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Construction of The Evaluation Index System for The Implementation of College Students' Physical Health Promotion Policies in Heilongjiang Province

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Abstract

Background and Aim: Since the 19th National Congress of the Communist Party of China made significant arrangements for the Healthy China strategy, policies for promoting students' physical health have been introduced in a "burst" manner, and the promotion of students' physical health has been increasingly valued and the main objective of this study was Construction of an evaluation system for the execution of policies for promoting students' physical health in universities in Heilongjiang Province.

Materials and Methods: The initial indicators of the evaluation system for the implementation of the physical health promotion policy of college students in Heilongjiang Province were selected by using research methods such as literature review, field survey, etc. The evaluation index system for the implementation of the physical health promotion policy of college students in Heilongjiang Province was finally constructed through the mathematical statistics method and the 3 rounds of the Delphi method, and the expert opinions were standardized using the entropy weight method combined with the mathematical statistics method, Calculate the weights of various levels of indicators in the evaluation system for the execution of physical health promotion policies for college students in Heilongjiang Province.

Result: (1) The evaluation system for the execution of policies to promote the physical health of college students in Heilongjiang Province consists of 5 first-level indicators, 9 second-level indicators, and 26 third-level indicators. The first level indicator with the greatest weight was executive subject consensus (0.512) and the indicator with the least weight was policy implementation personnel value orientation (0.114). The secondary level indicator with the greatest weight was the material allocation of the physical health promotion policy (0.569) and the indicator with the least weight was the value orientation of executive staff (0.114). 26 third-level indicators and weight coefficients are constructed based on first-level and second-level indicators. **Conclusion:** The total evaluation system for the execution of policies to promote the physical health of college students in Heilongjiang Province consists are 40 indicators. According to expert evaluation, it was found that the index evaluation system is reasonable, scientific, and rigorous, forming a relatively complete evaluation system for the execution of policies to evaluate the physical health of college students in Heilongjiang Province. **Keywords:** Colleges and Universities; Promotion of Students' Physical Health; Policy Execution Ability;

Introduction

Evaluation Index System

China has attached great importance to and cared about the cultivation and development of college students over the years. The 19th National Congress of the Communist Party of China made a major deployment for building educational power in the new era and implementing the strategy of a healthy China. College students, as an indispensable force in building an educational power, are the new backbone force of the country's social and economic development, and their healthy development plays a pivotal role. In 2016, the "Healthy China 2030" Planning Outline was issued, in which the promotion of sports activities for key groups clearly proposed to ensure that students' daily sports activities in school should not be less than 1 hour (The CPC Central Committee and The State Council, 2016). Then the General Office of the State Council issued the Opinions on Strengthening School Physical Education and Promoting the Comprehensive Development of Students' Physical and Mental Health, which put forward important deployment and requirements for the development of school physical education to promote the development of students' physical health. Subsequently, in 2017, the State Council's Notice on Printing and Distributing the "13th Five-Year Plan" for the Development of National Education proposed that "the goal should be to comprehensively enhance the students' physique and quality and the improvement of the physique should be an important part of education quality monitoring and education evaluation." (The State Council, 2017). In June 2019, the State



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Council's Action Opinions on the Implementation of Healthy China proposed that the physical health of college students should be included in the assessment and evaluation of colleges and universities (The National Health Commission, 2019). Then in September, the Ministry of Education issued the Opinions on Deepening the Reform of Undergraduate Education and Teaching and Improving the Quality of Talent Cultivation in an All-round Way, which proposed that "Strengthen the assessment of students' physical quality to make students meet the completion standard specified in the National Standard for Students' Physical Health." Since the issuance of Central Document No. 7, the physical health of college students has repeatedly appeared in national leaders' speeches and important policy documents. The healthy development of college students' physiques has become a high-level intensive area of the policies issued by the Party Central Committee and the State Council, which shows that the Party and the state attach great importance to the physical health of college students.

During the 43 years from 1978 to 2012, the state promulgated many sports policies. Although the promotion of college students' physical health has made overall short-term progress under the guidance of the policy, the downward trend of students' physical health has not been effectively controlled, and the current situation of college students' physical health development does not meet the policy objectives (Zhou Conggai, 2011). The implementation of the student's physical health promotion policy has some obstacles in policy implementation, such as perfunctory policy implementation, biased policy implementation, and lack of policy implementation. Therefore, it is necessary to strengthen the evaluation research on the implementation of college students' physical health policy. Constructing the evaluation index system for the implementation of the students' physical health promotion policy can provide the basis and standard for the evaluation of the implementation of the college students' physical health promotion policy, and can also provide the methods and ways for the evaluation of the implementation effect of the college students' physical health promotion policy, to improve the current difficulties faced by the college students' physical health development in Heilongjiang Province China, and strengthen the efficient implementation of the college students' physical health promotion policy, to achieve the goal of improving the physical health level of college students (Kelly R E., 2009).

The evaluation of policy execution is the key link to test the effect of policy implementation, and effective policy implementation is the key factor to promote the healthy development of students' physique, while the evaluation of policy execution of physique health promotion is an important factor to promote the realization and achievement of the policy objectives of college students' physique health promotion. At present, domestic research on policy implementation evaluation mainly focuses on the perspective, standards, and methods of policy implementation evaluation. The research on the implementation of students' physical health promotion policy has always been the focus of scholars' attention, especially the research on the "adolescent" physical health promotion policy, while the systematic research on the construction of Heilongjiang Province's physical health promotion policy implementation evaluation system is still relatively weak. Heilongjiang Province promulgated and implemented the Regulations on the Promotion of Students' Physical Health in 2009. More than 10 years since then, Heilongjiang Province has issued several relevant supporting policy documents.

In the paper "Construction of Evaluation Indicator System for Public Policy Execution", Feng Dong proposed an indicator system with dual attribute differences from different dimensions based on the discrimination between policy execution ability and policy execution strength, namely, the attribute of executive subject and the attribute of executive situation. He proposed static executive individual unit and organizational unit; There are four indicator units, namely, dynamic implementation individual unit and organizational unit, which can directly reflect the level of policy implementation (Feng, D. & Liu W. 2008). Wang Shuyan, in the Evaluation Indicators and Empirical Research on the Implementation of School Sports Policy, constructed an evaluation system consisting of 5 first-level indicators and 12 second-level indicators, including personal execution, organizational execution, etc., which mainly focuses on the implementation of school sports policy, and mainly uses Delphi method and analytic hierarchy process to construct the implementation of individual execution, organizational execution, etc., The research shows that the implementation of school sports policy is not good, There are also differences in the implementation of school sports policies between urban and rural areas (Wang, 2010).

However, due to the wide range of regions, different levels of colleges and universities, the lack of uniform policy implementation standards, and other practical problems, the implementation results of the policies for the promotion of students' physical health in colleges and universities are poor. Therefore, the research on the evaluation of the implementation of college students' physical



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health promotion policy will help to improve the effective implementation of students' physical health promotion policy.

Objectives

The main objective of the study was to construct the evaluation system for the implementation of the policies for promoting the physical health of university students in Heilongjiang Province China.

Literature Review

Domestic policy implementation research

The research on domestic policy implementation began in 1995. Before the 1990s, it focused on the introduction of Western theories, and after the 1990s, it began to try localization. "Policy execution" has gradually attracted the attention of scholars in the 21st century. Some scholars pointed out that "the relationship between policy functions, the change of policy execution environment and the internal factors of policy execution system are the direct factors affecting policy execution". The issue of policy executive power is the issue that domestic scholars began to pay attention to in 2005. The research results mainly focus on the concept, connotation, and extension of policy executive power, the influencing factors of policy executive power, the components of policy executive power, the countermeasures to improve policy executive power, and the construction of a policy executive power evaluation system.

The concept, characteristics, connotation, and extension of policy executive power

The research on policy execution is later than the research on government execution, mainly focusing on administration and enterprise management. Mo Yongbo explained the reasons for the problems of the local government's executive power in his article "On the Strategic Choice of Improving the Executive Power of the Chinese Government". He defined the executive power of the government as the inherent ability and strength of government organizations to use, dispatch, and control various resources, effectively implement the daily affairs of the government, and effectively implement laws, policies, decisions, decrees, strategic plans, etc. to achieve the established goals. (Mo, 2007) In "Game: Public Policy Execution and Interest Subjects", Zhou Guoxiong defined policy execution as the policy execution is the sum of the local government's ability to use administrative power to allocate and utilize various resources to realize the policy objectives and to translate the implementation plan into practical actions, as well as the resultant force generated by the interaction with external forces, that is, the ability to effectively implement public policies. (Zhou, G. 2008) In his book Public Policy, Ning Sao defined policy execution as the degree to which the government achieved the policy objectives in the process of organizing, implementing, and coordinating the implementation of public policies. In the paper "Construction of the Index System of Public Policy Execution", Feng Dong built an evaluation system that can intuitively reflect the local government's public policy execution ability according to the characteristics and laws of public policy execution and proposed that the policy execution ability not only includes the policy execution ability but also includes the strength of policy implementation (Ning, 2000). Ding Huang, in his article "The Dynamic Mechanism and Model Construction of Local Government's Policy Execution Force - From the Perspective of Synergy Theory", proposed that the policy execution force refers to that in the process of policy implementation, the internal and external factors of the policy execution subject are loyal to the policy objectives, and according to the changes in the policy environment, the most appropriate policy scheme is adopted, through reasonable planning, organizational integration, unified command, organic coordination, and appropriate control Actively innovate and other ways to form internal and external joint forces, so that policy objectives can be successfully achieved and policy issues can be effectively resolved. However, domestic research on policy execution is later than that of foreign countries and mainly focuses on local government policy execution, public policy, and other aspects. Although scholars have not yet formed a unified understanding of the concept of policy execution, through the interpretation of previous research results, we can see that policy execution is a very important link in the process of policy practice, and policy execution contains more content, which is the combined effect of various capabilities (Ding, 2014).

The influencing factors of policy implementation

Li Xingguo, in the article "The Way to Improve the Implementation of China's Labor Law Policy -- Based on the Model of Influencing Factors of Policy Implementation", drew on the





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comprehensive model of influencing factors of policy implementation of Mazmanian and Sabatier, and divided the influencing factors into four categories according to the model: 1) The difficulty of labor policy issues; 2) The adjustment and control ability of labor policy; 3) Labor policy implementation network; 4) Economic, social and cultural environmental factors (Li, 2017). Yan Lingzhou and others used the interpretative structural model to analyze the hierarchical relationship between the influencing factors of the implementation of science and technology policy in the article "Research on the influencing factors of the implementation of science and technology policy -Analysis based on the interpretative structural model", and believed that the main body of science and technology policy implementation, policy content, service object, science and technology demand, and institutional environment are different factors affecting the implementation of science and technology policy (Yan, 2016). Gao Yan, in the "Analysis of the Generation and Improvement of Policy Execution", pointed out that the reasons for the lack of government execution are the lack of local conditions, the unchanged government functions, multiple leadership, the separation of the party and government, the influence of the "benefit first" bureaucracy, the lack of executive elements, the lack of executive culture, the breeding and spread of corruption, and the lack of supervision (Gao, 2010). Chen Juxiang put forward in "The Dilemma of Improving the Policy Execution of Local Government and Its Solution" that the main factors affecting policy execution are the lack of policy execution and the dislocation of interests, and discussed the ways to improve the policy execution of local government from two main aspects (Chen, 2010).

The Countermeasures for the Inadequate Implementation of Government Policies

Guo Yue, in his article "On the Construction of Accountability for Government's Inadequate Execution", studied the issue of the government's executive power from the perspective of accountability, and pointed out that in the process of government implementation, accountability for the government's ineffective execution is an effective solution to improve government's executive power, and built a system of government's executive power from four aspects: accountability object, accountability method, accountability subject, and accountability procedure (Guo, 2016). In the article "Government Executive Power and Government Accountability", Wang Xuejie and Guo Yue have the same view that implementing accountability is an effective way to improve government executive power (Wang, 2009).

In the influential factors and countermeasures of government executive power, Lian Weiliang and others believed that improving the incentive and restraint mechanism, changing ideas, innovating organizational procedures, and strengthening government leadership can effectively improve policy executive power (Lian, 2013).

Xu Yuanshan starting from the current situation of the policy execution of the township government in China, pointed out some problems in the current policy execution of the township government in China. Through analyzing the influencing factors and their connotations, they believe that transforming government functions, optimizing government organizational structure, improving institutional norms, improving the quality of government executives, improving operational mechanisms, and strengthening executive supervision are powerful measures to improve the ability of government policy implementation (Xu, 2013).

Status of policy implementation evaluation system construction

At the beginning of the 19th century, domestic scholars carried out research on the construction of policy evaluation indicators, but most of them were based on different theories or foreign theoretical models.

In the paper "Construction of Evaluation Indicator System for Public Policy Execution", Feng Dong proposed an indicator system with dual attribute differences from different dimensions based on the discrimination between policy execution ability and policy execution strength, namely, the attribute of executive subject and the attribute of executive situation. He proposed static executive individual unit and organizational unit; There are four indicator units, namely, dynamic implementation individual unit and organizational unit, which can directly reflect the level of policy implementation (Feng, D. & Liu W. 2008).

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differences in the implementation of school sports policies between urban and rural areas (Wang, 2010).

Yang Xiujuan, in his book "Research on the Construction of the Evaluation System for the Implementation of Local Government's Environmental Protection Policy", based on the technical route of the selection principle of evaluation indicators - preliminary screening of evaluation indicators - construction of evaluation indicator system - reliability and validity test - weight determination, to establish the evaluation system for the implementation of local government's environmental protection policy, the article analyzes the factors affecting the implementation of local government's environmental protection policy. With the help of the Smith model, comprehensive policy implementation model, and balanced scorecard theory, the indicators of the evaluation system are selected (Yang, 2019).

The implementation of China's physical health promotion policy

In the 1980s, some Chinese scholars advocated the establishment of "sports policy science" and tried to explore the "role of policy in sports development" from multiple perspectives. Among them, the research related to the implementation of physical health promotion policy has always been the focus of scholars.

Chen Peiyou pointed out in the article "The Dilemma in the Implementation of China's Youth Physical Health Policy and the Ways to Relieve it" that the evolution of China's youth physical health policy has experienced four stages: policy exploration, policy introduction, policy development, and policy improvement (Chen P, 2014).

In the article "Constraints and Path Selection for the Implementation of China's Adolescent Physical Health Policy - Analysis Based on Smith Model", Han Jin explored the problems of the implementation of adolescent physical health policy and proposed that we must further improve the policy system and policy implementation agency system from a high position, improve the implementation efficiency, strengthen supervision, optimize the target group's policy identity and policy implementation environment, and establish a harmonious, smooth A dynamic policy implementation system (Han Jin, 2012).

Louise C M, Daniel N & Patti- Jean N. used the Mitt-Horn policy implementation system model to analyze the influencing factors of the implementation of the adolescent physical health policy in the article "Research on the effective implementation path of the adolescent physical health policy based on the perspective of the Mitt-Horn policy implementation system model", and found that the low level of policy objectives, too strong utilitarianism, the low legal effectiveness of the policy, and lack of policy implementation resources made the policy implementation into a dilemma (Louise, C.M., Daniel, N., & Patti- Jean, N. 2013).

Kamila B M. studies the implementation effect of school sports policy in the article "Research on the Evaluation of the Implementation Effectiveness of the National Student Physical Health Standard", and constructed the evaluation system of the implementation effectiveness of the National Student Physical Health Standard (Kamila B M., 2012). However, at present, there is no systematic study on the evaluation of the implementation of the policies for promoting students' physical health in Heilongjiang Province China. Therefore, this also leaves sufficient space for the topic selection and research of this study (Kamila B M., 2012).

Policy implementation model

The representative scholars who study the policy implementation model mainly include Thomas Smith, Sabatier, etc. The representative models mainly include the "process model", "system model", "comprehensive model", etc. The process model is proposed by Smith scholars, and the process model is good at explaining the differences between policy objectives and reality by using model and proposes that the policy implementation force runs through all aspects of the policy implementation process. The system model was put forward by Carl van Horn, who regarded the process from policy formulation to the production of implementation results as a complete process, regarded the influencing factors in the process as a system, and divided the influencing factors into internal and external factors. The comprehensive model of policy implementation was put forward by scholars Marzman and Sabatier, who studied the issue of policy implementation from three aspects: the disposability of the problem, the illegal factors, and the regulatory capacity, and believed that policy issues were indispensable, and important variables in the process of policy implementation evaluation (Lin Quanlu, 2006).

Evaluation methods of policy implementation





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In addition to the commonly used financial audit methods, foreign scholars have formed some important policy implementation evaluation methods based on practice, such as the fuzzy mathematics method, comprehensive scoring method, factor analysis method, public evaluation method, technical analysis method, etc. For example, Ronald Wright mainly used the theoretical method of fuzzy mathematics to evaluate the state government performance system in the article "Ranking State Financial Management". He described an evaluation method based on multi-level fuzzy rules in the article and used fuzzy theory to express the accuracy of the evaluation information judgment (Emma V.S., 2012).

Through sorting out the foreign literature, it is found that the research on the evaluation of policy implementation and the related research on the evaluation of policy implementation are indirect. For the research on the evaluation indicators of policy implementation, it can be seen that foreign scholars have paid great attention to the process of policy implementation evaluation and the evaluation of the main body of policy implementation in the evaluation of policy implementation. Secondly, from the perspective of policy implementation evaluation, foreign scholars attach great importance to the flexibility and practicality of the design of policy implementation performance evaluation and emphasize the flexible application and operational practice of policy implementation performance evaluation methods. In general, the research on policy implementation evaluation in foreign countries has been carried out earlier, and the evaluation indicators and evaluation methods formed have strong reference value. This provides a theoretical basis for the research on the evaluation of policy implementation.

International research on school sports policy implementation

Scholars from the United States, the United Kingdom, Canada, Australia, Norway, and other countries have conducted investigations and studies on the implementation of school sports and health policies. The results show that there is a huge difference between the ideal state and the actual state of policy implementation. The British scholar Hardman pointed out in the Global School Physical Education Survey Report that "21% of the countries surveyed did not implement physical education by legal obligations and policy expectations, or just perfunctory implementation" (Jones, H.O., 2019). In other words, "enforceability" and "effectiveness" are not the inherent characteristics of school sports policy, and policy implementation cannot be generalized (Mina H & Melissa A, 2011).

Norwegian scholar Ellen Haug and others pointed out through literature analysis that "the empirical literature on the effectiveness of school sports policy implementation is extremely limited, and it is urgent to carry out targeted research on the impact of policy changes on student sports activities", and "Verifying the participation of school sports activities before and after the implementation of the school sports policy through experimental research is a powerful research design to test the effectiveness of the policy. Specifically, we should pay close attention to the initiation and implementation process of the policy implementation, and collect relevant data and information, especially through the comparison of the physical activity level of students under the policy conditions and non-policy conditions and the physical activity level of the same group of students before and after the implementation of the policy and accurately analyze and demonstrate the performance of policy implementation " (Ellen Haug, 2009).

Russell R. Pate and other researchers pointed out that "the current and future school sports and health policy research must focus on analyzing the effectiveness of policy implementation to determine whether the implementation of the policy affects the students' sports behavior" given the key research issues and the research direction of policy implementation of youth sports activities in the world. At the same time, he also pointed out that because the results of sports and health education and environmental support are mixed, more detailed and in-depth research is needed to judge the effectiveness of policy implementation (Russell R. Pate, 2011).

American scholar Sarah M. Lee and others pointed out through investigation and research that although most states and regions in the United States have policies requiring schools at all levels to implement physical education, 21.7% of schools at all levels still do not make physical education requirements (Lee, S.M.2007).

To evaluate the implementation degree of physical education policy, A.F. MONICA and others developed the fidelity index of school physical education policy implementation to evaluate the environmental factors and specific indicators that affect the implementation of school physical education policy. According to the specific score of the indicators, the policy implementation is divided into five levels: "full implementation", "high implementation", "partial implementation", "low implementation" and "no implementation". On this basis, the scholar also conducted empirical



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research on the effectiveness of school sports policy through field observation and other methods and found that "Although the surveyed schools mentioned the adoption of policies in the report, these policies have not been fully implemented.

Overall, these studies collectively contribute to the knowledge and understanding of the implementation of students' physical health promotion policy has always been the focus of scholars' attention, especially the research on the "adolescent" physical health promotion policy, while the systematic research on the construction of Heilongjiang Province's physical health promotion policy implementation evaluation system is still relatively weak. However, due to the wide range of regions, different levels of colleges and universities, the lack of uniform policy implementation standards, and other practical problems, the implementation results of the policies for the promotion of students' physical health in colleges and universities are poor. Therefore, the research on the evaluation of the implementation of college students' physical health promotion policy will help to improve the effective implementation of students' physical health promotion policy.

Conceptual Framework

The research title "Construction of The Evaluation Index System for The Implementation of College Students' Physical Health Promotion Policies in Heilongjiang Province" was designed as follows

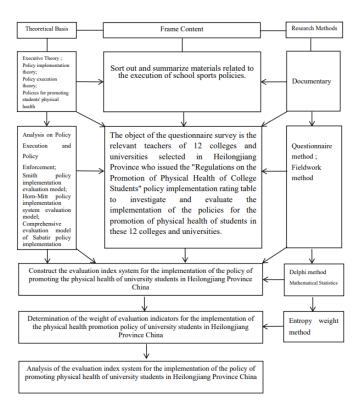


Figure 1 Conceptual framework

Methodology

1. Population and sample: Population: The population includes experts in the field of physical education, promotion of physical health and exercise, measurement, and evaluation.

Samples: 12 experts to evaluate and check the draft evaluation indexes and determine the indexes. 19 experts to select indexes by Delphi method and 12 experts for the Focus group. **Sampling techniques:** In this study, experts are selected by purposive sampling.



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- 1.1 The experts in the field of physical education are selected from the education administrative department of Heilongjiang Province as the head, the head of the university sports department, and the experts in the field of school physical education.
- 1.2 Health promotion experts are selected from the staff or university teachers who have been engaged in physical education for a long time (more than 15 years) in colleges and universities in Heilongjiang Province China.
- 1.3 Measurement and evaluation experts are selected from the group with a bachelor's degree or above, a major in measurement and evaluation, and more than three years of experience.

2. Research Instruments

- 2.1 The first questionnaire: Open-Ended Questionnaire for experts.
- 2.2 The second questionnaire: The Rating Scale Questionnaire with five options, namely, the maximum level, the large level, the general level, the small level, and the minimum level.
 - 2.3 The third questionnaire was designed by the researcher for use in the Focus Group.

3. Data Collection

Design questionnaire.

Review literature, conduct theoretical and policy analysis, draw on relevant research results, preliminarily determine evaluation index, and design questionnaire;

Select experts in relevant fields to conduct 3 rounds of expert questionnaires. The details are as follows: The first round of questionnaires: Experts are invited to delete or modify the initial indexes system, and collect the questionnaires. The questionnaire is modified according to the experts' opinions, and the index dimension is preliminarily determined; The second round of questionnaires: The statistical results of the first round of questionnaires are fed back to the 19 experts, and the experts are invited to score the first-level indexes to the third-level indexes. The third round of questionnaires: Using the Rating Scale Questionnaire, 19 experts were invited to fill in the questionnaire and write reasons for the indexes of disagreement. Use the Entropy weight method to determine the weight of every evaluation index.

4. Data analysis

- 4.1 This study is mainly a software package for analyzing data; (1) Calculate the published quantity and trend of previous research literature; (2) The reliability and validity of the expert consultation questionnaire were tested by principal component analysis and Cronbach a coefficient method; (3) Integrate the opinions and data of the first two rounds of expert groups; (4) After the expert opinion data is standardized, the index weight of each level is calculated according to the relevant formula; (5) The scores of the returned questionnaires are calculated.
- 4.2 Entropy weight method. The entropy weight method can be used to calculate the information "entropy value" of the index, to achieve the purpose of calculating the index weight. When the index information entropy is small, the weight is large. On the contrary, when the index information entropy is large, the weight is small.

5. Research process

The purpose of this study is to build an evaluation system for the implementation of the policy of promoting university students' physical health in Heilongjiang Province China, and the researcher conducts research according to the following:

- Step 1 Collect relevant data and determine the first draft of indexes.
- Step 2 Invite 12 experts to evaluate and check the draft evaluation indexes and determine the indexes.
- Step 3 Use the Delphi method to establish the evaluation system for the implementation of the promotion policy of college students' physical health in Heilongjiang Province China.
- Step 4 Check the applicability and feasibility of the Evaluation System for the Implementation of the Policies for Promoting the Physical Health of University Students in Heilongjiang Province China.
- Step 5 Summarize and report the contents of the Evaluation System for the Implementation of the Policies for Promoting the Physical Health of University Students in Heilongjiang Province China.





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Results

Models can achieve concise reflections of prototypes. The abstraction achieved through models can further deepen people's understanding of prototypes, which is a leap in the cognitive process. Similarly, the implementation of policies also requires cooperation among various organizations, institutions, the environment, and other aspects. This is a very complex social activity process, but people can understand policies by indirectly describing their policy implementation process. In recent years, due to the continuous deepening of research on policy execution evaluation, different scholars have different perspectives and research focuses on policy execution evaluation, forming many different evaluation models.

1. Construction of the evaluation index system for the implementation of policies to promote the physical health of college students in Heilongjiang Province

Based on the principles of expert authority and representativeness, combined with the complexity of policy execution, they mainly focus on the main responsible institutions and personnel for implementing students' physical health promotion policies in universities, as well as the physical education teachers who mainly implement policies, There are a total of 12 experts and scholars familiar with the study of policies for promoting students' physical health, including 4 university leaders, 4 university physical education teachers, and 4 experts in the field of implementing policies for promoting students' physical health. There is a total of 12 experts

After three rounds of expert consultation, based on expert opinions and evaluation scores, comprehensive statistics and analysis were conducted using a software package. Finally, the indicator system was determined by ranking each indicator based on its importance.

Table 1 Evaluation Index System for the Implementation of Policies for Promoting Physical Health of College Students in Heilongjiang Province

Level I index	Level II index	Level III index
A1 consensus on policy objectives (0.133)	B1 Consensus of the executive body (0.512) B2 Consensus of target groups (0.448)	C1 proportion of understanding of physical health promotion policies (0.448) C2 The proportion of policy recognition for promoting physical health (0.552) C3 Support degree of physical health promotion policy (0.394) C4 Positive degree of physical health promotion policy (0.513)
	B3 Supporting physical health promotion policies (0.431)	C5 The number of supporting policies for promoting physical health (0.106) C6 Flexible nature of supporting policies for promoting physical health (0.013)
A2 Policy resource allocation (0.191)	B4 Physical health promotion material allocation (0.569)	C7 the comprehensiveness of supporting policies for promoting physical health (0.022)
		C8 The proportion of physical education teachers to students (0.271) C9 The compliance rate of site facility configuration (0.401)



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Level I index	Level II index	Level III index
A3 Policy implementing agency (0.252)	B5 Actuator setting (0.493)	C10 The proportion of special funds to the total sports funds (0.328)
		C11 Reasonable level of institutional hierarchy (0.416)
		C12 Clarity of institutional rights and responsibilities (0.538)
	B6 Implementation mechanism construction (0.507)	C13 Implementation and operation mechanism of physical health promotion policy (0.221) C14 Reward and punishment mechanism for implementation of physical health promotion policy (0.256) C15 Implementation and supervision mechanism of physical health promotion policy (0.295) C16 Implementation and evaluation mechanism of physical health promotion policy (0.227)
		C17 number of policy formulation for cross-departmental cooperation (0.279)
A4 Policy implementation coordination (0.310)	B7 Cross-departmental cooperation and communication (0.523)	C18 Number of cross-departmental cooperation and exchange platforms (0.411) C19 Number of cross-departmental collaborative resource-sharing channels (0.301)
	B8 Participation of target groups (0.477)	C20 Attendance rate of physical education classes for the target group (0.576) C21 Target group's proportion of people joining sports clubs (0.327) C22 The proportion of the number of target groups participating in sports competitions (0.265)
A5 Executive Value Orientation (0.114)	B9 Executive Value Orientation (0.114)	C23 Executive enthusiasm (0.235) C24 Executive Team Collaboration Awareness (0.281) C25 The intensity of executive staff to improve their professional quality (0.270) C26 Number of times execution personnel participated in physical health promotion training (0.213)

2. Determination of the weight of evaluation indicators for the execution of physical health promotion policies for college students in Heilongjiang Province

Selection of Index Weight Calculation Method - Entropy Weight Method



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The important step after establishing the indicator system is to calculate the weight of each indicator. Weight calculation is a comprehensive consideration of the importance of the indicator itself. The establishment of indicator weight affects the operability and science of the entire evaluation system and directly affects the evaluation results. Therefore, calculating the weight of indicators is a very important step, and determining the method for calculating indicator weight is a crucial first step.

Through the collection of relevant literature on indicator weight calculation methods in the early stage, there are currently many methods for calculating and establishing indicator weight coefficients, which are mainly divided into two categories: 1) objective assignment methods: entropy weight method, principal component analysis method, complex correlation coefficient method, etc; 2) Subjective valuation methods; Analytic Hierarchy Process, Expert Measurement Method, Fuzzy Analysis Method, etc; The method of subjective assignment is greatly influenced by the subjective factors of the evaluator, which can easily lead to more subjective results and lack scientific validity; The objective assignment method mainly derives and calculates based on data, with strong objectivity. Therefore, the evaluation results are not easily influenced by subjectivity, and the evaluation results have absolute objectivity.

based on the combination of subjective and objective perspectives and the principle of science, the core element of policy execution evaluation is the word "ability", that is, "execution ability". The evaluation of "ability" tends to be subjective indicators, and the data basis for determining the weight of indicators is subjective scoring from various experts. Considering that the use of the entropy weight method can effectively reduce the interference of human subjective factors, Therefore, the entropy weight method is selected for the weight calculation method of the evaluation system indicators to ensure the scientific establishment of the weight coefficient of the indicator system.

2.1 Calculation ideas of entropy weight method

Based on the calculation steps, the weights of each index in the system have been determined, as shown in the table below:

Table 2 Weights of the Evaluation Index System for the Implementation of Policies on Promoting Physical Fitness and Health of College Students in Heilongjiang Province

Level I index	Level II index	Level III index
	B1 Consensus of the executive body (0.512)	C1 proportion of understanding of physical health promotion policies (0.448) C2 The proportion of policy recognition for promoting physical health (0.552)
A1 consensus on policy objectives (0.133)	B2 Consensus of target groups (0.448)	C3 Support degree of physical health promotion policy (0.394) C4 Positive degree of physical health promotion policy (0.513)
	B3 Supporting physical health promotion policies (0.431)	C5 The number of supporting policies for promoting physical health (0.106) C6 Flexible nature of supporting policies for promoting physical health (0.013)
A2 Policy resource allocation (0.191)	B4 Physical health promotion material allocation (0.569)	C7 the comprehensiveness of supporting policies for promoting physical health (0.022) C8 The proportion of physical education teachers to students (0.271) C9 The compliance rate of site facility



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Level I index	Level II index	Level III index
-		configuration (0.401)
A3 Policy implementing agency (0.252)	B5 Actuator setting (0.493)	C10 The proportion of special funds to the total sports funds (0.328)
		C11 Reasonable level of institutional hierarchy (0.416)
		C12 Clarity of institutional rights and responsibilities (0.538)
	B6 Implementation mechanism construction (0.507)	C13 Implementation and operation mechanism of physical health promotion policy (0.221) C14 Reward and punishment mechanism for implementation of physical health promotion policy (0.256) C15 Implementation and supervision mechanism of physical health promotion policy (0.295) C16 Implementation and evaluation mechanism of physical health promotion policy (0.227)
A4 Policy implementation coordination (0.310)	B7 Cross-departmental cooperation and communication	C17 number of policy formulation for cross-departmental cooperation (0.279)
	(0.523)	C18 Number of cross-departmental cooperation and exchange platforms (0.411) C19 Number of cross-departmental collaborative resource-sharing channels (0.301)
	B8 Participation of target groups (0.477)	C20 Attendance rate of physical education classes for the target group (0.576) C21 Target group's proportion of people joining sports clubs (0.327) C22 The proportion of the number of target groups participating in sports competitions (0.265)
A5 Executive Value Orientation (0.114)	B9 Executive Value Orientation (0.114)	C23 Executive enthusiasm (0.235) C24 Executive Team Collaboration Awareness (0.281) C25 The intensity of executive staff to improve their professional quality (0.270) C26 Number of times execution personnel participated in physical health promotion training (0.213)



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From the research process After obtaining all three levels of indicators all indicators will be taken into the weighting process by experts. This can be seen in the picture showing the process below.

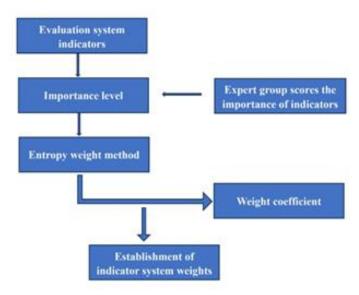


Figure 2 Indicators of weight determination process

Conclusion

Through theoretical analysis of the concept and characteristics of the implementation of policies for promoting the physical health of college students, it is pointed out that the evaluation of the implementation of policies for promoting the physical health of students is of great value in ensuring their physical health. By drawing on relevant policy implementation evaluation models and empirical methods, the evaluation index system for the implementation of policies for promoting the physical health of college students in Heilongijang Province is constructed.

Through the preliminary formulation of the evaluation index system, after three rounds of expert consultation, based on expert opinions and evaluation scores, comprehensive statistics and analysis were conducted using a software package. Finally, the index system was determined by ranking each indicator based on its importance, and a policy index system for promoting college student health in Heilongiang Province was constructed.

The evaluation system for the implementation of policies to promote the physical health of college students in Heilongjiang Province includes 5 first indicators (policy goal consensus, policy resource allocation, policy execution agencies, policy execution collaboration, and policy execution personnel value orientation), 9 secondary indicators (consensus among executing entities, the consensus among target groups, supporting policies for promoting physical health, the material allocation for promoting physical health, the establishment of executing institutions, construction of executing mechanisms, cross-departmental cooperation and communication, participation of target groups, and value orientation of executing personnel) and 26 third indicators.

The evaluation index system for the execution ability of health promotion policies includes 5 first indicators and weight coefficients: consensus on policy execution goals 0.133, policy resource allocation 0.191, policy execution agencies 0.252, policy execution synergy 0.310, and policy executor value orientation 0.114, respectively; 9 secondary indicators and weight coefficients are respectively 0.512 consensuses of the executing entity, 0.488 consensuses of the target group, 0.431 policy support for physical health promotion, 0.569 allocations of physical health promotion materials, 0.493 setting of executing agencies, 0.507 construction of executing mechanisms, 0.523 cross-departmental



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cooperation and communication, and 0.477 participation of target groups The value orientation of executives is 0.114, as well as 26 third indicators and weight coefficients.

Based on the weighted evaluation system for the execution of policies promoting the physical health of college students in Heilongjiang Province, improving material support measures and strengthening cross-departmental cooperation and communication is the key to improving the execution of policies promoting the physical health of college students.

Discussion

This study is consistent with the proposition of Wang Shuyan (2010). The evaluation index system for the execution of school sports policies should follow the principles of comprehensiveness, science, dynamism, and operability in the construction process. According to the method of system structure division, the primary indicators of school sports policy execution are macroscopically divided into five systems: individual execution, organizational execution, school sports policy itself, school execution resources and environment, and execution effectiveness.

The hierarchical classification of secondary and tertiary indicators is based on the basic structure of each subsystem, referring to and drawing on relevant research results, and obtaining a predetermined indicator system for the execution of school sports policies (Feng Dong & Liu Wenzheng, 2008). The predetermined indicator system for the execution of school sports policies was conducted through two rounds of research with domestic school sports and policy experts and scholars, school principals, sports teachers, sports researchers, and other frontline personnel in school sports work. The final selection of indicators was completed, and the weights of the indicators were determined using the Analytic Hierarchy Process. Finally, a school sports policy execution index system consisting of five first-level indicators, twelve second-level indicators, and thirty-five thirdlevel indicators was established, along with the weights of each indicator.

In relevant research, Emma, V.S. (2012) analyzed the current situation of sports policy execution in six ordinary universities and schools. In terms of policy formulation, the national policy formulation level increased communication with frontline teachers, students, and other groups, starting from actual needs; At the level of policy formulation in universities, the school regulations should be unified with national policies, and the requirements should be quantified for easy implementation by teachers; When formulating policies, relevant departments should clarify the standards for evaluating and implementing policies, which departments should supervise them, and how rewards and punishments should be implemented. In terms of school policy promotion: increase training for physical education teachers on school sports policies, increase publicity efforts for school sports policies, and enhance students' attention to sports policies. In terms of sports activity organization: Schools should organize various sports activities to increase students' interest in sports activities and create a good school sports cultural atmosphere. In terms of funding: While enhancing government funding support, universities should expand social resources, increase funding sources, and improve their basic sports facilities. In terms of supervision and evaluation system: the higher authorities in charge of universities and the establishment of an evaluation system for the implementation of school sports policies within universities (Lin Quanlu, 2006).

Recommendation

1. The construction of the evaluation index system for the execution of policies promoting the physical health of college students is mainly based on policy execution theories such as the Horn Mitt policy execution system and the Smith policy execution model. However, it is not enough to establish a comprehensive evaluation system for the execution of policies promoting the physical health of college students solely based on these theoretical models. There are still many models for policy execution research, Subsequent research can draw on other policy execution evaluation models, as well as relevant models from other disciplines.



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- 2. In the process of building the evaluation system, although the Delphi method was used, some experts' relevant opinions were not fully explained, which limited the representativeness of experts to a certain extent.
- 3. At the same time, due to limited research time, the evaluation index system for the execution ability of the physical health promotion policy for college students in Heilongjiang Province has not been empirically studied. In summary, after future research, empirical research will be conducted on the evaluation index system and evaluation standard table for the execution ability of the physical health promotion policy for college students in Heilongjiang Province.

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