

การพัฒนาแนวทางการบริหารจัดการเพื่อส่งเสริม นักกีฬาวูซูเยาวชนชั้นนำในมณฑลเหอเป่ย์ DEVELOPING MANAGEMENT GUIDELINE TO PROMOTE ELITE YOUTH WUSHU ATHLETES IN HEBEI PROVINCE

หลี่ ห่าว^{1*} ประกิต หงษ์แสนยาธรรม¹ และ เอก เกิดเต็มภูมิ¹

Li Hao^{1*}, Prakrit Hongsaenyatham¹ and Ake Girdtempoom¹

¹คณะวิทยาศาสตร์และเทคโนโลยีการกีฬา มหาวิทยาลัยกรุงเทพธนบุรี กรุงเทพมหานคร

¹Faculty of Sports Science and Technology, Bangkokthonburi University, Bangkok

*Corresponding Author: 1776682509@qq.com

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บทคัดย่อ

วัตถุประสงค์ของการวิจัยนี้คือเพื่อพัฒนาแนวทางการบริหารจัดการเพื่อส่งเสริมนักกีฬาวูซูเยาวชนชั้นนำในมณฑลเหอเป่ย์ โดยใช้รูปแบบการวิจัยแบบผสมผสาน ประชากรประกอบด้วยนักกีฬาวูซูเยาวชนอายุ 12-15 ปี จำนวน 534 คน และผู้ฝึกสอนวูซูจำนวน 31 คน จากโรงเรียนกีฬาจำนวน 4 แห่งในมณฑลเหอเป่ย์ ได้แก่ โรงเรียนกีฬางาโจว เป่าต้ง ถังซาน และสือเจียจวง กลุ่มตัวอย่างที่ใช้ในการวิจัยประกอบด้วยนักกีฬาวูซูเยาวชนจำนวน 226 คน และผู้ฝึกสอนทั้งหมด 31 คน ผู้วิจัยได้ใช้แบบสอบถามเพื่อศึกษาสถานการณ์ปัจจุบันและปัญหาสำคัญในการส่งเสริมนักกีฬาวูซูเยาวชนชั้นนำ นอกจากนี้ได้ทำการสัมภาษณ์ผู้เชี่ยวชาญจำนวน 7 คน เพื่อระบอบุคคลประกอบหลักของแนวทางการบริหารจัดการที่เสนอ ต่อมาได้ดำเนินการสนทนากลุ่มกับผู้เชี่ยวชาญจำนวน 10 คน เพื่อพัฒนาแนวทางดังกล่าว และในขั้นตอนสุดท้าย ได้ดำเนินการสัมภาษณ์ผู้เชี่ยวชาญกับผู้เชี่ยวชาญจำนวน 7 คน เพื่อยืนยันความเหมาะสมและความเป็นไปได้ของแนวทางที่พัฒนาขึ้น ข้อมูลถูกวิเคราะห์โดยใช้ค่าเฉลี่ย ส่วนเบี่ยงเบนมาตรฐาน และการวิเคราะห์เนื้อหา ผลการวิจัยพบว่า แนวทางการบริหารจัดการประกอบด้วย 10 มิติหลัก ได้แก่ 1) การกำกับดูแลและความร่วมมือ 2) การพัฒนานโยบายและกฎระเบียบ 3) การพัฒนาผู้ฝึกสอน 4) สวัสดิการและแรงจูงใจของนักกีฬา 5) การบริหารงบประมาณและทรัพยากร 6) สิ่งอำนวยความสะดวกและอุปกรณ์ 7) ระบบการแข่งขันและเส้นทางการพัฒนา 8) การติดตามและประเมินผล 9) การสะท้อนผลและการพัฒนาอย่างต่อเนื่อง และ 10) การพัฒนานักกีฬาในระยะยาว แนวทางดังกล่าวเป็นกรอบการดำเนินงานที่มีโครงสร้างชัดเจนและสามารถนำไปปฏิบัติได้จริงสำหรับโรงเรียนกีฬา เพื่อสร้างความร่วมมืออย่างมีประสิทธิภาพ และเพื่อพัฒนานักกีฬาวูซูเยาวชนชั้นนำต่อไป

คำสำคัญ: แนวทางการบริหารจัดการ, นักกีฬาเยาวชนชั้นนำ, วูซู

Abstract

The objective of this study was to develop a management guideline to promote elite youth Wushu athletes in Hebei Province. A mixed-methods research design was employed. The population consisted of 534 youth Wushu athletes aged 12–15 years and 31 Wushu coaches from four sports schools in Hebei Province, namely Cangzhou, Baoding, Tangshan, and Shijiazhuang Sports Schools. A sample of 226 youth athletes, along with all 31 coaches, was selected for the study. The researcher was administered the questionnaires to examine the current situation and key challenges in promoting elite youth Wushu athletes. In addition, seven experts were interviewed to identify the core components of the proposed management guideline. Subsequently, a focus group discussion with ten experts was conducted to develop the guideline. Finally, a connoisseurship session involving seven experts was carried out to validate and assess the appropriateness and feasibility of the finalized guideline. Data were analyzed using mean,

standard deviation, and content analysis. The findings revealed that the management guideline comprises ten key dimensions: (1) Governance and Collaboration; (2) Policy and Regulatory Enhancement; (3) Coach Development; (4) Athlete Welfare and Motivation; (5) Funding and Resource Management; (6) Facilities and Equipment; (7) Competition and Development Pathways; (8) Monitoring and Evaluation; (9) Feedback and Continuous Improvement; and (10) Long-Term Athlete Development (LTAD). This guideline provides a structured and practical operational framework for sports schools to collaborate effectively in nurturing elite youth Wushu athletes.

Keywords: Management guideline, Elite youth athletes, Wushu

Introduction

Wushu, also known as Chinese martial arts, is a traditional sport that embodies centuries of Chinese cultural heritage and physical discipline. It is both a competitive sport and a performative art form, integrating techniques for attack and defense with philosophical elements derived from Confucianism, Daoism, and Buddhism. In modern China, Wushu has evolved from its historical military roots to become a national and international sport, promoted in schools, universities, and professional institutions. It is not only a symbol of cultural identity but also a tool for physical fitness, moral education, and international exchange. Within the Chinese education system, particularly in provinces like Hebei, Wushu is also positioned as a key sport for youth development, offering pathways from grassroots participation to elite performance (Zhong & Li, 2022).

Sports schools play a critical role in the identification, cultivation, and advancement of youth Wushu athletes in China. As specialized institutions that integrate academic education with athletic training, sports schools provide young athletes with structured environments where they can receive professional coaching, systematic skill development, and competitive experience from an early age. These schools serve as the foundation of China's elite athlete pipeline, particularly in traditional sports like Wushu, which require long-term, disciplined training to achieve technical mastery (Hou & Xiao, 2021). The structure of sports schools allows for early talent identification, often beginning between the ages of 8 and 12, followed by targeted training in specific disciplines such as Taolu or Sanda. Through daily training sessions, access to skilled coaches, and exposure to provincial and national competitions, young Wushu practitioners are given the opportunity to build both physical abilities and mental resilience, which are essential for elite-level performance (Kong et al., 2020).

Moreover, sports schools play a vital role in developing training systems that are tailored to the physiological and psychological needs of young athletes. These systems are informed by principles of Long-term athlete development (LTAD) and often supported by sports science and monitoring, including performance evaluation, injury prevention, and recovery protocols (Huang, 2024). This level of professionalization is typically not accessible through regular school-based physical education programs. In provinces like Hebei, where Wushu has historical and cultural significance, sports schools act as regional centers of excellence for preserving traditional martial arts while advancing competitive goals. They collaborate with local sports bureaus, Wushu associations, and national talent development programs to ensure a cohesive pathway for athletes to progress from the school level to the provincial and national teams (Ji et al., 2022). Beyond performance, sports schools also promote moral education and discipline, which are deeply embedded in Wushu philosophy. By cultivating respect, perseverance, and humility, these institutions support the holistic development of youth athletes not just as competitors but as future role models and cultural ambassadors.

Therefore, this research aims to address the lack of a structured and evidence-based management framework for promoting elite youth Wushu athletes in Hebei Province. Despite Wushu's cultural importance

and competitive presence in Chinese sports, many sports schools face challenges such as inconsistent training practices, limited coaching resources, and weak coordination between institutions. These issues hinder the effective development of young talent and reduce the long-term success of athlete pathways. Therefore, this study seeks to develop a practical and context-specific management guideline that can support sports schools and advancing elite youth Wushu athletes in the Hebei province.

Research Methodology

This study employed an explanatory sequential mixed-methods design to develop a management guideline for promoting elite youth Wushu athletes in Hebei Province, guided by the Planning – Organizing – Leading – Controlling (POLC) framework and the Sport Policy Factors Leading to International Sporting Success (SPLISS) model. The research was conducted in two interconnected phases: a quantitative phase followed by a qualitative phase, with explicit integration between the two strands. Ethical approval was granted by the Bangkokthonburi University Ethics Committee (No. 2568/414(4), November 10, 2025).

Participants

1) Quantitative Phase

The population consisted of 534 youth Wushu athletes aged 12–15 years and 31 Wushu coaches from four sports schools in Hebei Province, China, all of whom were actively involved in formal Wushu training programs. The distribution of the population was as follows: Cangzhou (115 athletes, 6 coaches), Baoding (139 athletes, 8 coaches), Tangshan (128 athletes, 8 coaches), and Shijiazhuang (152 athletes, 9 coaches)

The sample size for athletes ($n = 226$) was determined using the Krejcie and Morgan sampling table at a 95% confidence level and $\pm 5\%$ margin of error. All 31 coaches were included due to their relatively small number

2) Qualitative Phase

Purposive sampling was used to select experts based on their professional experience in Wushu and sports management. The participants were as follows: (1) IOC validation experts ($n = 3$): Evaluated research instruments for content validity; (2) Interview experts ($n = 7$): Provided in-depth insights into key issues and solutions; (3) Focus group experts ($n = 10$): Collaboratively developed the management guideline; (4) Connoisseurship experts ($n = 7$): Validated feasibility, relevance, and applicability of the guideline.

Research Instruments

1) Questionnaires. Two structured questionnaires were developed for athletes and coaches using a 5-point Likert scale. Content validity was established using the IOC method (IOC = 0.93 for athletes; 0.90 for coaches).

2) Expert Interview Protocol. A semi-structured interview guide with open-ended questions was designed to explore deeper insights into athlete development, policy gaps, and management strategies.

3) Focus Group Discussion Guide. A structured guide was developed to facilitate collaborative discussion among experts on key themes such as talent identification, coaching development, and institutional support.

4) Connoisseurship Evaluation Framework. A structured evaluation framework was used to assess clarity, feasibility, adaptability, and sustainability of the proposed guideline.

Data Collection

The study followed a three-stage sequential process:

- 1) Quantitative Phase. Questionnaires were administered to 226 athletes and 31 coaches to examine current conditions, challenges, and support systems.
- 2) Qualitative Phase – Interviews and Focus Group. Seven expert interviews were conducted to identify key components of the guideline, followed by a focus group discussion with ten experts to collaboratively develop and refine the guideline.
- 3) Validation Phase – Connoisseurship. Seven experts evaluated the guideline in terms of feasibility, relevance, and practical applicability, leading to final refinements.

Data Analysis

Quantitative data were analyzed using statistical software (e.g., SPSS). Descriptive statistics, including mean and standard deviation (S.D.), were employed to analyze responses from 226 youth Wushu athletes and 31 Wushu coaches. These analyses were used to identify overall trends, key strengths, and critical issues in the current development of elite youth Wushu athletes. Qualitative data obtained from expert interviews, focus group discussions, and the connoisseurship session were analyzed using content analysis. The analysis process involved coding, categorizing, and identifying key themes to ensure a systematic interpretation of expert perspectives and to support the development of the management guideline.

To ensure the content validity of the research instruments, the Index of Item-Objective Congruence (IOC) method was applied. Three qualified experts evaluated the relevance and clarity of each item in the questionnaires and interview protocols. Only items with IOC values ranging from 0.60 to 1.00 were retained for the final instruments.

A 5-point Likert scale was used to measure participants' levels of agreement in the questionnaire, ranging from 1 (Very Poor) to 5 (Highest). The mean score for each item was calculated to represent respondents' overall evaluations. The interpretation criteria for mean scores were as follows: (Lindner & Lindner, 2024).

Table 1. The interpretation criteria of 5-point Likert scale

Average score range	Meaning
5.00 - 4.51	Highest
4.50 - 3.51	High
3.50 - 2.51	Moderate
2.50 - 1.51	Poor
1.50 - 1.00	Very Poor

Results

Part 1: Current Situation and Challenges in Promoting Elite Youth Wushu Athletes in Hebei Province

1) Questionnaire Survey Results of Youth Wushu Athletes

A total of 226 youth Wushu athletes from four sports schools in Hebei Province participated in the questionnaire survey. All responses were successfully collected and deemed valid for analysis. The results of the data analysis are presented as follows:

Table 2. The questionnaire survey results of youth Wushu athletes (n=226)

Questionnaire Items	Total Score		Result
	$\bar{X}$	S.D.	
1. Training intensity and duration are appropriate for improving performance.	2.42	0.86	Poor
2. Training schedules are adjusted based on competition demands.	3.12	0.88	Moderate
3. Coaches possess strong technical and professional knowledge.	3.25	0.91	Moderate
4. Feedback from coaches helps me improve my performance.	2.38	0.84	Poor
5. There are enough qualified coaches to support youth Wushu development.	2.45	0.80	Poor
6. There is good communication between athletes, coaches, and administrators.	2.40	0.82	Poor
7. There is sufficient space and environment for Wushu practice.	3.08	0.90	Moderate
8. The training facilities are adequate and well-maintained.	2.46	0.83	Poor
9. There are enough opportunities to participate in local and provincial competitions.	2.55	0.85	Poor
10. Competition experiences help improve my performance.	3.85	0.78	High
11. I am motivated to continue training and improving in Wushu.	4.67	0.59	Highest
12. My family supports my participation in Wushu training and competitions.	4.72	0.57	Highest
13. Promising athletes receive further development and support opportunities.	2.50	0.88	Poor
14. Access to medical and physiotherapy support is available when needed.	2.48	0.89	Poor
Total	2.91	0.83	Moderate

In summary, the findings indicate that although youth Wushu athletes in Hebei Province demonstrate strong intrinsic motivation and benefit from substantial family support, significant limitations persist in management organization, facility quality, and coaching resources. Addressing these gaps through structured management guidelines, improved infrastructure, and enhanced professional development for coaches is essential to strengthen the athlete development pathway toward elite performance.

2) Questionnaire Survey Results of Wushu Coaches

A total of 31 Wushu coaches from four sports schools in Hebei Province participated in the questionnaire survey. All responses were successfully collected and deemed valid for analysis. The results are presented as follows:

Table 3. The questionnaire survey results of Wushu coaches (n=31)

Questionnaire Items	Total Score		Result
	$\bar{X}$	S.D.	
1. Training plans are periodically evaluated and adjusted based on performance results.	2.45	0.80	Poor
2. Coaches receive adequate time and resources to prepare effective training sessions.	2.48	0.77	Poor
3. Coaches possess sufficient technical knowledge of modern Wushu techniques.	3.20	0.85	Moderate
4. Regular workshops and training courses are provided for coaches' professional development.	2.46	0.83	Poor
5. There is an effective system for evaluating and rewarding coaching performance.	2.40	0.78	Poor
6. There is a systematic process for identifying talented young Wushu athletes.	2.50	0.82	Poor
7. Athletes receive proper guidance in balancing training with education.	3.10	0.86	Moderate
8. Long-term athlete development pathways are implemented effectively.	2.44	0.79	Poor
9. Sports equipment and Wushu apparatus are regularly maintained.	2.48	0.84	Poor
10. Access to medical, nutrition, and physiotherapy services is available for athletes.	2.43	0.88	Poor
11. Financial support for athlete training and competition is adequate.	2.41	0.86	Poor
12. The local government and sports bureau actively support youth Wushu development.	3.12	0.90	Moderate

Table 3. (continued)

Questionnaire Items	Total Score		Result
	$\bar{X}$	S.D.	
13. Youth athletes have enough opportunities to compete at local and provincial levels.	2.46	0.84	Poor
14. Post-competition evaluation is conducted to improve future training plans.	2.47	0.80	Poor
15. Parents or guardians actively support youth athletes' participation in Wushu.	4.65	0.58	Highest
16. The management system in schools promotes athlete welfare and discipline.	2.49	0.82	Poor
Total	2.83	0.81	Moderate

The overall findings indicate that although coaches and families demonstrate strong commitment to athlete development, the broader system, including training management, facilities, and institutional policies remains insufficiently developed. Constraints such as limited resources, inadequate professional development opportunities, and insufficient government support continue to impede the sustainable progression of youth Wushu toward elite performance.

Part 2: Development of the Management Guideline for Promoting Elite Youth Wushu Athletes in Hebei Province

1) Results of Expert Interviews

Building upon the findings from the questionnaire survey of 226 youth Wushu athletes and 31 coaches, the researchers conducted in-depth interviews with seven experts, including three sports management experts, two Wushu coaches, and two representatives from Wushu associations. The quantitative results highlighted key challenges related to training management, facilities, and resource allocation.

In response to these findings, the experts provided further insights and unanimously agreed that although the development of elite youth Wushu athletes in Hebei Province has shown steady progress, significant structural improvements are still required. In particular, they emphasized that adopting the SPLISS model would offer a systematic and evidence-based framework to address the identified gaps. This approach would facilitate better alignment among stakeholders, enhance the scientific management of training and resources, and support long-term sustainable development. The experts collectively recommended using the SPLISS model as a foundation for developing comprehensive management guidelines.

2) Focus Group Discussion

Following the expert interviews, a focus group discussion was conducted with ten experts, including three sports management experts, three Wushu coaches, two Wushu association members, and two Wushu referees. The discussion was guided by both the quantitative findings from the questionnaire survey and the qualitative insights obtained from the expert interviews.

Through this integrative process, the experts collaboratively refined and developed the proposed management guideline. The final guideline represents a synthesis of empirical evidence and expert consensus, ensuring both theoretical grounding and practical applicability. The detailed components of the Management Guideline for the Training of Elite Youth Wushu Athletes in Hebei Province are presented as follows:

Table 4. The management guideline to promote elite youth Wushu athletes in Hebei Province

The management guideline to promote elite youth Wushu athletes in Hebei Province	
Governance and Collaboration	1. Establish a Provincial Wushu Development Committee integrating the Sports Bureau, Education Department, and Wushu Association. 2. Form school-level Wushu management units responsible for local coordination and reporting 3. Develop MOUs among schools, clubs, and local enterprises to support sponsorship and talent exchange
Policy and Regulation Enhancement	1. Update provincial policies to define standards for: - Coach qualifications and renewal requirements - Athlete safety, selection, and registration - School–club collaboration and data sharing 2. Institutionalize Wushu as a priority discipline within sport school frameworks.
Coach Development	1. Implement tiered certification linked to competency and experience. 2. Integrate sport science, psychology, and pedagogy into coach training 3. Require annual CPD (continuing professional development) and performance reviews. 4. Establish mentor–apprentice programs to cultivate new coaches in sport schools.
Athlete Welfare and Motivation	1. Provide scholarships, stipends, medical insurance, and psychological counseling 2. Develop academic tutoring programs ensuring academic–athletic balance 3. Introduce motivation incentives such as award systems and leadership opportunities 4. Strengthen career planning and transition support for post-graduation athletes.
Funding and Resource Management	1. Implement a performance-based funding model supported by provincial budgets and private sponsorships. 2. Allocate resources based on school performance, participation rates, and equity needs. 3. Adopt transparent budgeting with public disclosure and digital tracking 4. Establish infrastructure maintenance funds to ensure long-term usability of facilities.
Facilities and Equipment	1. Apply SPLISS facility benchmarks for safety, capacity, and functionality 2. Modernize training halls with standard mats, mirrors, conditioning zones, and injury-prevention areas. 3. Introduce a facility inspection and maintenance schedule audited annually.
Competition and Development Pathways	1. Design tiered competition systems: intra-school → city → provincial → national. 2. Ensure age-appropriate competitive loads to prevent burnout. 3. Integrate referees, coaches, and educators in competition assessment panels. 4. Use competition performance data to guide training adjustments and policy improvement.
Monitoring and Evaluation	1. Develop a Provincial SPLISS Evaluation Index for Wushu covering: - Policy efficiency - Coaching quality - Talent identification - Funding and infrastructure use - Athlete development and retention 2. Collect data biannually and present at provincial Wushu management summits.
Feedback and Continuous Improvement	1. Establish feedback loops between coaches, administrators, and policymakers 2. Conduct annual focus group reviews to revise management practices. 3. Implement digital performance dashboards for real-time monitoring of athlete progression and institutional performance.

Table 4. (continued)

The management guideline to promote elite youth Wushu athletes in Hebei Province	
Long-Term	1. Align training stages with biological growth and academic milestones
Athlete	2. Integrate technical, tactical, psychological, and academic progression plans.
Development	3. Encourage late specialization and multi-sport participation at early stages.
(LTAD)	4. Promote athlete longevity and post-sport career opportunities.

Based on the outcomes of the focus group discussions, the proposed Guidelines for the Development and Management of Elite Youth Wushu Athletes in Hebei Province provide a comprehensive and systematic framework. This framework integrates key dimensions, including governance, policy enhancement, coach development, athlete welfare, financial resource management, and monitoring and evaluation mechanisms. The guidelines are designed to support the holistic development of young athletes by fostering motivation, well-being, and long-term performance progression. Ultimately, they serve as a strategic blueprint for establishing a coordinated, efficient, and sustainable management system for Wushu development within sports schools in Hebei Province.

Part 3: Validation of the Developed Management Guideline for Promoting Elite Youth Wushu Athletes in Hebei Province

To evaluate the appropriateness, feasibility, and practical applicability of the developed management guideline, a panel of seven experts, comprising three sports management experts, two Wushu coaches, and two representatives from Wushu associations was convened using a connoisseurship evaluation approach.

The expert panel reached a consensus that the proposed guideline is well-structured, practical, and aligned with both the operational capacity of sports schools in Hebei Province and the developmental needs of Wushu. Its key strengths lie in the effective integration of the POLC management framework, SPLISS model, and LTAD principles, encompassing critical dimensions such as governance and collaboration, coach development, athlete welfare, competition pathways, and financial resource management. Furthermore, the guideline clearly outlines implementation mechanisms, including cross-institutional coordination, digital monitoring systems, and continuous evaluation processes. It balances strategic planning with practical execution, addressing not only athlete development but also educational orientation and policy alignment.

Overall, the experts confirmed that the guideline is scientifically grounded, contextually appropriate, and practically feasible. It is considered applicable within the sports school system of Hebei Province and capable of providing meaningful guidance for the development of elite youth Wushu athletes, with potential for broader application as a reference model.

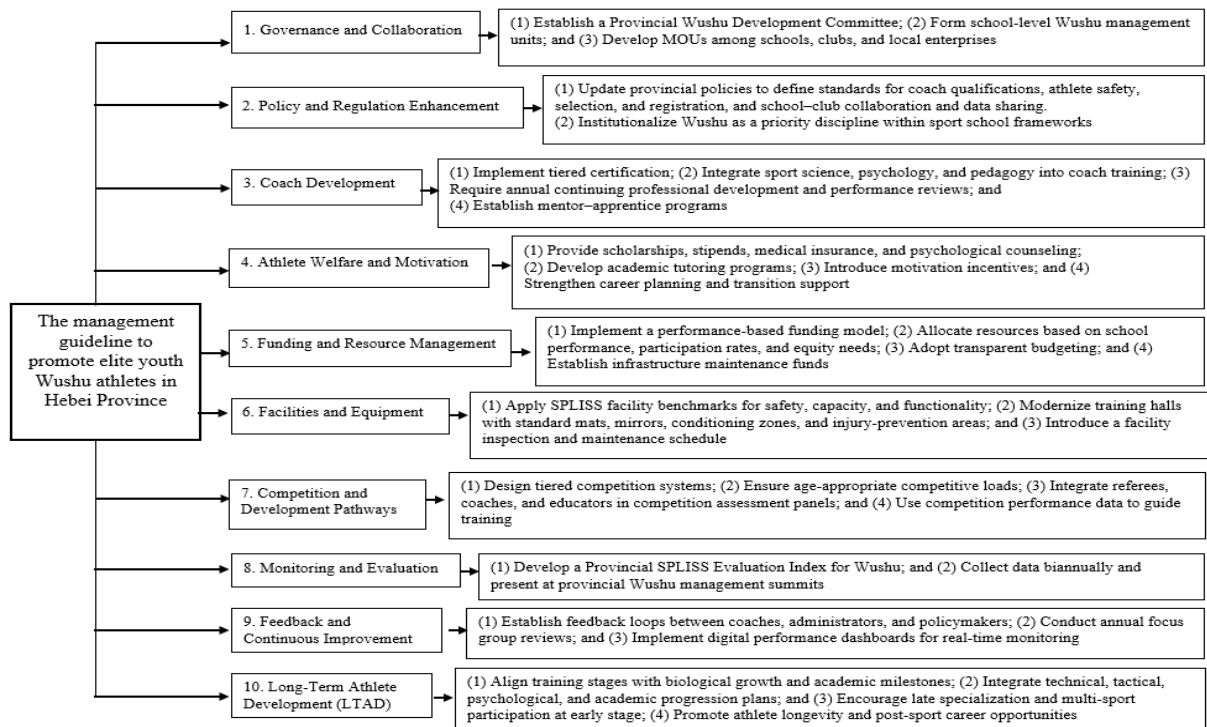


Figure 1. The management guideline to promote elite youth Wushu athletes in Hebei Province

Discussion

The findings of this study reveal that the development of elite youth Wushu athletes in Hebei Province is characterized by both notable strengths and persistent challenges. On the one hand, athletes, coaches, and families demonstrate strong intrinsic motivation, commitment, and support, which provide a solid foundation for talent development. On the other hand, the results from the questionnaire survey and qualitative analysis indicate structural limitations in training management, facility quality, coaching development, and policy implementation. These constraints, coupled with limited resources and insufficient institutional support, continue to hinder the sustainable progression of youth Wushu toward elite performance.

To provide a deeper analytical interpretation, the findings were systematically examined through the integration of the POLC framework, SPLISS model, and LTAD principles. From a POLC perspective, the current system reveals gaps in structured planning, coordination, leadership, and control mechanisms. In particular, the lack of standardized management processes and systematic monitoring reduces the effectiveness of training programs and limits organizational efficiency.

From the standpoint of the SPLISS model, several critical pillars remain underdeveloped, particularly in terms of financial investment, coaching quality, facilities, and structured talent development pathways. These gaps highlight the need for stronger policy support, improved resource allocation, and enhanced coordination among stakeholders to build a more robust high-performance system.

In addition, the LTAD framework provides an important lens for understanding issues related to training load, competition exposure, and athlete welfare. The findings emphasize the importance of age-appropriate training, progressive competition systems, and long-term athlete support to ensure sustainable development while minimizing risks such as overtraining, burnout, and injury.

In response to these challenges, this study proposes a comprehensive management guideline integrating ten key dimensions: governance and collaboration, policy and regulatory enhancement, coach

development, athlete welfare and motivation, financial and resource management, facilities and equipment, competition and development pathways, monitoring and evaluation, feedback and continuous improvement, and LTAD. The guideline aims to establish a structured and coordinated system that aligns strategic planning with practical implementation, thereby enhancing both efficiency and sustainability in athlete development.

Particularly, improvements in policy and coach development are essential for strengthening the institutional foundation of youth Wushu. This includes updating provincial policies, clarifying coach qualification standards, and implementing continuous professional development programs. Well-trained and experienced coaches are critical in ensuring effective training delivery and long-term athlete progression.

In terms of facilities and competition systems, the study emphasizes the need to modernize training infrastructure through regular inspection and maintenance, ensuring safe and high-quality training environments. A structured and tiered competition pathway from school to provincial and national levels is also necessary to support athlete progression. At the same time, competition loads should be carefully aligned with athletes' developmental stages to prevent fatigue and injury. Competition performance data should be systematically utilized as a feedback mechanism to refine training programs and inform policy decisions.

These findings are consistent with the recommendations of Han et al (2021), which highlights the importance of sustained participation in multi-level competitions for youth athlete development. Similarly, Côté & Vierimaa (2014) emphasize that effective athlete development must balance physical, technical, and psychosocial factors, while Perreault & Gonzalez (2021) underline the importance of age-appropriate training loads and structured periodization.

Overall, the integration of the POLC, SPLISS, and LTAD frameworks provides a comprehensive explanation of the empirical findings and offers clear policy and management implications, including the need for integrated governance structures, evidence-based decision-making, and alignment between short-term performance goals and long-term athlete development strategies. The results of this study demonstrate that the proposed management guideline is contextually appropriate, practically feasible, and theoretically grounded, with strong potential to enhance the development of elite youth Wushu athletes in Hebei Province and serve as a reference for similar contexts.

Conclusion and Suggestion

The development of the proposed management guideline provides a structured and systematic framework to facilitate effective collaboration among sports schools, Wushu associations, and relevant administrative bodies in cultivating elite youth Wushu talent. It offers a strategic direction for strengthening organizational management, optimizing training systems, and supporting the sustainable development of athletes.

Grounded in the integration of the POLC framework, SPLISS model, and LTAD principles, the guideline establishes a coherent approach that aligns governance, resource allocation, and athlete development pathways. Expert evaluation indicates that the guideline is contextually appropriate, practically feasible, and well-aligned with the operational conditions of sports schools in Hebei Province.

Recommendations from the Research Findings

- 1) The provincial government should prioritize Wushu development within Hebei's educational and sports policy agenda, ensuring consistent funding, institutional support, and the integration of Wushu into school curricula and community sports programs.
- 2) A standardized monitoring and evaluation system, based on the SPLISS framework, should be implemented to assess policy effectiveness, coaching quality, talent identification, and resource utilization across sports schools. Regular reporting mechanisms would enhance transparency and accountability.
- 3) Sports schools should adopt a holistic athlete development approach by providing comprehensive support systems, including scholarships, medical and psychological services, and career guidance. Balancing athletic training with academic development is essential to ensure long-term sustainability.

Recommendations for Future Research

- 1) Future studies could conduct comparative analyses across different provinces in China to examine the applicability of the proposed guideline and identify best practices for refining a national Wushu development framework.
- 2) Longitudinal research is recommended to assess the long-term impact of guideline implementation on athlete performance, coach development, and organizational effectiveness.
- 3) Further empirical studies should quantitatively validate the SPLISS-based evaluation indicators proposed in this study to strengthen their predictive value and policy relevance.

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