a strong interest in policy participation and can often actively participate in policy formulation in their focus areas.

Most high-level university think tanks maintain good interactive relationships with relevant policy departments, and this frequency of policy participation is an important manifestation of think tank activity. With the widespread application of internet technology, university think tanks increasingly disseminate their products through the internet, using Weibo, WeChat public accounts, and web pages to rapidly spread think tank products and obtain widespread social attention in the short term. On the other hand, domestic and foreign traditional media are also important channels for university think tanks to convey ideological products, as traditional media's long-term accumulation makes viewpoints disseminated through them more authoritative and socially recognized. University think tank activity is also reflected in academic exchanges. Different from other types of think tanks, the value of university think tanks also lies in academic community recognition. Maintaining academic frontiers and absorbing the latest academic viewpoints for think tank products are important experiences for university think tanks to maintain ideological leadership. Therefore, university think tank activity is also manifested through hosting high-end forums, conference exchanges, and international cooperation.

3.4.3 Logical Representation of Z-Dimension (Contribution) Indicators at All Levels

The Z dimension (contribution) reflects the recognition and adoption degree of university think tank products by political, academic, and social circles. It can also be divided into three aspects: first, evaluation from government decision-making departments on university think tank products, namely decision-making consultation quality; second, evaluation from the academic community on university think tank products, namely academic research level; and third, evaluation from the general public on university think tank products. Since university think tanks cultivate numerous practitioners in relevant fields, talent cultivation is also an important evaluation indicator of contribution degree by the general public. Among them, the quantity and level of adopted decision-making consultation can reflect the recognition and adoption degree of university think tank products by government decision-making departments. The number of instructions from leaders, participation in research and drafting of relevant plans, and the effect of government-commissioned projects transformed into policies reflect the policy contribution degree of university think tanks. Academic research is one of the important responsibilities of university think tanks and also an important feature distinguishing them from other types of think tanks. Therefore, traditional indicators reflecting academic contribution degree, such as the quantity and level of research projects, papers, monographs, and research results, are also important indicators for evaluating university think tanks. Another important feature distinguishing university think tanks from other types is their function of carrying talent cultivation. University think tanks bear the responsibility of cultivating reserve professional research talents for other types of think tanks, so talent training and capability expansion by university think tanks are also important indicators of their contribution degree.

References

[1] Mei Xinlin. Strategic Significance and Corresponding Countermeasures of University Think Tank Construction[M]//Chinese Scholarship Going to the World. Proceedings of the 6th China Social Science Frontier Forum. Beijing: China Social Sciences Press, 2013: 45-51.

[2] Chen Guoying, Bao Jiangqiang, Zhong Weijun, et al. Research on Chinese University Think Tank Evaluation: Dimensions and Indicators[J]. Higher Education Evaluation and Development, 2016(05): 18-29.

[3] General Office of the Central Committee of the Communist Party of China, General Office of the State Council. Opinion on Strengthening the Construction of New Types of Think Tanks with Chinese Characteristics[EB/OL]. [2017-08-10]. http://www.gov.cn/xinwen/2015-01/20/content_2807126.htm

[4] Ministry of Education. Plan for Promoting the Construction of New Types of University Think Tanks with Chinese Characteristics[EB/OL]. [2017-08-10]. http://www.gov.cn/gzdt/2014-02/28/content_2625304.htm.

[5] Research Group of Center for Global Think Tanks Research, Zhejiang University of Technology. Research on Network Activity Evaluation of University Think Tanks in Zhejiang Province[J]. Journal of Zhejiang University of Technology (Social Science Edition), 2016(02): 121-127.

[6] Chen Guoying, Zhang Jie, Chen Ming. Research on Network Activity and Influence of Chinese University Think Tanks: Analysis Based on Baidu Search Index[J]. Think Tank: Theory & Practice, 2017, 2(2): 15-23.

Author Contributions

Mei Xinlin: Proposed the "three-dimensional model" and overall conception of the paper;
Chen Guoying: Conducted three-dimensional evaluation analysis and revised the paper;
Chen Ming: Revised the paper;
Miao Yang: Elaborated on the three-dimensional model expression;
Bao Jiangqiang: Conceived and wrote the overall paper.

Note: Figure translations are in progress. See original paper for figures.