

## TAEKWONDO COMPETITION MARKETIZATION DEVELOPMENT STRATEGY BASED ON SWOT-AHP MODEL

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**Abstract:** China middle school students Taekwondo League, as the highest level of taekwondo events for middle school students, is an important part of middle school sports events. The development of the league can not only enrich sports activities, mobilize the enthusiasm of middle school students for sports, but also conducive to the improvement of students' will quality and psychological quality as well as training reserve talents. With the rapid development of taekwondo League for middle school students, problems such as imperfect market organization and operation system, unreasonable competition system and imperfect management system of sports teams have been exposed, which affect the sustainable development of the competition to a certain extent. This paper mainly uses the SWOT AHP research method to explore the market commercialization status quo, existing problems and development strategies of Chinese middle school students Taekwondo League, so as to provide theoretical basis for other related studies.

**Key words:** market operation, SWOT analysis, AHP hierarchical analysis

**Quotation:** Under the background of the rapid development of social civilization, economic globalization promotes the exchange of sports culture in various countries, people's sports life is gradually enriched, and the sports competition market is gradually concerned by the public. Therefore, the marketization of sports competition has become a trend. Taekwondo, as a passionate and unique national charm fighting sport, reverts the mission of modern sports athletics to pursue higher, faster and stronger. In recent years, it occupies an important position in the sports consumption of our country. Taekwondo has been included in the Olympic Games for many years, conforming to the global mainstream situation, and constantly exploring the direction of marketization and commercialization. At present, many fighting sports and the rise of national fighting sports have brought great pressure and challenge to Taekwondo.

China Middle School Students Taekwondo League is organized by China Middle School Students Sports Association and organized by each Taekwondo branch of China Middle School Students Sports Association. As a national event, China Middle School Students Taekwondo League has a high level of training and competition and a large scale of participation,

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representing the highest level of taekwondo for middle school students in China. Its strict management system guides Taekwondo to move forward continuously in the established direction. At the same time, some domestic scholars who study sports events point out that China's sports event market is in the time point of system reform and path innovation, Taekwondo, as one of the important sports events, should also actively follow the reform trend and step on the shoulder of policy to promote market-oriented reform. To this end, Taekwondo event marketization needs more attention.

This study mainly focuses on the sports event market, Taekwondo market, the operation status of Taekwondo league for middle school students in China and the marketization operation, and specifically analyzes the successful brand cases of taekwondo event marketization strategy in China. In order to explore a suitable path for the marketization development of Chinese middle school students Taekwondo league, to provide reasonable theoretical support and effective empirical reference for the development of Taekwondo sports science.

### 1. SWOT-AHP analysis model

SWOT analysis model, the situation analysis method, is a qualitative study of internal factors, including the advantages and disadvantages of the internal environment and the opportunities and challenges brought by the external environment. It is an important tool for strategic decision-making in the process of business operation. The Analytic Hierarchy Process (AHP) is a strategic analysis method that combines quantitative and qualitative analysis to solve multi-objective complex problems. When using analytic hierarchy process (AHP) to construct system model, it can be divided into the following four steps: establishing hierarchical structure model, constructing judgment matrix (pair comparison), single hierarchical ranking and consistency test, total hierarchical ranking and consistency test. (See Table 1-1 for the scoring experts on the marketization development factors of Chinese middle school students Taekwondo League)

Table 1-1 Information of experts

Serial Number	Specialist's name	Gender	Units	Highest degree	Exercise level	Title position	Coaching time	Area of nationality
1	Luo Wei	female	Sun Yat-sen University Shandong	Master's	Olympic champion	Associate professor	10 years	Chinese mainland
2	Wei Song	male	Agricultural University Shandong	Master's	International referee	Associate professor	20 years	Chinese mainland
3	Lee Jin-woo	male	Shandong	Ph.D.	6 Black Belt	Associate	10 years	South Korea

4	He Yun	female	University of Physical Education Shandong	Master's	International referee	Professor	17 years	Chinese mainland
5	Yang Weiwei	female	Modern Vocational College Chinese Middle School	Ph.D.	National Division I athlete	Instructor	8 years	Chinese mainland
8	Zhou Xiaoming	male	Students Taekwondo Association	Undergraduate	International referee	Vice President	23 years	Chinese mainland

## 2 Construction of SWOT AHP model for marketization operation

### 2.1 SWOT analysis of marketization operation

#### 2.1.1 Advantage analysis

##### (1) The demand of school and market promotes the marketization operation of Chinese Middle School Students Taekwondo League (S1)

School demand: Taekwondo into the teaching system still has a lot of room for development. In recent years, Taekwondo has gradually entered the campus of some primary and secondary schools, and has become a characteristic course, and some have formed a special high-level Taekwondo training team. Taekwondo League for middle school students in China has the dual functions of selection and demonstration, the scale of the event is large, the amount of start-up capital is high, and many schools cannot afford it independently, which requires the help of the marketability of the event. If the power of social investment can be used to improve the capital structure, the further development of Taekwondo will come naturally.

Market demand: The marketization operation of China Middle school students Taekwondo League will be the joint choice of the organizers and investors. China Middle School students Taekwondo League has display and appreciation, which means that there are sufficient conditions to set up advertising space in the competition venue to attract commercial investment. It can be seen that the marketization operation of Chinese middle school students Taekwondo League is a win-win choice[5].

##### (2) The unique charm and value of Taekwondo give Chinese middle school students Taekwondo League market operation potential (S2)

Training sense of competition: Taekwondo training process is very competitive and technical, must bravely face the opponent's attack, which requires learners to have a correct treatment of success or failure, gains and losses and happiness and sadness of the psychological quality, practice taekwondo can be a good training sense of competition and fighting spirit.

Training physical fitness: Taekwondo is a fighting sport. Learners can speed up emergency response through daily practice and learn self-defense skills that can be used under different circumstances. Adhering to practice will improve their physical fitness and outperform ordinary people in strength, endurance, speed, explosion, flexibility and coordination[6].

Training the quality of will: Taekwondo emphasizes the basic skills and physical training, which is boring and painful. Practitioners must experience the bitterness and fatigue in the process of practice, learn to overcome psychological obstacles, challenge the physical limit and be willing to participate in it, so as to lay a solid foundation for future actual combat training.

Exercise the mind: Taekwondo is violent, rough and brave in the eyes of the audience who do not understand. After real practice, we will find that it is rich in methods and skills, and we need to flexibly use various techniques and tactics in actual combat.

### **(3) High-level competitions encourage Chinese Middle School Students Taekwondo League to Market Operation (S3)**

Through field investigation of Chinese Middle School Students Taekwondo League from 2017 to 2023, and summarizing the grade data of athletes participating in the competition, the number of athletes in Group A whose sports grade is above the national level accounts for 10% of the total number. The number of athletes in Group B whose sports level is above national level 2 accounts for 20.258% of the total number. The national level one athletes and level two athletes occupy a certain proportion in all the competitors, which reflects that the Chinese middle school students Taekwondo League athletes have a high level of competition[7].

#### **2.1.2 Disadvantage analysis**

##### **(1) Too tight schedule (W1)**

The athletes of the Chinese middle school students Taekwondo League are all primary and middle school students. The students have a tight schedule and the time is very limited. However, due to the constraints of the competition system, the organizer and the organizer must efficiently complete hundreds of competitions of different groups within the prescribed two to three days, which makes the entire event arranged in a hurry, difficult to arrange more eye-catching opening ceremony, award style and other ceremonial stage packaging, which leads to the performance of the competition, viewing greatly decreased, making the audience feel boring.

##### **(2) Low participation in competition commercialization (W2)**

The commercialization degree of Taekwondo league for middle school students in China is basically in the initial stage of market-oriented development. There are many Taekwondo champions of the World Middle School Students' Games and the National Youth Taekwondo Championship (Group B). The professional level can actually be comparable with similar Taekwondo commercial competitions. At present, the competition system of the league still mainly relies on government departments and host schools, and the source of funds and control are difficult to be attributed to the market, which causes difficulties for market operation[8].

##### **(3) Restriction of Competition System and competition Rules (W3)**

The current regulations of China Middle School Students Taekwondo League in China are officially formulated by the Taekwondo Branch of China Middle School Students Sports Association. Individual competition and team competition are classified as the standard, and single-defeat elimination system is adopted to advance through the ranks. In addition, all the participating athletes are from all over the country in middle school students, the competition time is very limited, resulting in some of the sub-competitions can not participate, the true level of athletes is difficult to fully show.

### **2.1.3 Opportunity analysis**

#### **(1) Relevant national policy support (O1)**

The Outline for Building a strong Sports Country issued by The General Office of the State Council in 2019 (hereinafter referred to as the Outline) points out that by 2050, a modern socialist sports country should be fully built, and sports should become a landmark cause for the great rejuvenation of the Chinese nation in the middle of this century. Sports have increasingly become an important symbol to highlight a country's comprehensive strength, and competitive sports are the top priority in the development of sports. In view of the development of competitive sports, the Outline puts forward a series of strategic tasks, among which the establishment of a modern competition system with Chinese characteristics is the key task of building a powerful sports country[9].

#### **(2) Development of School Sports Industrialization (O2)**

In recent years, many sports events for middle school students have gradually entered the road of market commercialization and achieved ideal social repercussions, among which the successful examples are: The National Middle School Basketball Championship (CSBA), the NIKE National high School Basketball League, the national youth campus football League, etc., which are marketized, commercial operation is very representative of the middle school sports boutique events.

#### **(3) The prosperity of fighting sports industry (O3)**

The market prospect of fighting sports is promising in recent years. The UFC series of mixed martial arts, which emerged from the United States, has attracted the attention of all countries in the world and achieved rapid development. CCTV5 began to broadcast the World Taekwondo Championship and the World Taekwondo Grand Slam series. Watching Wu Jingyu's injury return from the world peak to the young Zhao Shuai wearing the national flag in 1995 broke historical records repeatedly. These events have one thing in common: they make full use of new media and the Internet, use the power of news media to integrate event resources, guide public opinion, and improve the entire industrial chain of competitive sports events.

### **2.1.4 Challenge analysis**

#### **(1) Insufficient social influence (T1)**

Taekwondo is a minority sport, and the public pays less attention to it and knows less about various events. There are almost no empty seats in tens of thousands of national stadiums for basketball, football and volleyball competitions, and it is even difficult to get a ticket for some finals. Taekwondo is a highly competitive sport that mixes speed, strength, passion and blood. However, in reality, the attendance rate of Taekwondo competitions is relatively low. Most Taekwondo competitions are athletes, parents and stadium staff who have no competition tasks. Besides, the TV media platform rarely reports on the competitions, so the social influence is low.

## (2) Lack of media communication channels (T2)

Nowadays, it is no longer relying solely on the traditional income source of ticket revenue, but has begun to seek diversified income channels such as commercial sponsorship, product advertising, new media live broadcast, and peripheral products. This is an inevitable trend of conforming to marketization, finding new ideas, stimulating new demand, and maximizing market value. China middle school students Taekwondo League has made use of these new media ways to try, but it is only a beginning, its development space needs to be explored and in-depth.

## (3) Lack of fund chain (T3)

The funds of the regional branch competitions of China Middle School Students Taekwondo League mainly come from the accommodation, food and beverage expenses, transportation expenses, registration fees and social sponsorship paid by the participating teams all over the country. Among them, due to the temporary lack of social influence of the league and the lack of publicity professional ability, there are very few social enterprises to sponsor the competition. To promote the marketing operation of the tournament, certain start-up funds will be needed to expand the influence of the tournament and attract greater and stronger resource investment from all social parties. Therefore, the lack of funds seriously restricts the development and marketization and commercial operation of this event.

## 2.2 Quantitative analysis of marketization operation

The SWOT-AHP model is used to analyze the judgment matrix of the advantages, disadvantages, opportunities and challenges of the marketization operation of Chinese middle school Taekwondo League, as shown in Table 1:

Table 1 Inter-group judgment matrix of strengths, weaknesses, opportunities and challenges

Strengths	weight	Rating	Intensity	Underdogs	Weights	Rating	Intensity
S1	0.3177	4.8	1.5250	W1	0.1016	4 -	0.4064
S2	0.1692	2.8	0.4738	W2	0.0414	3.1	0.1283
S3	0.0645	3.2	0.2064	W3	0.0132	2.3	0.0304
Chance	weight	Rating	Intensity	Challenge	Weights	Rating	Intensity
O1	0.1058	3	0.3174	T1	0.0711	2.5	0.1778
O2	0.0541	1.7	0.0920	T2	0.0231	1.6	0.0370
O3	0.0711	1.2	0.0853	T3	0.0104	1.1	0.1144

Calculate the eigenvalues, eigenvectors and determine whether they pass the consistency test according to the above judgment matrix:

	Lambda Max	CI	CR	Pass the conformance test
S	3.0285	0.0142	0.0274 < 0.1	is
W	3.0613	0.0306	0.0589 < 0.1	
O	3.0127	0.0063	0.0122 < 0.1	
T	3.0408	0.0204	0.0393 < 0.1	

## 2.3 Development strategy selection of marketization operation

### 2.3.1 Calculation of strategy vector

The calculated force value describes the coordinates of each factor on the corresponding half axis of the coordinate system, and connects successively to obtain the strategic

quadrilateral, as shown in Figure 1.

Total strength, total weakness, total opportunity and total threat strength are as follows:

$$S = \sum S_i = 1.5250 + 0.4738 + 0.2064 = 2.2052$$

$$W = \sum W_i = 0.4064 + 0.1283 + 0.0304 = 0.5651$$

$$O = \sum O_i = 0.3174 + 0.0920 + 0.0853 = 0.4100$$

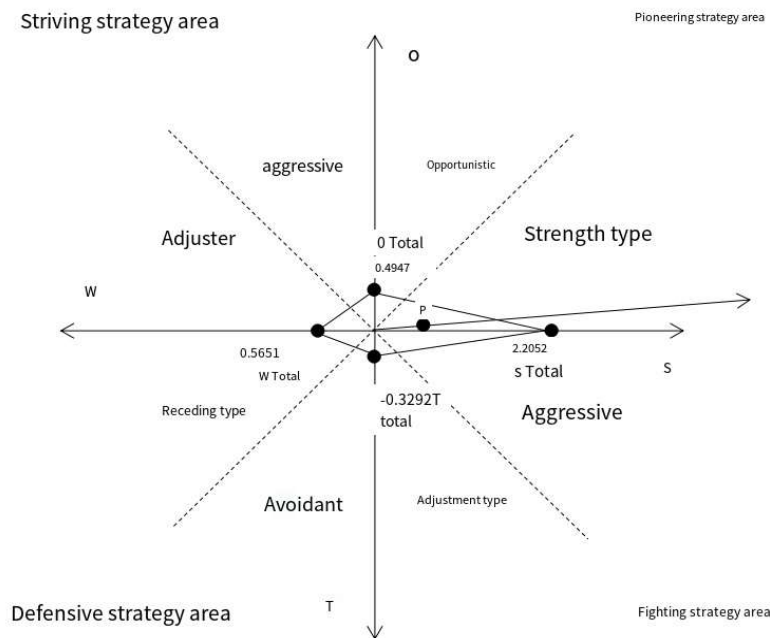
$$T = \sum T_i = 0.1778 + 0.0370 + 0.1144 = 0.0414$$

According to the values of S, W, O and T, the center of gravity P point of the overall strategy quadrangle is determined, which is used as the basis for the selection of the overall strategy type. By calculating the center of gravity coordinates of P point:

$$P(X, Y) = \left( \frac{S_i + W_i}{n}, \frac{O_i + T_i}{n} \right)$$

$$P(X, Y) = (2.2052 - 0.5651) / 4, (0.4947 - 0.3292) / 4 = (0.4100, 0.0414);$$

$$P(0.4100, 0.0414)$$



### 2.3.2 Overall strategic quadrangle

The four variables of total strength S, total strength W, total opportunity strength O and total threat strength T are each half axes to form a four-half dimensional coordinate system.

Figure 1 Overall strategic quadrangle

As can be seen from the figure, point P is located in the first quadrant, belonging to the SO pioneering strategic area. Therefore, the overall strategy should be based on SO strategy, make full use of its own advantages and objective opportunities, but also take into account the ST resistance strategy, as far as possible to avoid the threat of external environment.

## 3. Market operation and development strategy

### 3.1.1 Improve the market organization and operation mechanism

Chinese middle school students Taekwondo league to gradually expand the market participation share, can consider the implementation of similar "step-by-step development"

strategy, the "step-by-step development" applied to the internal and external system transformation: (1) external mechanism, the State General Administration of Sport Science and Education Department, China Middle School Students Sports Association, Taekwondo sports management center and other administrative departments of the management system reform step by step. That is, the management center should be properly separated from the functions of full operation, pay more attention to the competitive environment and the health of the market environment of Taekwondo League, and help, guide and improve the operating system of the market organization. The operation function will be handed over to the market management, continue to perform the supervision function, and research and promulgate the event policies and regulations more conducive to market operation, ensure fairness and justice, openness and transparency, and support the market operation of Taekwondo from the system. Chinese middle school students Taekwondo Branch should strengthen the initiative to promote the establishment of middle school students Taekwondo promotion committee in all provinces and cities across the country, and the association should also give technical support to the provincial and municipal promotion committee in all aspects; (2) the internal system, the national provinces and cities of middle school students take the initiative to set up taekwondo characteristic training team, to cater to the development of middle school students taekwondo league, and gradually with the social market. Give priority to the development and support of China's provinces and cities and regions sports reserve key object units, and eventually form a driving role.

### **3.1.2 Innovation of competition rules to meet market demand**

In order to adapt to and promote the marketization operation of Chinese middle school students Taekwondo League, all links should seek market opportunities from the perspective of the audience, and it is particularly important to adjust and innovate the competition rules. The adjustment of competition rules should not only ensure the fairness, justice and safety of the competition, but also make efforts to improve the audience's viewing experience. The China Taekwondo League for middle school students takes the WTAE League's competition rules as its general outline. Although relevant staff are constantly learning and improving the competition rules, they can't meet the audience's psychological needs on the whole. For reference to the successful and influential commercial taekwondo competitions in China at this stage, the competition regulations are relatively open, boldly breaking the competition rules, not using protective gear to fight, and strengthening the rules to encourage the hit at the same time, the intensity of the competition and the spectator are greatly improved. Chinese middle school students Taekwondo League players have a high competitive level, the league can learn from some successful commercial competitions, boldly break the competition rules, add exhibition matches to meet the audience's psychological needs, improve the attention of the competition to win the market.

### **3.1.3 Reform of sports team management system**

(1) Materialization of taekwondo teams in middle schools. Compared with commercial competitions, taekwondo teams in middle schools usually only carry out concentrated short-term training before participating in competitions, and the time and effect of daily training cannot meet the competitive level required by Taekwondo leagues. Therefore, in order to improve the overall level of athletes participating in competitions within the system, expand the scale of competitions and promote the marketization of Taekwondo competitions, it is



necessary to first call for the establishment of professional taekwondo clubs in middle schools, which are managed and trained by middle schools, and set up a semi-professional team of league athletes, which can not only fully complete the tasks of competitions within the system, but also provide training for professional taekwondo teams. The team can also achieve the goal of professional competitions; Second, organize the management personnel in the club to realize the function transformation to the direction of brokers, responsible for urging and improving the daily training level and training intensity, and selecting professional taekwondo stars; At the same time, the middle school clubs can establish a convenient sharing network for venues, coaches, experience, etc., and then form a market pattern with taekwondo characteristics, from which to explore the new direction of taekwondo marketization process.

(2) Strengthen the training of Taekwondo reserve talents. After Taekwondo entered the official competition of the Olympic Games, there are a very large number of practitioners in our country to pursue. Taekwondo clubs in our country are all over the streets and alleys, and the practitioners are basically teenagers. As the Chinese government attaches great importance to the public fitness and the construction of sports power, Taekwondo has attracted much attention as a national characteristic skill and attack sport. At present, when the education circle calls for the cultivation of students' core qualities, Taekwondo has become an important issue in primary and secondary schools and colleges. From the perspective of the professional sports market, the training of Taekwondo reserve talents can directly affect the marketization and development level of the project. It is necessary to strengthen the work intensity of Taekwondo reserve talent training, set up and perfect the talent training system. At present, the reserve strength of Taekwondo in our country mainly comes from the Taekwondo students studying in sports colleges and universities, so it is particularly important to attach great importance to the development of the reserve talent cultivation base. Upgrading and updating the basic construction of teachers, training sites and supporting equipment in grassroots schools, improving the quality of Taekwondo reserve talents, making our Taekwondo talent training echelon present a scientific development trend, and adapting to the future Taekwondo professional arena is an important guarantee. In addition to the training of reserve talents in schools, we should also pay attention to the training of reserve talents in clubs, gyms and other enterprises, strengthen the contact between schools and social enterprises, create cooperative relations, support the development of amateur Taekwondo clubs, and provide a high-quality development platform for outstanding reserve talents in our country.

#### **3.1.4 Build brand events and train sports stars**

Event brand is the core product of the event, and excellent brand is the cultural basis for audiences, media, enterprises and other people to recognize and even have emotional dependence on an event. Sports stars are the image representatives of the brand, and one or several outstanding athletes have high news value, which is enough to represent the quality standard of an event. At present, the commercial taekwondo league competitions in China are evenly matched, the competition is fierce, and there is not yet a very prominent and well-known event brand. Therefore, the important weapon for Chinese middle school students Taekwondo League to build a market-oriented operation system is to create high-quality event brands.

#### **3.1.5 Strengthen cooperation with sports intermediaries**

At present, the organizers and co-organizers of various sports events are mainly responsible for ensuring the smooth operation of the events and coordinating the work of

various departments, and few special teams are responsible for the marketing of the events. In such a market environment, sports intermediary came into being. It can connect sponsors and sponsored parties, provide more professional and standardized sponsorship channels and publicity means for sports events, and is one of the service forces to promote the marketization of sports events. Chinese middle school students Taekwondo League should actively cooperate with sports intermediaries and make use of the bridge of intermediaries to contract out the event marketing, so as to obtain more professional and specialized publicity services, which can not only focus on the quality construction of the event, but also save the publicity cost of the event. More efficient and low time cost to promote the market operation of Chinese middle school students Taekwondo league.

### **3.1.6 Development of sports event sponsorship and sports advertising market**

#### **(1) Establish strategic partnerships with social enterprises**

Sports events and business sponsorship are mutually beneficial. To achieve the desired effect of commercial sponsorship and advertising, it needs the joint efforts of many beneficiaries. The organizers and organizers of sports events should establish close cooperative relations with social enterprises and integrate the advantages of all parties to play, in order to ensure the stability of sports sponsorship and sports advertising. To this end, the Chinese middle school students Taekwondo League should increase the publicity of the event at the same time, should be closely connected with the cooperative enterprises, with the help of TV networks and other new media platforms, sports events and commercial advertising clever combination, to achieve a win-win situation.

#### **(2) Enrich the carrier of sports advertising**

Fast-paced life and work fragment people's time, and short news and short videos have become the new advertising carriers that dominate people's fragmented time. Sports advertising should also conform to the development trend of The Times. It should release news, spread event news and share event content through mobile phone media terminals, and interact with the audience in real time through wechat, Weibo and other tools. The Taekwondo League of Middle school students in China should create more streamlined advertising content, and rely on the network new media platform to rapidly expand the event publicity.

### **3.1.7 Pay attention to the guarantee system and strengthen the construction of medical team**

First of all, relevant documents should be supplemented in the pre-competition preparation process to list the foreseeable danger situation in the course of the competition and find out reasonable solutions; Secondly, all teams should be focused on basic first-aid knowledge popularization before the game, so as to ensure that athletes do not suffer secondary injuries in the case that medical personnel cannot arrive on the field in time. Finally, China Middle School Students Taekwondo Association can develop and build a special medical team, which is recruited and trained by the association and is responsible for the association. Compared with the current emergency personnel only relying on local hospitals in the competition area, this measure can improve the targeted treatment of taekwondo athletes by the medical team, and can also be used as a link in the market operation of Taekwondo league.

### **3.1.8 Strengthen the team and expand the influence of the competition by grasping the policy**

In line with this is the enrollment policy of some colleges and universities in our country.

Some sports colleges, normal colleges and comprehensive colleges and universities are gradually opening research directions such as traditional national sports and sports training, and setting up enrollment places for high-level taekwondo athletes. Under the condition of dual preferential policies of sports association and relevant departments of the state, Taekwondo sports events should grasp the policy, on the one hand, let the event enter the campus, get more young people's attention and love, actively supplement the amateur taekwondo training team, and expand the scope of participants to ordinary college students; On the other hand, give full play to the authority of the event results, provide more direct and convenient opportunities for taekwondo athletes to study, and strive to improve the overall cultural literacy of Taekwondo athletes.

#### 4 Epilogue

Through the research, it is found that Chinese middle school students Taekwondo League has advantages in promoting school and market demand, showing the competitive charm of taekwondo and promoting the high-level competition of the project; The development of school sports industrialization, the increasing prosperity of fighting sports and the active promotion of relevant state departments provide better opportunities for the development of the league. At the same time, due to the lack of social influence of the league, the lack of communication media channels and the lack of fund chain of the tournament also pose a certain threat. Through the SWOT AHP hierarchical analysis, the marketization development type of Chinese middle school Taekwondo league is selected as: overcoming threats and grasping opportunities SO strong development path. According to the overall strategy model, firstly, the market organization and operation system of the league is established, and several levels such as development principles, development goals, implementation measures and competition guarantee mechanism are set up. Strengthen the means of commercial cooperation, enrich the cooperation projects between enterprises and competitions, vigorously build brand competitions, train tournament stars, and strengthen cooperation with sports intermediaries to achieve win-win results. Rational use of relevant national policies, expand the diversity of events, promote the reform of the management system of sports teams, expand the number of participating teams, expand the influence of events, improve the security mechanism, strengthen the construction of medical teams to ensure high-level athletes' physical fitness. In order to promote the marketization of sports events in China.

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