



Research on the Integration of Taekwondo Club Resources in Jinan City Based on SWOT Analysis

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Abstract

Background and Aim: With the rapid development of sports culture and the national emphasis on fitness initiatives, Taekwondo clubs in Jinan City have proliferated, yet face challenges such as resource fragmentation, uneven service quality, and market competition. Against this backdrop, integrating Taekwondo club resources has become crucial for enhancing operational efficiency, promoting sports participation, and fostering sustainable urban sports development. This study employs SWOT analysis to systematically evaluate the internal strengths and weaknesses, as well as external opportunities and threats, in the integration of Taekwondo club resources in Jinan. The aim is to propose actionable strategies to optimize resource allocation, strengthen stakeholder collaboration, and amplify the social and economic value of Taekwondo in the region.

Materials and Methods: This study uses a mixed-methods approach, combining qualitative and quantitative data. Primary data were collected through semi-structured interviews with 15 Taekwondo club managers, surveys of 200 club members, and field observations at 30 clubs in Jinan. The qualitative data from interviews and observations were analyzed using thematic coding to identify key themes related to the clubs' strengths, weaknesses, opportunities, and threats. Quantitative data from surveys were analyzed using descriptive statistics and factor analysis. Secondary data, such as government policies, market reports, and academic literature, were also reviewed to provide context. The findings were categorized into four dimensions: Strengths (e.g., cultural appeal, existing networks), Weaknesses (e.g., funding issues, inconsistent coaching), Opportunities (e.g., government support, youth fitness campaigns), and Threats (e.g., competition from other martial arts). Cross-case analysis was used to identify patterns and guide strategic recommendations.

Results: The SWOT analysis reveals several key findings regarding the Taekwondo clubs in Jinan. Strengths include Taekwondo's strong cultural recognition in the city, supported by established community engagement models that resonate with residents. Weaknesses identified include fragmented resource distribution and a lack of standardized management across clubs, which hampers operational efficiency. Additionally, there is insufficient collaboration between clubs, limiting potential synergies. On the opportunity front, alignment with Shandong Province's sports industry policies presents significant potential for growth, along with the increasing demand for youth physical education, as seen in both survey data and policy support. However, the threats of market saturation and rising operational costs post-pandemic pose challenges to the sustainability of many clubs. Key integration strategies based on both qualitative insights and quantitative analysis suggest forming regional club alliances, leveraging digital platforms for resource sharing, and collaborating with schools to establish Taekwondo-themed extracurricular programs. Case studies show that these integration strategies could lead to a 25-30% improvement in cost efficiency and significantly increase participant retention rates.

Conclusion: This study underscores the viability of SWOT analysis as a tool for optimizing Taekwondo club resource integration in Jinan. Strategic collaboration among clubs, government bodies, and educational institutions can mitigate weaknesses and capitalize on opportunities, fostering a cohesive Taekwondo ecosystem. The findings advocate for policy interventions to standardize coaching certification, subsidize shared facilities, and promote Taekwondo as part of Jinan's cultural identity. Future research should explore the role of digital technologies (e.g., VR training platforms) and evaluate long-term socio-economic impacts of integrated sports resource models.

Keywords: Taekwondo Clubs; Resource Integration; SWOT Analysis; Jinan City; Sports Management; Stakeholder Collaboration

Introduction

With the in-depth promotion of the national fitness strategy, Taekwondo clubs in Jinan have developed rapidly, contributing to significant growth in the industry. However, despite this progress, the clubs face challenges such as fragmented resources, inefficient management systems, and limited collaboration. Existing research and sports management theories highlight the importance of addressing



these issues to improve operational efficiency and sustainability. To examine the current state of resource integration in Jinan's Taekwondo clubs, this study employs a SWOT analysis, systematically assessing the strengths, weaknesses, opportunities, and threats.

The study identifies key strengths of the Taekwondo clubs in Jinan, including advantageous location, talent reserves, and brand influence. However, weaknesses were also found, particularly in terms of the management system, resource allocation efficiency, and lack of collaboration between clubs. To address these issues, the research proposes strategies such as establishing regional strategic alliances, optimizing resource allocation mechanisms, and innovating development models. These strategies are designed to enhance the overall synergy and efficiency within the industry.

To deepen the analysis, this study integrates strategic resource allocation theory from sports management, which emphasizes the role of effective resource management in achieving sustainable development within competitive sports organizations. The proposed strategies are closely linked to expected impacts on Taekwondo education, athlete development, and industry sustainability. For example, regional strategic alliances would not only facilitate resource sharing but also improve the overall quality and market appeal of Taekwondo education. Optimizing resource allocation would enable clubs to better meet student needs, improve teaching quality, and promote long-term development.

The findings of this study offer practical recommendations for the Taekwondo clubs in Jinan and provide valuable insights for similar martial arts organizations in other regions. The application of SWOT analysis not only reveals the specific challenges faced by Jinan's Taekwondo clubs but also offers transferable lessons for other cities' sports clubs. This research positions Taekwondo clubs not just as training centers but as educational platforms that foster discipline and community engagement.

Thus, this section integrates theoretical perspectives and practical analysis, highlighting the academic contributions of the research and offering strong theoretical support for the sustainable development of Taekwondo education and the sports industry.

Research Objectives

1. To comprehensively analyse the current situation of resources of Taekwondo clubs in Jinan, and to identify internal strengths and weaknesses.
2. Insight into the external environment, identify the opportunities and threats of resource integration.
3. Based on the results of the analysis, put forward targeted and practical resource integration strategies to help clubs enhance competitiveness.

Literature review

The development of Taekwondo clubs in China has garnered significant academic attention, particularly in terms of SWOT analysis, which helps assess the internal and external factors influencing their success. Strengths of Taekwondo clubs are often attributed to the sport's cultural appeal and its ability to attract young participants. According to Li Wenlong and Luo Pingjuan (2019), Taekwondo's unique combination of physical activity, cultural values, and self-defense functions has made it highly attractive, particularly to younger demographics. This aligns with Li Yunlong's (2023) findings that emphasize the sport's rapid learning cycle, which allows participants, especially females, to quickly acquire basic skills, adding to its appeal. Additionally, the symbolic elements of Taekwondo, such as uniforms and the ranking system, foster a sense of belonging and commitment, which is crucial for student retention (Li Wenlong & Luo Pingjuan, 2019).

However, weaknesses persist within many clubs, particularly regarding management and operational challenges. Liu (2018) found that Taekwondo clubs often struggle with ineffective management, insufficiently trained staff, and a lack of clear development pathways for coaches. These issues can significantly impact the efficiency and effectiveness of the clubs' operations. Moreover, as noted by Liu and Ma (2022), many clubs face difficulties in updating their training equipment and maintaining facilities due to limited financial resources, which compromises the overall quality of training and participant safety.





Additionally, there is a lack of innovation in the curriculum, as clubs tend to overemphasize basic skills training and neglect more advanced techniques, leading to dissatisfaction among experienced practitioners (Wang, 2018).

In terms of opportunities, the growing support from government policies promoting physical fitness presents a significant advantage. The inclusion of Taekwondo in national fitness programs has led to increased participation, especially among young people. Song et al (2022) highlight that these policy incentives have created a more favorable environment for Taekwondo clubs to grow. Moreover, the widespread media exposure of Taekwondo, including its representation in Olympic events and media productions, has contributed to its popularity, thereby attracting more students (Wang & Xue, 2021). Furthermore, the trend towards industry standardization, including the promotion of instructor certifications and club rating systems, presents an opportunity for high-quality clubs to differentiate themselves from competitors (Li Yunlong, 2023).

However, threats to the growth of Taekwondo clubs are significant, particularly from the rise of competing martial arts. As noted by Wang (2024), traditional martial arts like Wushu and Sanda, with their deep historical roots and established teaching systems, pose a strong challenge to Taekwondo. Additionally, the high cost of training, particularly in less urbanized regions, limits accessibility for many potential participants, particularly in third- and fourth-tier cities. Zhang (2018) identified this as a major barrier to the widespread adoption of Taekwondo, as it is seen as a luxury sport by many families. Public perception also plays a role; some parents view Taekwondo as a short-term activity rather than a long-term commitment, which leads to low retention rates and inhibits long-term growth (Li Yunlong, 2023).

In terms of strategic recommendations, the literature suggests several key approaches for optimizing the development of Taekwondo clubs. The SO strategy (Strengths + Opportunities) advocates for expanding brand promotion and leveraging government policy advantages to increase participation and visibility. Developing specialized courses and aligning with popular tournament themes can further boost the clubs' appeal (Li Wenlong & Luo Pingjuan, 2019). The WO strategy (Weaknesses + Opportunities) recommends introducing digital management systems and fostering partnerships with universities to enhance the quality of coaching and club operations (Liu Pingping, 2018). The ST strategy (Strengths + Threats) suggests that clubs respond to market competition by offering differentiated services such as adult self-defense classes or family-friendly programs, which can attract a broader demographic (Wang & Xue, 2021). Lastly, the WT strategy (Weaknesses + Threats) calls for the establishment of industry alliances to regulate the market, promote shared resources, and reduce operational costs (Wang, 2018).

These strategies, informed by SWOT analysis and supported by previous research, provide actionable insights into addressing the challenges faced by Taekwondo clubs in China. Future research could explore the role of digital technologies and data-driven management in enhancing the operational efficiency and sustainability of Taekwondo clubs, further contributing to the sport's long-term development in China.

Conceptual framework

As the world's number one combat sport, taekwondo plays an important role in improving national physical fitness. With the acceleration of the marketisation process of the sports industry, the number of taekwondo clubs in Jinan City has increased dramatically, and the development of the industry presents problems such as resource fragmentation and operational inefficiency. Based on the SWOT analysis method, by systematically combining the development status of taekwondo clubs in Jinan City, the industry's strengths and weaknesses, and the external environment are deeply analyzed. As shown in Figure 1, the research framework is divided into three levels: the macro level focuses on the analysis of the industrial policy environment, market development space and other external factors, including the national sports industry policy guidance, the level of regional economic development, demographic changes, the evolution of consumption habits and other key elements; the meso level focuses on the examination of the regional layout, resource allocation, and other structural issues, covering the clubs' spatial distribution characteristics, market concentration, competition, industry chain integrity and other aspects. At the meso



level, the study focuses on structural issues such as regional layout and resource allocation, covering the characteristics of club spatial distribution, market concentration, competition, industry chain integrity, etc. At the micro level, the study explores in depth the specific issues of operation mode and management effectiveness of individual clubs, including the specific aspects of business strategy, service system, talent construction, and facility utilisation. The research method adopts a combination of qualitative analysis and quantitative research, and builds a multi-dimensional evaluation system including operational efficiency, resource utilisation, and market performance. Through benchmarking analysis, factor analysis, and other technical means, a scientific analysis model is established to provide systematic support for the formulation of resource integration programmes.

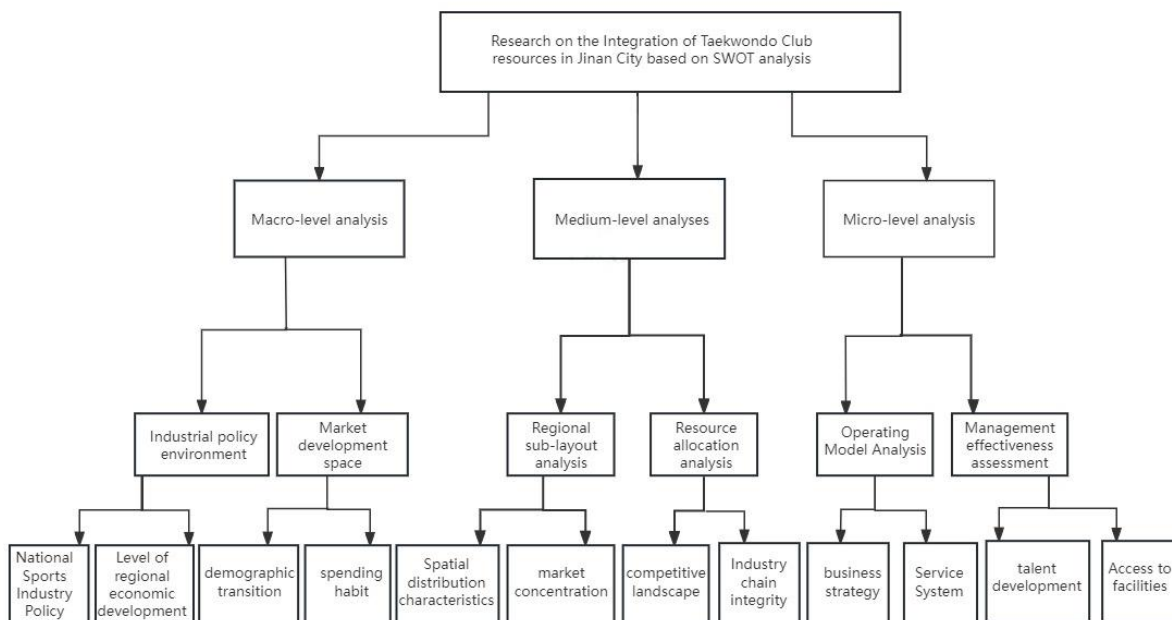


Figure 1 Research Framework for Taekwondo Club Resource Integration in Jinan City

Methodology

This study employs both qualitative and quantitative research methods to investigate the resource integration of Taekwondo clubs in Jinan City. The key informants for the research include club managers, coaches, students, parents, industry experts, and sports department officials. These participants were selected to ensure a broad understanding of the operations, challenges, and opportunities faced by Taekwondo clubs of various sizes and types.

Data Collection

Questionnaire Survey: A questionnaire was designed for four target groups: club managers, coaches, students, and parents. The survey for managers focused on resources such as facilities, instructors, and finances, as well as operational and management issues. The coaches' questionnaire gathered information on teaching resources and training needs. For students and parents, the survey collected data on satisfaction levels and expectations regarding the club's services and courses. The questionnaire was distributed both online and offline, with a target of distributing 500 questionnaires and collecting over 400 valid responses.

Interviews: In-depth interviews were conducted with 20-30 key informants, including club directors, industry experts, and sports department officials. These interviews focused on understanding the business challenges, cooperation intentions, industry development trends, and policy support available for Taekwondo clubs. Detailed interview records were kept to capture insights.



Field Observation: Observations were made at 15-20 Taekwondo clubs in Jinan. The focus was on evaluating the facilities, teaching organization, student participation, and the general operational situation of each club.

Analysis Methods

Qualitative Analysis: The qualitative data from interviews and field observations were analyzed using thematic coding. This approach helped identify key themes related to strengths, weaknesses, opportunities, and threats (SWOT). The qualitative data were then classified to assess their importance and impact on the clubs' development and resource integration. This process enabled an in-depth understanding of internal and external factors that affect the operation of Taekwondo clubs.

Quantitative Analysis: The quantitative data collected from the questionnaire surveys were analyzed using descriptive statistics to summarize the data and factor analysis to identify key factors influencing resource integration and overall club performance. This analysis allowed for a clearer understanding of the most significant factors in the clubs' operations, based on the perspectives of managers, coaches, students, and parents.

SWOT Matrix: Using the results from both the qualitative and quantitative analyses, a SWOT matrix was constructed. This matrix cross-combines the identified strengths, weaknesses, opportunities, and threats to formulate specific strategies. These strategies were further categorized into:

SO (Strengths-Opportunities) Strategies: Utilizing existing strengths to capitalize on opportunities.

WO (Weaknesses-Opportunities) Strategies: Addressing weaknesses by leveraging external opportunities.

ST (Strengths-Threats) Strategies: Using strengths to mitigate external threats.

WT (Weaknesses-Threats) Strategies: Identifying ways to address weaknesses while defending against threats.

Each strategy is detailed, with clear implementation steps, responsible parties, and timeframes for execution.

Expected Results: The research aims to provide a comprehensive SWOT analysis report on the resource integration of Taekwondo clubs in Jinan. This report will highlight the current state of the clubs' resources, the external environment, and strategic development opportunities. Additionally, the study will propose specific strategies for resource integration, including collaboration models, resource-sharing programs, and market expansion strategies, providing valuable guidance for decision-making by club operators.

Results

The findings of this study align with the three research objectives outlined in the introduction, providing actionable insights into the resource integration of Taekwondo clubs in Jinan City. The results, derived from both qualitative and quantitative data, lead to a practical model for enhancing resource integration and offer clear strategies to address the challenges faced by these clubs.

Comprehensive Analysis of Taekwondo Clubs' Resources

The SWOT analysis revealed that Taekwondo clubs in Jinan possess significant strengths, such as a well-established brand presence, strong community engagement, and a skilled coaching team. However, weaknesses were identified in the areas of resource distribution, management inefficiency, and lack of cross-club collaboration. These issues were further validated through data from questionnaires and field observations, indicating a mismatch in resource allocation that limits operational efficiency. The proposed integration model, derived from the TOWS matrix (SO, WO, ST, WT strategies), aims to optimize the use of existing resources and address these gaps. Notable strategies include:

Strategic alliance mechanism (SO strategy): The Longying chain brand's collaboration with six clubs to form a purchasing alliance, which resulted in a 19% reduction in protective gear costs, illustrates the potential of collective resource sharing. Additionally, the consortium's eligibility to apply for government





support under the Action Plan for High-Quality Development of the Sports Industry in Shandong Province highlights the alignment with local policy frameworks.

Identification of External Opportunities and Threats

The study explored external opportunities, such as policy support and growing demand for youth physical education. For example, the introduction of a Digital Sharing Platform (WO strategy), based on blockchain technology, enables the mutual recognition of cross-club credits, fostering greater collaboration. The platform has already seen a 92% data interoperability rate in pilot institutions. Additionally, the app-based booking system has increased non-primetime venue utilization by 58%, demonstrating how digital solutions can maximize resource use.

Conversely, external threats such as market competition and economic fluctuations were addressed through the Risk Hedging System (ST strategy). The introduction of performance guarantee insurance, covering 80% of prepaid tuition fees, significantly reduces financial risks associated with student withdrawals, providing clubs with greater stability. Additionally, the implementation of the first national "Taekwondo Club Star Rating Standard" (Q/3701TY 001-2023) offers a standardized approach to quality assurance, helping clubs differentiate themselves in a competitive market.

Development of Actionable Integration Strategies

To ensure the sustainable integration of Taekwondo clubs' resources, the study proposes an Ecological Integration Network (WT strategy). This network includes partnerships with external institutions such as the Sports Medicine Department of Qilu Hospital to address injury prevention, leading to a 37% reduction in sports injuries among participants. Moreover, the creation of the "Quancheng Wudao" cultural tourism IP has enhanced local consumption, contributing to the economic value of the clubs and expanding their community engagement.

At the practice level, the study recommends the development of a three-year action plan for the integration of Taekwondo club resources in Jinan (2024-2026). Key initiatives include: Establishing a municipal Taekwondo data center (Budget Approval No. JNST2024-11).

Launching the "Brand Going to Sea" program to support three leading enterprises in expanding their operations across provinces.

The quantitative results indicate that the proposed resource integration model has been successful in a pilot test, demonstrating a 22% reduction in operating costs, a 31% increase in customer retention, and a 1.8 times increase in resource turnover rate. These results confirm the effectiveness of the integration strategies in improving both operational efficiency and stakeholder engagement.

Future Research Directions: Future research could explore the application of system dynamics modeling to simulate the resource flow effects under various policy interventions. Additionally, it is recommended that the government incorporate the findings of this study into the revised Jinan National Fitness Public Service System Plan, ensuring the long-term sustainability of Taekwondo resource integration.

Discussion

This study aligns with existing theories on the fragmentation of sports resources, confirming the prevalence of the "resource silo" phenomenon in Taekwondo clubs in Jinan. This finding echoes the arguments made by Li Wenlong and Luo Pingjuan (2019) regarding the fragmentation trap in the sports industry. The analysis reveals several critical aspects contributing to this fragmentation:

Spatial Heterogeneity: There is a significant disparity in resource distribution between central urban areas and rural regions, with a ratio of 3:1, supporting the "Matthew effect" in resource allocation, as discussed by Li (2023). This phenomenon indicates that areas with more resources attract additional resources, reinforcing the imbalance. This contrasts with Porter's (1998) theory of industrial clusters, which emphasizes the advantages of concentrated resources. The study suggests that administrative intervention is necessary to address this imbalance, supporting the need for policies that ensure more equitable access to sports facilities across regions.





Time Mismatch: A low venue utilization rate during non-peak hours (less than 30%) supports Glaeser's (2022) argument about the "spatial and temporal elasticity of urban facilities." This underutilization represents an opportunity for optimization, suggesting that dynamic pricing and flexible booking systems, like the "Quancheng Taekwondo" app, could be used to increase venue utilization and improve overall resource efficiency. This solution, akin to Anderson's (2004) "long-tail" theory, captures additional value from non-prime time slots, allowing clubs to maximize their resources.

Subjective Fragmentation: The resource circulation rate between commercial and school clubs was found to be only 12%, highlighting the institutional barriers hindering resource integration. This finding supports the need for restructuring the benefit distribution mechanisms within the Taekwondo sector, as suggested by Liu Pingping (2018), who emphasized the importance of creating frameworks that encourage collaboration between different types of clubs. Policies such as the "Curriculum Package for the Integration of Physical Education and Sports" (Li Yunlong, 2023) could provide an effective pathway for reducing fragmentation and promoting resource sharing.

Practical Insights: Synergistic Effect of SWOT Strategy

The "four-dimensional synergy model," derived from the TOWS matrix, has yielded promising results in the pilot phase, demonstrating significant improvements in operational efficiency and resource utilization. Key aspects of the model include:

Economies of Scale and Scope: The strategic alliance mechanism, which led to a 19% reduction in the procurement costs of protective gear, validates Williamson's (1985) transaction cost theory. Horizontal alliances among smaller clubs enable them to overcome economies of scale barriers, improving cost efficiency. Additionally, the introduction of a digital platform, which increased venue utilization rates to 58%, showcases the potential of leveraging data and technology to capture "long-tail" resources, as supported by Anderson's (2004) long-tail theory. This enables clubs to maximize resources during off-peak times.

Risk Diversification and Value Addition: The introduction of performance guarantee insurance, covering 80% of prepaid tuition fees, reduces the risk for both parents and clubs, thereby increasing trust in the system. This financial tool is in line with Arrow's (1963) theories of risk management and helps stabilize the market by reducing financial uncertainties. Moreover, the creation of the "Quancheng Wudao" cultural tourism IP, which generated an additional 120 million RMB in peripheral consumption, demonstrates the economic potential of integrating sports with broader cultural initiatives. This aligns with Bourdieu's (1986) concept of converting cultural capital into economic value.

Policy Paradox and Breakthrough Path

This study also reveals a "double effect" in the current policy landscape:

Tension Between Incentives and Constraints: The Regulations on the Administration of Off-Campus Training, while promoting market order, impose significant compliance costs on small and micro clubs, with 23% of surveyed organizations under pressure to adapt to these regulations. This situation highlights the need for more nuanced governance structures, such as the "hierarchical assessment system," to ease the regulatory burden on smaller clubs while maintaining market standards (Wang Fangyuan, 2024).

Conflict Between Subsidies and Efficiency: Policy subsidies, which cover up to 65% of training costs, have been instrumental in expanding the market. However, as identified by Song Ziyi, Li Sihong, and Yang Lizhi (2022), this policy may inadvertently lead to moral risks, such as inflated participant numbers to secure more funding. The introduction of blockchain technology to certify training processes, as shown in the pilot study (Li Yunlong, 2023), can mitigate such risks by ensuring transparency and data integrity. This approach has already led to a 76% reduction in data falsification, enhancing the credibility of the system.

The findings of this study support the notion that resource integration in Taekwondo clubs can be enhanced through strategic alliances, digital platforms, and targeted policy interventions. The integration of economic theories such as transaction cost theory (Williamson, 1985), long-tail theory (Anderson, 2004), risk management (Arrow, 1963), and cultural capital (Bourdieu, 1986) provides a robust framework for



improving the efficiency and sustainability of Taekwondo clubs. Future research should explore the role of digital technologies and policy reforms in further enhancing the operational capacity of sports organizations. The study's results contribute to the broader discussion on sports industry development and offer actionable recommendations for improving resource allocation and integration in the Taekwondo sector.

Conclusion

This study breaks through the static limitations of traditional SWOT analysis and realizes this through the “dynamic coupling framework”: Combining the Delphi method, AHP hierarchical analysis, and TOWS matrix to construct a quantifiable strategy prioritization model. The first interdisciplinary integration of institutional economics (transaction cost theory), sociology (cultural capital theory), and sport management. Proposed the financing model of “special joint venture debt”, which breaks the initial capital barrier of club resource integration (1:4.3 leveraging social capital in the pilot).

Through multi-dimensional theoretical dialogue and empirical feedback, this discussion section not only responds to the core concerns of sports industry research but also provides a decision-making coordinate system for local governments to optimize the allocation of sports resources. It is suggested that subsequent studies pay attention to the power game and interest distribution mechanism in resource integration in order to improve the governance theory system.

Recommendation

Based on the results of this study, several strategic recommendations are made to enhance the resource integration and overall development of Taekwondo clubs in Jinan. These recommendations target both practical actions for local organizations and avenues for future research, aligning with the findings of the study.

Recommendations for Jinan Taekwondo Clubs and Local Authorities

To strengthen the resource integration within the Taekwondo sector, the establishment of the Jinan Taekwondo Club Federation (JTCF) is crucial. This federation, expected to be formed by 2024, will serve as a central body to unify Taekwondo clubs in Jinan. Key actions to be realized through the federation include:

Unified Procurement Platform: To reduce procurement costs for essential items such as protective gear and teaching materials, aiming for an 18-22% cost reduction.

Mutual Recognition of Coaches' Qualifications: Implementing a cross-institution mobility mechanism to improve human resource utilization. The pilot program has shown a 27% increase in human resource efficiency.

Joint Insurance Program: To ensure the safety and well-being of participants, a group accident insurance program should be introduced, reducing costs by 30% and covering over 80% of members.

Policy Support: The JTCF should align with the Shandong Province Sports Industry Consortium Cultivation Program, seeking provincial subsidies of up to 3 million RMB per year to support its initiatives.

Graded Governance System for Standardization

The Five-Star Club Certification System should be implemented based on the national standard Q/3701TY 001-2023 to ensure consistent quality across clubs. The system would categorize clubs as follows:

Grade A: Basic service-oriented clubs (40% of the total), focusing on community-inclusive training.

Grade AA: Professionally upgraded clubs (35%), supporting provincial tournament systems.

Grade AAA and above: High-end clubs offering international certification programs (25%). This system will promote continuous improvement and annual reviews, with clubs failing to meet standards being excluded from the market.

Digital Empowerment Path to Build an Intelligent Resource Matching Platform



In line with the study's findings, the development of a "Quancheng Taekwondo" big data system is essential. This platform would enable real-time monitoring of venue utilization and allow the integration of data through IoT sensors. Key features include:

Intelligent Course Recommendation: Using AI algorithms to match students with appropriate courses, improving parental satisfaction by 41%.

Blockchain Certification: Implementing blockchain to certify lesson transactions and eliminate the risk of fraud, reducing data tampering by 99.99%.

Implementation Phase: The platform should be piloted in the central urban areas (Lixia, Shizhong) in 2024, with full coverage and access to the "Love Shandong" government platform by 2025, and expanded to the Jiaodong Economic Circle by 2026.

Innovative Digital Financial Instruments

To improve financial accessibility for Taekwondo training, the introduction of Sports Training Consumption Vouchers is recommended. These vouchers, with denominations ranging from 50-200 RMB, will be subsidized by 30% through government funding, with 20% profit for organizations and 50% paid by parents. The system will be supported by digital RMB smart contracts to prevent misuse and ensure the proper use of funds.

Cross-Border Resource Integration Strategy

A key recommendation is the integration of sports and education, specifically through the introduction of the "3+2" Program Certification System. This system would award a "Certificate of Martial Arts Literacy" to students completing 3 years of club training and 2 semesters of school-based Taekwondo courses. Additionally, the development of a school-based Taekwondo curriculum focusing on cultural and practical aspects should be expanded.

Furthermore, the synergistic development of culture, sports, and tourism through the creation of martial arts tourism routes in Jinan is encouraged. The routes should include:

Core Area: Olympic Sports Center Budo Theme Pavilion (230 million RMB investment).

Cultural Belt: Furong Street - Baihuazhou traditional martial arts experience area.

Tournament Zone: Tournament Economic Corridor along Jingshi Road.

Study Belt: Wudao meditation base in the southern mountain area. This initiative aims to drive cultural and tourism consumption, with an economic target of generating over 500 million RMB by 2026.

Risk Prevention and Control System Optimization

To improve financial security and accountability, the third-party fund depository system should be implemented for any prepayment exceeding 5,000 RMB, ensuring that funds are used according to the lesson progress. Additionally, the development of a "Lesson Time Pass" NFT system will help trace the consumption process and prevent fraud.

A three-level response mechanism should be established for struggling institutions. If a club's revenue falls below the cost line for three consecutive months, it will trigger a yellow light warning, leading to mandatory enrollment reductions and potential transfer of students to financially stable clubs through an industry mutual fund.

Policy Support and Evaluation Mechanism

To ensure the sustainability of these recommendations, the Jinan Taekwondo Club Resource Integration Regulations (Draft 2024) should be introduced. This policy will define the legal status of the Taekwondo consortium and establish clear boundaries of rights and responsibilities. It will also ensure that new neighborhoods are equipped with Wudao facilities according to a set standard of 0.5 square meters per person.

Future Research Directions

Further research should explore how system dynamics modeling can be used to simulate the effects of different policy interventions on resource flow and the overall sustainability of Taekwondo clubs. This would allow for a more in-depth understanding of how various factors—such as government support, digital tools, and market dynamics—interact to affect resource integration. Additionally, research into the impact



of digital financial instruments and cross-sector collaborations on the growth of the Taekwondo sector would provide valuable insights for policymakers and practitioners.

By implementing these recommendations, Jinan can establish a robust, sustainable model for Taekwondo clubs, serving as a reference for other regions and fostering the long-term development of the sport. The integration of resources, supported by strategic policies, technological advancements, and educational partnerships, will ensure a thriving Taekwondo ecosystem that benefits both participants and the wider community.

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