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Abstract: Background: The “Double Reduction” policy changed the education market landscape overnight in China. This study aimed to develop a strategic development model for the sports education market within the context of the “Double Reduction” policy. Methods: This study employed a hybrid model of SWOT (strengths, weaknesses, opportunities, and threats) and AHP (analytic hierarchy process). First, SWOT factors were identified by a literature review and survey. In 2022, 30 managers and 251 parents from Changsha and Tianjin were surveyed regarding the sports education market. Second, five decision-makers from the Changsha sports education market performed a pairwise comparison of the AHP analysis, which was used to determine weights, consistency ratios, and intensities of SWOT factors. Third, the strategic vector method was used to develop the strategic development model. Results: Sixteen SWOT factors were determined. The strategic quadrilateral’s center of gravity is positioned in quadrant II (−0.0595, 0.0246). The strategic azimuth is 157.5°, and the strategic coefficient is 0.49. The strategic vector is located at the striving zone of the adjustment type. Conclusions: A conservative business strategy should be implemented in the current sports education market. Four novel strategies were proposed to support the high-quality development of the Chinese sports education market.

Keywords: sports management; sports industry; physical education; public health; VR

1. Introduction

Parents in China prize education because school grades play a critical role in deciding employment prospects [1]. In the highly competitive college admission exam system (“gaokao” in Chinese), for instance, a comprehensive grading generally includes tests of Chinese literature, mathematics, and English, as well as tests of history, politics, and geography for liberal arts majors and tests of physics, chemistry, and biology for science majors. As a result, many parents, particularly those from high-income households [2], feel compelled to enroll their children in private tutoring to improve their academic performance [3], and Chinese school-aged children drown in private tutoring sessions every year.

In accordance with the Chinese government’s goal, a fully developed Chinese youth should not only be bright and morally upright but also possess strong physical fitness and artistic sensibility [4]. In July 2021, the General Office of the Central Committee of the Chinese Communist Party and the General Office of the State Council jointly announced the “Opinions on Further Reducing the Burdens of Homework and Off-campus Training for Students During the Period of Compulsory Education” (hereinafter referred to as “Double Reduction” policy) [5]. The policy aims at easing the burden and anxiety of Chinese parents who wish to provide their children with a competitive education. Broadly, the policy can...
be considered as a part of the “Health China 2030” plan [6], a long-term national strategy to promote public health and a strong nation.

The “Double Reduction” policy resulted in a radical transformation of the Chinese education market. For instance, the New Oriental Education & Technology Group, a NASDAQ-listed Chinese private tutoring company, saw its share price decline by 54.2% in a single day immediately following the policy’s announcement. One year after the announcement of the policy, the Ministry of Education reported that the number of private tutoring institutions in traditional academic subjects had been drastically reduced, with the proportion of offline institutions decreasing by 95.6% and the proportion of online institutions decreasing by 87.1% [7]. In the meantime, China’s sports education market has experienced explosive growth, and Chinese households are becoming increasingly aware of the need for quality sports education to promote child development and lifelong health [8].

The Chinese government’s commitment to sports and people’s health has exceeded all other historical eras, and the implementation of the “Double Reduction” policy represents a generational opportunity for the sports education market. Currently, however, the sports education market does not meet the requirements for high-quality education, and numerous challenges need to be resolved. Shortly after the policy shift, both industry and academic groups exhibited a great deal of interest in exploring the sports education market. Wang et al. [9] suggested that the current sports education market has issues such as unclear positioning of the role of governing bodies in industry regulation, low bar to market access and coaches’ qualification certification, and disorderly establishment of institutions necessitated by the addition of physical education to the middle school examination. Chai et al. [10] highlighted the dilemma of the current sports education market in five aspects: administrative barriers impede the efficacy of relevant policy implementation; absence of regulatory bodies results in ineffective market supervision; lack of industrial standards impedes the standardization of sports education operations; ineffective instructors reduce the quality of education services; and lack of supervision decreases the business’s efficiency. To our knowledge, no research has been published that surveys market participants to explore the high-quality development strategy of the sports education market. Moreover, recent studies have explored the sports education market from a qualitative perspective [11,12], and no published research employs quantitative research to guide the development strategy of the sports education market.

SWOT (strengths, weaknesses, opportunities, and threats) analysis is a qualitative framework used to evaluate the competitive position of the program, organization, and industry and to draw future strategies [13]. The SWOT analysis facilitates administrators to examine their internal environment’s strengths and weaknesses, as well as the external environment’s opportunities and threats, and then to develop plans to maximize opportunities and strengths while minimizing weaknesses and threats. Analytic Hierarchy Process (AHP) is a quantitative decision-making technique [14]. AHP organizes lists of factors into a hierarchical structure and ranks the factors through pairwise comparison. With this quantitative method, it is possible to assess the relative importance of factors and to propose a factor analysis that is less biased. Given the unique strengths of SWOT and AHP approaches, Kurbtila et al. [15] proposed a hybrid SWOT-AHP analysis for the decision-making process, which has since been applied to the strategic development of numerous businesses, including sports management [16].

Even though the “Double Reduction” policy has only been in place for a year, its influence on the Chinese education market and its long-term implications on Chinese society cannot be overstated. Contrary to this policy context, no systematic quantitative market research exists for this highly specialized non-traditional education market and for decision-makers to analyze and apply for superior business management. Therefore, the purpose of the study was to identify both internal and external factors that influence the sports education market in Changsha and Tianjin, then to establish a strategic development model based on a strategic vector method, and finally to recommend tailored business management strategies in the new era of “Double Reduction” policy.
2. Materials and Methods

2.1. Methodological Overview

We devised a three-step research approach based on the SWOT-AHP theory of strategy selection. First, we investigated the internal and external factors of the Chinese sports education market using the SWOT framework to identify its strengths, weaknesses, opportunities, and threats. This study’s SWOT analysis incorporated both a review of the literature and actual surveys of market participants. Second, the AHP approach was used to establish a hierarchy with the first and second classes, to execute pairwise comparisons, and to assume comparative weights of each factor and total intensities of SWOT groups. Third, the strategic vector method was used to generate a SWOT-AHP strategic selection model, after which the development strategy was presented. This study utilized yaanp version 12.6 (metadecsn.com, accessed on 28 September 2022) for its AHP analysis. The research protocol was approved by the Ethical Committee of Tianjin University of Sport, and all participants gave informed consent to participate in the survey research.

2.2. SWOT: Survey

Initially, a comprehensive literature review was conducted to identify the various factors proposed to influence the Chinese sports education market. Two self-structured surveys were conducted to increase the adaptability and accuracy of SWOT analysis following the announcement of the “Double Reduction” policy. The managers of sports education institutions in Changsha and Tianjin were asked to perform a SWOT analysis. These managers are instructors and business administrators. They have specialized knowledge of business operations and marketing, as well as an understanding of the current market’s structural advantages, disadvantages, and gaps. A second SWOT survey was issued to parents in Changsha and Tianjin who selected sports education for their children. Consumers were also interviewed because their opinion could provide more diverse perspectives on the current situation of the sports education market. From April 2022 to June 2022, survey responses were gathered through an internet survey platform (wjx.cn, accessed on 12 November 2022). In total, 30 surveys were given to managers, and 30 valid surveys were collected; additionally, 251 surveys were given to parents, and 251 valid surveys were collected. Cronbach’s alpha values for the manager survey and the parent survey were 0.73 and 0.97, respectively. By utilizing descriptive analysis of the collected survey data, we obtained market participants’ perspectives on the current business state of the sports education market.

2.3. SWOT: Factors Generation

Although it is desirable to include a thorough list of factors throughout the decision-making process, it is advised that the number of SWOT factors is kept to a reasonable number for the subsequent AHP pairwise comparisons [17]. In a hybrid SWOT-AHP study, it is advised that the number of factors within each SWOT group not exceed 10 [18]. Based on the literature review and the findings of two surveys of market participants, we used the Delphi technique to construct a total of 16 SWOT factors that we believe represent the significant advantages and drawbacks of the current sports education market adequately. Then, these factors were organized into a hierarchical structure (Figure 1).
2.4. AHP: Decision-Makers

AHP is a mathematical approach developed to survey experts, such as decision-makers, with specialized expertise in a particular field [15]. Thus, the selection of experts is a crucial component of a successful AHP. In this study, a rigorous criterion was used to choose decision-makers. First, decision-makers must have a comprehensive understanding of the sports industry. Since the announcement of the “Double Reduction” policy, numerous organizations that formerly operated in the non-sports education field have shifted their business coverage to the sports education market. However, those decision-makers lacked the necessary knowledge and qualifications in sports and were therefore excluded from the sampling process. Second, the selected decision-makers must have been registered with their business for at least two years; managers of newly founded sports education institutions following the introduction of the “Double Reduction” policy were excluded from the sample procedures. Accordingly, we ensure that the selected decision-makers have appropriate knowledge of the sports education market and can therefore provide a more accurate and authoritative perspective on the present market. In addition, SWOT-AHP analysis can be conducted with a small sample of subject-matter experts [18], unlike standard statistical analysis, which relies on a sufficient sample size to generate enough statistical power. Between October 2022 and November 2022, five decision-makers from sports education institutions in Changsha, Hunan Province, participated in the AHP survey. Their professional background is detailed in Table 1.

Table 1. Background of AHP decision-makers.

<table>
<thead>
<tr>
<th>No.</th>
<th>Sex</th>
<th>Highest Education</th>
<th>Field of Study</th>
<th>Administrative Position</th>
<th>Sports Education Experience (Years)</th>
<th>Business Operations</th>
<th>2021 Business Revenue (Million Yuan)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>M</td>
<td>Bachelor’s degree</td>
<td>Sports pedagogy</td>
<td>Business partner</td>
<td>4</td>
<td>Youth fitness, jumping rope</td>
<td>0.9</td>
</tr>
<tr>
<td>2</td>
<td>F</td>
<td>Bachelor’s degree</td>
<td>Sports pedagogy</td>
<td>CEO</td>
<td>8</td>
<td>Yoga</td>
<td>3</td>
</tr>
<tr>
<td>3</td>
<td>M</td>
<td>Bachelor’s degree</td>
<td>Social sports guidance and management</td>
<td>CEO</td>
<td>3</td>
<td>Basketball</td>
<td>0.8</td>
</tr>
<tr>
<td>4</td>
<td>M</td>
<td>Master’s degree</td>
<td>Exercise training</td>
<td>CEO</td>
<td>5</td>
<td>Basketball, badminton, table tennis</td>
<td>2</td>
</tr>
<tr>
<td>5</td>
<td>F</td>
<td>Bachelor’s degree</td>
<td>Business management</td>
<td>General manager</td>
<td>10</td>
<td>Sports dance, cheerleading</td>
<td>6</td>
</tr>
</tbody>
</table>
2.5. AHP: Comparative Weight

Decision-makers were required to carry out pairwise comparisons. By using Saaty’s nine-point scale [14], the decision-makers evaluated the relative importance of each factor between SWOT groups and factors within each group. The algebraic matrix of pairwise comparisons is as follows:

\[
A = (a_{ij}) = \begin{pmatrix}
  a_{11} & a_{12} & \cdots & a_{1n} \\
  a_{21} & a_{11} & \cdots & a_{2n} \\
  \vdots & \vdots & \ddots & \vdots \\
  a_{n1} & a_{n2} & \cdots & a_{nn}
\end{pmatrix}
\]  

(1)

where \( a_{ij} \) is the relative importance of \( i \) to \( j \), \( a_{ij} = 1/a_{ij} \), and \( a_{ii} = 1 \) if \( i = j \).

Because humans are prone to making inconsistent decisions, the AHP technique depends on the consistency ratio (CR) to validate experts’ judgment in pairwise comparisons [18]. The estimate of the pairwise comparisons’ consistency is as follows:

\[
CI = \frac{\lambda_{\text{max}} - n}{n - 1}
\]

(2)

\[
CR = \frac{CI}{RI}
\]

(3)

where \( CI \) is the consistency index; \( \lambda_{\text{max}} \) is the maximum eigenvalue of the judgment matrix, which was computed by yaanp; and \( RI \) is the random index generated for a random matrix of order \( n \). For the matrix to be consistent, \( CR \) must be maintained below 0.1 as a general rule [14]. The aggregate weight can be computed by multiplying the factor weight by the corresponding group weight.

2.6. AHP: Factor Intensity

While weight reflects the relative importance of each SWOT factor, determining the priority of a strategy based only on AHP weights oversimplifies the decision-making process. As such, this study assessed the intensity of each SWOT factor. The same five decision-makers were asked to estimate the factor strength based on their individual preferences. The assessment was based on a scale of 1 to 4 points, with perceived economic benefits serving as the control criterion. The strengths and opportunities factors are indicated by positive values, whereas the weaknesses and threats factors are indicated by negative values; the greater the absolute value, the higher the strength. Then the intensity of each factor is computed as follows:

\[
I_S = \sum_{i=1}^{n_1} S_{Si} \times W_{Si}
\]

(4)

\[
I_W = \sum_{i=2}^{n_2} S_{Wi} \times W_{Wi}
\]

(5)

\[
I_O = \sum_{i=3}^{n_3} S_{Oi} \times W_{Oi}
\]

(6)

\[
I_T = \sum_{i=4}^{n_4} S_{Ti} \times W_{Ti}
\]

(7)

where \( S_{Si}, S_{Wi}, S_{Oi}, \) and \( S_{Ti} \) represent the mean strength estimated by all decision-makers for the corresponding SWOT factors. \( n_1, n_2, n_3, \) and \( n_4 \) are the total factor number in each SWOT group. \( W_{Si}, W_{Wi}, W_{Oi}, \) and \( W_{Ti} \) are the weight of each factor in the corresponding SWOT groups.
2.7. SWOT-AHP: Strategic Vector

The strategic vector \((\theta, \rho)\) method consists of the strategic azimuth \((\theta)\) and the strategic coefficient \((\rho)\). The strategic azimuth is based on the coordinates of the center of gravity of the strategic quadrilateral \(P(X, Y)\). The point \(P(X, Y)\) can be calculated:

\[
P(X, Y) = \left(\frac{I_S + I_W}{4}, \frac{I_O + I_T}{4}\right)
\]  

(8)

By using the inverse trigonometric functions, the strategic azimuth can be calculated:

\[
\theta = \arctan\frac{Y}{X}, \quad (0 \leq \theta \leq 2\pi)
\]  

(9)

Based on the strategic azimuth, the type of strategic development model can be established (Table 2).

<table>
<thead>
<tr>
<th>Azimuth Quadrant Zone</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>([0^\circ, 45^\circ])</td>
<td>I Pioneering</td>
</tr>
<tr>
<td>([45^\circ, 90^\circ])</td>
<td>I Pioneering</td>
</tr>
<tr>
<td>([90^\circ, 135^\circ])</td>
<td>II Striving</td>
</tr>
<tr>
<td>([135^\circ, 180^\circ])</td>
<td>II Striving</td>
</tr>
<tr>
<td>([180^\circ, 225^\circ])</td>
<td>III Conservative</td>
</tr>
<tr>
<td>([225^\circ, 270^\circ])</td>
<td>III Conservative</td>
</tr>
<tr>
<td>([270^\circ, 315^\circ])</td>
<td>IV Resistant</td>
</tr>
<tr>
<td>([315^\circ, 360^\circ])</td>
<td>IV Resistant</td>
</tr>
<tr>
<td>([0^\circ, 45^\circ])</td>
<td>I Pioneering</td>
</tr>
</tbody>
</table>

The strategic coefficient is measured by the distance between the origin of the coordinate system and the center of gravity of the strategic quadrilateral \(P(X, Y)\). The strategic coefficient can be calculated as follows:

\[
U = I_S \times I_O
\]  

(10)

\[
V = I_W \times I_T
\]  

(11)

\[
\rho = \frac{U}{U + V}, \quad (\rho \in [0, 1])
\]  

(12)

In general, if \(\rho\) is more than 0.5, a pioneering development strategy should be implemented; otherwise, a conservative development strategy should be implemented.

3. Results

3.1. SWOT: Strengths (S)

S1: Clear market positioning. The sports education market has a more clearly defined market position than the sports goods manufacturing, sports media marketing, and other sports industry sectors. Despite being an emerging business, the sports education market has rapidly expanded into communities and provided training programs for people of all ages. According to a survey [19], the potential population for early childhood sports education in China was 130 million, 89.34% of the parents surveyed were willing to enroll their children in sports education programs, and the potential market for early childhood sports education was 234 billion yuan. The children’s sports education sector has established highly specialized target markets on both the supply and demand sides. For example, Walmonos Sports, a private sports education organization, has built 120 clubs in 25 provinces and municipalities, serving over 1500 kindergartens participating in regular sporting events within its network [19]. With a comprehensive understanding of consumer preferences, the children’s sports education sector has entered a period of rapid growth.
Similarly, the sports education market has been strategically positioned for the mass fitness, female bodybuilding, and middle-aged and senior exercise rehabilitation markets, with a variety of personalized sports services for specific groups. Overall, the Chinese sports education market has a solid industrial foundation based on a thorough comprehension of the business and its tendencies.

S2: Technology boosted instruction. Before the 2020s, technology such as wearable and mobile apps had already demonstrated its value in reshaping the sports education market [20], and COVID-19 has accelerated the trend toward instructions that emphasize new technologies. Traditionally, user demand for online sports education has been rather low. Moreover, there is a scarcity of sports workers skilled in both sports education and internet technology. During the first wave of COVID-19 in 2020, Chinese schools implemented remote teaching aggressively, and the sports education market has also embraced this digital shift. The majority of online courses offered by sports education institutions consist of recorded lessons and live-streaming large classes and small classes. As a result of the easing of pandemic limitations, these teaching models are not abandoned; rather, they are being enhanced and expanded as part of regular teaching models in sports education institutions. For instance, 3D motion capture technology and smartphone-based AI motion correction have been developed to detect and record the quality of children’s motions in sports practice, while rank-based online competitions and immersive training are employed for daily training and interaction [21]. In the post-pandemic period, the marketing model of sports education is shifting progressively toward hybrid offline and online instruction, with technology helping to diversify and scientize teaching models.

S3: Extensive venue coverage. Since the introduction of the National Fitness Program [22], administrative districts, including rural areas, have established a “15-min fitness circle” and, at the request of the central government, enterprises, institutions, agencies, and other social organizations have improved the supporting sports facilities. As a result, urban Chinese have never before had such easy access to sports and fitness facilities [23]. Moreover, in economically undeveloped regions, government-built public fitness facilities increase the popularity of grassroots sports [24], encouraging rural Chinese to share the country’s economic growth. According to the General Administration of Sport statistics, the total usable area of sports venues for the Chinese population is 3.411 billion m², and the per capita utilization of sports venues has reached 2.41 m² [25]. The extensive venue coverage is beneficial to retaining the current consumer base, sustaining economic benefits, and fostering the growth of the sports education market.

S4: Complete competition system. Since the creation of the People’s Republic of China, the sports tournament system has seen constant improvement. Early on, the Chinese government presented the sports development policy of “combining popularization and improvement” [26], laying the groundwork for the modern sports tournament system in China. The “developing sports and enhancing people’s physique” [26] has been continuously refined for the people-centered sports development philosophy. From school, institution, and social group tournaments to provincial and national competitions, the sports tournament system covering all Chinese societies is now fully developed. The multi-level sports tournament system provides the sports education market with a well-articulated, scientific, and distinctive talent pool, hence strengthening the industry’s professional and commercial preparedness.

S5: Scientific evaluation standards. The growth of the sports education market cannot be separated from the role of policies as leaders and guides and the function of industry standards as supervisors and restrainers. The General Administration of Sport has established a series of scientific athlete evaluation standards. For example, the Chinese Football Association released the “Chinese Men’s Youth Player Athletic Ability Stage Evaluation Criteria (2021 Edition)” [27] to keep up with the rapid development of campus football across China. China’s industry standards are routinely refined by academic researchers to provide a more comprehensive evaluation of sports participants [28]. With rigid evaluation standards, sports attract a large number of children and adolescents with an athletic talent
to the sports education market, and the scientific training of sports talent further reinforces professional sports workers, which has positive implications for the quality development of the sports education market. After the implementation of the “Double Reduction” policy, social sports associations, sports clubs, sports education institutions, and higher education institutions collaborate to cultivate diverse sports workers. Overall, scientific evaluation standards will be more favorable to the creation of a high-quality sports education market.

3.2. SWOT: Weaknesses (W)

W1: Lack of sports workers. According to the General Administration of Sport [29], China will require 8 million sports workers by 2025; however, as of 2018, China had just 4,439,000 sports workers, resulting in a severe shortage of sports workers. In the sports education labor market, there are two primary job categories: sports teaching and training and sports business operation and management. The disparity between insufficient skilled sports instructors and rigid demand has caused the uneven quality of instruction in the sports education market. As a result, consumers may receive an outstanding or poor sports education based on their assigned instructors, which affects the quality and effectiveness of instruction and undermines the market’s reputation. Moreover, in specialty sports such as fencing, equestrian, and rugby, there are even fewer qualified professionals. Many specialist sports originated in Europe and the United States and are only recently brought to regular (i.e., white- and blue-collar) Chinese households; hence, there are even fewer professional instructors available in these sports education themes. Furthermore, as parents pay increasing attention to their children’s physical fitness, sports education institutions require instructors with knowledge in various aspects of early childhood education and developmental psychology in addition to their professional sports expertise. The demand for extensive credentials in sports education institutions is growing. Moreover, in the absence of skilled business administrators, the market cannot develop in an orderly and profitable manner. Overall, the lack of qualified sports workers slows down the program implementation, standardization, and expansion of the sports education market.

W2: Confused pricing norm. The weaknesses found by the manager survey are listed in Table 3. More than 50% of all respondents described that managers of sports education institutions set their dynamic prices or rates without a specified mechanism, indicating the absence of an industry-wide pricing norm. Such a confused pricing norm could not only lead to vicious competition in the sports education market, affecting the industry’s healthy growth but could also negatively affect consumer sentiments, resulting in a loss of prospective customers and low economic efficiency and quality development in the sports education market. Based on the parent survey, it should be highlighted that respondents appear to have a rather low price sensitivity. Despite this, sports education institutions must prioritize the development of sustainable pricing strategies to reinforce their core competencies and obtain more market share.

Table 3. Summary of weaknesses in the sports education market (N = 30).

<table>
<thead>
<tr>
<th>Weaknesses</th>
<th>Methods</th>
<th>N</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pricing norm</td>
<td>Competition-based</td>
<td>14</td>
<td>45.2</td>
</tr>
<tr>
<td></td>
<td>Dynamic</td>
<td>12</td>
<td>38.7</td>
</tr>
<tr>
<td></td>
<td>Unspecified</td>
<td>4</td>
<td>12.9</td>
</tr>
<tr>
<td></td>
<td>Coach discretion</td>
<td>20</td>
<td>45.5</td>
</tr>
<tr>
<td>Content development</td>
<td>Independent design</td>
<td>16</td>
<td>36.4</td>
</tr>
<tr>
<td></td>
<td>Common content</td>
<td>4</td>
<td>9.1</td>
</tr>
</tbody>
</table>

W3: Incomplete teaching system. According to the manager survey (Table 3), only 36.4% of the training contents were independently designed and evaluated by sports education institutions, indicating that a scientific teaching system has not yet been established in the business. A strict teaching system is the core foundation of the entire sports education market, and its end performance is the teaching quality and efficacy, which are closely
related to the quality of institutional development. Retired athletes have a strong sporting ability and rich practical experience in sports, but their teaching experience and teaching knowledge are weak; however, they are the most preferred talents to be introduced into sports education institutions, and comprehensive pre-employment training should be developed to assist these talents in adapting to their new role. As the capital market continues to invest in and shape the sports education market, training institutions will become increasingly competitive, with the perfect teaching system granting firms priority access to market share and the core competitiveness of enterprises.

W4: Poor brand effect. The core competitiveness of sports education institutions is their capacity to export brands and resources. Due to the profit-driven and short-sighted nature of the current sports education market, it is difficult for an institutional brand to be acknowledged by the broader consumer audience. In terms of brand planning, sports education institutions have yet to properly implement an event system that blends entertainment competitions with competitive events to realize the transformation of events from internal service qualities to branding and commercialization attributes. Without sufficient brand visibility and recognition, there would be no long-term brand loyalty, which is necessary for corporate success in the modern market structure. Moreover, the present industry lacks event IP specific to businesses, and brand recognition and brand influence are in their infancy in comparison to the entertainment and general education industries. Overall, the lack of brand effect in the sports education market has restricted the sector’s growth and made it challenging to advance its quality.

3.3. SWOT: Opportunities (O)

O1: Policy tailwinds. In recent years, the General Office of the Central Committee of the Chinese Communist Party, the General Office of the State Council, and the General Administration of Sport have issued a series of directives to boost the development of the sports industry. In 2014, the State Council published for the first time a strategic policy stating that the total output value of the sports industry should exceed 5 trillion yuan by 2025, demonstrating that China will invest more social resources, economic resources, and policy resources in the sports industry to ensure its high-quality development. The 2016 publication of the “Health China 2030” plan, as well as the National Fitness Program, which is updated every five years, is very favorable for the development of the sports education market and a high-quality sports education market can support the sports industry in becoming one of the pillar industries of a public health strategy. The “Integration of Sports and Education” policy in 2020 and the “Double Reduction” policy in 2021 generate enormous policy dividends that fuel the explosive growth of the sports education market. Such national policies compel a high-quality transformation of the sports education market, and qualified business entities are encouraged to provide Chinese children and adolescents with a well-rounded education (moral, cognitive, physical, social, and aesthetic). In the meantime, the market will eliminate disqualified sports education institutions, thereby optimizing industry growth.

O2: Rigid demand. The 2022 Sports Law proposes to include physical education in the scope of middle and high school academic examinations, and the National Physical Education and Health Curriculum Standards for Compulsory Education (2022 Edition) has increased the weight of physical education throughout the middle school teaching system. While increasing the weight of physical education examinations in academic evaluations will undoubtedly boost the demand for sports education, such a policy shift should not be regarded merely within the educational context. “Developing sports and enhancing people’s physique” has been a longstanding guiding principle on the Chinese path to sports modernization, and Xi Jinping further proposes that society at large should cultivate one or two sports as lifelong sports. Xi Jinping’s concept of “health first” education has been recognized in every aspect of modern Chinese culture, signaling that the sports industry is steadily shifting from an entertainment industry to a health
industry. A rigid demand for high-quality sports education in Chinese society has provided fresh momentum for the market's rapid expansion.

O3: Increasing disposable income. Education has traditionally been seen as a fundamental virtue by Chinese families. As a result of national GDP growth, Chinese households' disposable income has been increasing steadily, and the middle-class population continues to grow. In this favorable macroeconomic context, Chinese parents' propensity to invest in education has greatly increased [40]. The majority of today’s parents were born between 1980 and 2000. This demographic group grew up in the wake of the reform and opening up and watched China’s rapid economic boom following its WTO membership in 2001. As global cultural ideas continue to fuse in their youth and adulthood, these parents recognize that their children’s early childhood motor development is the cornerstone for lifelong health, social skills, and positive character, and as a result, they devote greater attention to their children’s sports education [41]. New-generation Chinese parents anticipate that sports education will enhance their children’s all-round development. As the Chinese middle class is expected to expand further in this decade, parents will be able to invest more in their children’s education, and policy tailwinds [35] will encourage them to invest more in high-quality sports education.

O4: Interactive new media. Although the use of 5G technology and live-streaming is not revolutionary, COVID-19 has expedited the transition of consumer shopping preferences to internet-based platforms. New media that incorporate influencer marketing has become a new focal point in the Chinese sports education market. New media platforms such as TikTok, Kuaishou, Bilibili, and Haokan offer new promotional channels for the sports education market, and a growing number of original fitness content and workout models are easily accessible to the public, garnering positive consumer feedback [42]. The success of this new type of fitness business is also attributable to influencers who can contribute an interactive effect that boosts the flow experience of intense training. A celebrity and instructor such as Liu Genghong could amassed ten million followers on major new media platforms, and each live-streamed training session attracts over one million views from fitness fans [43]. The sports education market has brought in new prospects for growth, and there is a greater need for a paradigm upgrade to meet the demands of the internet generation consumers.

3.4. SWOT: Threats (T)

T1: Inadequate regulation and legislation. While the sports education market is not a new business, the introduction of the “Double Reduction” policy has led to an influx of players and capital into the market, revealing numerous regulatory and legislative problems in the current system. For example, motivated by a five trillion yuan sports industry, capital flowed disorderly into the sports and fitness business. However, due to a lack of appropriate market positioning and intense market competition, sports education institutions are occasionally forced to shut down their business. Entities that employ the user subscription model have vanished without refunding consumers’ subscription fees [44], and consumers have no effective legal recourse for recouping losses. A more worrisome legal gap involves training-related injuries or even fatalities. In contrast to English, arts, and traditional off-campus education, sports education is frequently associated with sports-related injuries, particularly in contact sports, where minor to severe body injuries are common. However, even government-sponsored sports, such as the campus football program, demonstrate that there are insufficient injury management strategies, and when injuries occur, it is unclear which party should assume responsibility for treatment-related medical costs [45]. Authorities have not established a comprehensive regulatory framework that provides legal interpretations on such issues. When actual economic or physical damage occurs, it may be too late to intervene, resulting in irreparable harm to consumer psychology and the sports education market.

T2: Low bar to industry access. According to the manager survey (Table 4), 67.7% of sports education institutions’ training facilities are leased, suggesting both the flexibility
and passivity of the business environment, which, in the long run, would drag the growth of the sports education market. The managers polled work in first-tier metropolitan cities. The high cost of land use in China’s first-tier cities has a significant impact on the majority of sports education facilities being leased. This has a negative impact on the profitability of businesses. Since the announcement of the “Double Reduction” policy, however, sports facilities have become scarce, making it difficult for institutions to find facilities that match their training and development demands, and some facilities are located far from urban centers. The remote location of the facilities has a substantial impact on consumer psychology, thus impeding the market’s growth. In addition, 26.7% of sports education institutions operate without business registration, and 29.0% have fewer than two full-time coaches, which not only lowers the overall quality of the market but also disrupts industry standards.

Table 4. Summary of threats in the sports education market (N = 30).

<table>
<thead>
<tr>
<th>Threats</th>
<th>Category</th>
<th>N</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Training facilities</td>
<td>Lease</td>
<td>21</td>
<td>67.7</td>
</tr>
<tr>
<td></td>
<td>Cooperative</td>
<td>5</td>
<td>16.1</td>
</tr>
<tr>
<td></td>
<td>Self-management</td>
<td>4</td>
<td>12.9</td>
</tr>
<tr>
<td>Business registration</td>
<td>No</td>
<td>8</td>
<td>26.7</td>
</tr>
<tr>
<td></td>
<td>Yes</td>
<td>22</td>
<td>73.3</td>
</tr>
<tr>
<td>Number of full-time</td>
<td>&gt;10</td>
<td>4</td>
<td>12.9</td>
</tr>
<tr>
<td>coaches</td>
<td>6–10</td>
<td>5</td>
<td>16.1</td>
</tr>
<tr>
<td></td>
<td>3–5</td>
<td>12</td>
<td>38.7</td>
</tr>
<tr>
<td></td>
<td>&lt;2</td>
<td>9</td>
<td>29.0</td>
</tr>
</tbody>
</table>

T3: Lack of market coordination. There are three primary types of sports education business models: self-management, leasing, and cooperative operation. The leasing business model refers to sports education institutions that primarily charter operating hours and fields by prepaying rent to the facility provider. Under the leasing model, however, facility providers may alter the contract based on their operations, and lack of coordination between market makers decreases the business efficacy. In addition, according to survey data, more than 70% of sports education facilities are owned and managed by individuals, with a lack of industry-wide resource integration. This problem is mostly a result of the education industry’s small yet numerous institutions and fragmented nature. As a sub-sector of the broader education market, sports education institutions are generally smaller and more spatially distributed, which exacerbates the fragmentation of the industry. Due to issues such as insufficient regional synergy and inadequate cross-institutional resource integration, a lack of market coordination in the sports education market exacerbates the industrial dilemma that present hardware resources cannot keep up with the rapidly expanding consumer demand.

3.5. AHP Analysis

Table 5 summarizes the relative importance of each SWOT group and each factor within the SWOT groups. In the pairwise comparisons, it is determined that all matrices are consistent. Opportunities have the most weight among the SWOT groups, followed by strengths, threats, and weaknesses. Based on the predicted strength, Table 6 summarizes the total intensity of each SWOT group.
### Table 5. Weight of SWOT factors.

<table>
<thead>
<tr>
<th>SWOT Group</th>
<th>SWOT Factor</th>
<th>CR</th>
<th>$\lambda_{\text{max}}$</th>
<th>Group Weight</th>
<th>CR</th>
<th>$\lambda_{\text{max}}$</th>
<th>Factor Weight</th>
<th>Aggregate Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>S</td>
<td>S1</td>
<td>0.2791</td>
<td>0.0589</td>
<td>5.2639</td>
<td>0.3965</td>
<td>0.1107</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>S2</td>
<td></td>
<td></td>
<td></td>
<td>0.2464</td>
<td>0.0688</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>S3</td>
<td></td>
<td></td>
<td></td>
<td>0.2035</td>
<td>0.0568</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>S4</td>
<td></td>
<td></td>
<td></td>
<td>0.0658</td>
<td>0.0184</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>S5</td>
<td></td>
<td></td>
<td></td>
<td>0.0878</td>
<td>0.0245</td>
<td></td>
<td></td>
</tr>
<tr>
<td>W</td>
<td>W1</td>
<td>0.0600</td>
<td>4.1602</td>
<td>0.0852</td>
<td>0.4760</td>
<td>0.0406</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>W2</td>
<td></td>
<td></td>
<td></td>
<td>0.0783</td>
<td>0.0067</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>W3</td>
<td></td>
<td></td>
<td></td>
<td>0.1967</td>
<td>0.0168</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>W4</td>
<td></td>
<td></td>
<td></td>
<td>0.2490</td>
<td>0.0212</td>
<td></td>
<td></td>
</tr>
<tr>
<td>O</td>
<td>O1</td>
<td>0.5086</td>
<td>0.0385</td>
<td>4.1028</td>
<td>0.5791</td>
<td>0.2945</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>O2</td>
<td></td>
<td></td>
<td></td>
<td>0.1439</td>
<td>0.0732</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>O3</td>
<td></td>
<td></td>
<td></td>
<td>0.0606</td>
<td>0.0308</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>O4</td>
<td></td>
<td></td>
<td></td>
<td>0.2164</td>
<td>0.1101</td>
<td></td>
<td></td>
</tr>
<tr>
<td>T</td>
<td>T1</td>
<td>0.1271</td>
<td>0.0281</td>
<td>3.0293</td>
<td>0.7225</td>
<td>0.0918</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>T2</td>
<td></td>
<td></td>
<td></td>
<td>0.1741</td>
<td>0.0221</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>T3</td>
<td></td>
<td></td>
<td></td>
<td>0.1033</td>
<td>0.0131</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Table 6. The intensity of SWOT factors.

<table>
<thead>
<tr>
<th>SWOT Factor</th>
<th>Factor Weight</th>
<th>Estimated Strength</th>
<th>Factor Intensity</th>
<th>Total Intensity</th>
</tr>
</thead>
<tbody>
<tr>
<td>S1</td>
<td>0.3965</td>
<td>3.4</td>
<td>1.3481</td>
<td></td>
</tr>
<tr>
<td>S2</td>
<td>0.2464</td>
<td>3.4</td>
<td>0.8378</td>
<td></td>
</tr>
<tr>
<td>S3</td>
<td>0.2035</td>
<td>3.4</td>
<td>0.6919</td>
<td>3.2288</td>
</tr>
<tr>
<td>S4</td>
<td>0.0658</td>
<td>2.4</td>
<td>0.1579</td>
<td></td>
</tr>
<tr>
<td>S5</td>
<td>0.0878</td>
<td>2.2</td>
<td>0.1932</td>
<td></td>
</tr>
<tr>
<td>W1</td>
<td>0.4760</td>
<td>−3.6</td>
<td>−1.7136</td>
<td></td>
</tr>
<tr>
<td>W2</td>
<td>0.0783</td>
<td>−2.4</td>
<td>−0.1879</td>
<td></td>
</tr>
<tr>
<td>W3</td>
<td>0.1967</td>
<td>−3.4</td>
<td>−0.6688</td>
<td>−3.4667</td>
</tr>
<tr>
<td>W4</td>
<td>0.2490</td>
<td>−3.6</td>
<td>−0.8964</td>
<td></td>
</tr>
<tr>
<td>O1</td>
<td>0.5791</td>
<td>4.0</td>
<td>2.3164</td>
<td></td>
</tr>
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<td>O2</td>
<td>0.1439</td>
<td>3.4</td>
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</tr>
<tr>
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<td>3.4</td>
<td>0.2060</td>
<td>3.5743</td>
</tr>
<tr>
<td>O4</td>
<td>0.2164</td>
<td>2.6</td>
<td>0.5626</td>
<td></td>
</tr>
<tr>
<td>T1</td>
<td>0.7225</td>
<td>−3.4</td>
<td>−2.4565</td>
<td></td>
</tr>
<tr>
<td>T2</td>
<td>0.1741</td>
<td>−3.6</td>
<td>−0.6268</td>
<td>−3.4758</td>
</tr>
<tr>
<td>T3</td>
<td>0.1033</td>
<td>−3.8</td>
<td>−0.3925</td>
<td></td>
</tr>
</tbody>
</table>

### 3.6. Strategic Development Model

The center of gravity coordinate $P$ locates at the quadrant II, $(-0.0595, 0.0246)$. The strategic azimuth is $157.5^\circ$, and the strategic coefficient is 0.49. Accordingly, Figure 2 depicts the strategic vector of the strategic development model for the Chinese sports education market.
3.6. Strategic Development Model

The center of gravity coordinate and the strategic coefficient is 0.49. Accordingly, Figure 2 depicts the strategic vector of the strategic development model for the Chinese sports education market.

4. Discussion

To our knowledge, this is the first SWOT-AHP analysis of the sports education market in China since the “Double Reduction” policy was announced. A recent study on the structural weaknesses of the sports education market [12] is consistent with the conclusions from the present SWOT analysis. Based on the strategic vector, the strategic development model is placed in the striving zone of the adjustment type, indicating that a conservative business strategy should be implemented at this point. This suggestion is consistent with the current macro environment. When capital is indiscriminately rushing into the sports education market, “survival” in the first wave of capital rivalry requires more rigorous business planning. Moreover, while the Chinese government has created a capital market conducive to innovation, credit growth has slowed as a result of COVID-19 and geopolitical uncertainty, meaning that lending in private sectors is skewed toward the risky side despite the PBOC’s reduction in the loan prime rate since 2022. Therefore, a conservative management strategy is necessary for the stability of the current market development. In light of this, we propose four novel strategies for optimizing business management for a sustainable sports education market.

SO strategy: Nowhere has the digital economy become as deep in every aspect of society as in China [46]. Market participants must integrate the digital economy into the sports education market and put more priority on building digitized platforms for campuses, communities, and households. A digitized industry could not only alleviate the instability of resource allocation in the sports education market but also enlarge the consumer base while adopting social media and public opinion oversight. Moreover, market makers should invest much more in VR content in specialized sports education. VR training has already demonstrated great promise in the rehabilitation of Parkinson’s disease patients [47], and similar training should be extended to other types of lifestyle diseases (e.g., Alzheimer’s disease) among the elderly Chinese population. The sports education market is not confined to youth, and with an aging Chinese society [48], the application of VR sports education in communities targeting the senior population could considerably expand the non-traditional consumer base and demonstrate corporate social commitment to the “Health China 2030” goal.
WO strategy: There have been more institutions since the announcement of the “Double Reduction” policy, and it is expected that more capital will join this high-growth sector. On the one hand, more institutions represent that consumers could have plentiful options in the future; on the other hand, it also indicates that the market competition is going into core competitiveness. Competition-based pricing is a temporary solution and not an optimal strategy [49]. Instead, the future pricing strategy should be tailored to the value of the content offered to consumers as well as the sustainability of the business operation. Given the increasing disposable income of Chinese households, institutions should confidently price their original and high-quality content higher than their competitors, and Chinese parents are more likely to prioritize quality over price, even when selecting expensive property [50]. We place special emphasis on original content, which should eventually evolve into original IP and create a brand effect. Institutions that focus on preschool sports education, for instance, could create scientifically rigorous curricula [51] and advertise the content’s lifelong advantages. Not only does value-based pricing represent a premium for intellectual output, but it could also increase institutions’ revenue. In turn, institutions could hire more competent sports workers who could teach and create more IP, developing a positive feedback loop for career development, business growth, and the industry’s overall sustainability.

ST strategy: One of the unique characteristics of sports education is that it serves both young children and senior individuals, as both populations are physically vulnerable. Given this, policymakers should urgently regulate the market in the following areas. First, all parts of emergency preparedness should be improved, including mandated first aid certification for all training staff, institutional first response protocol, and optional equipment such as an automated external defibrillator [52]. Non-certified institutions should be considered ineligible businesses and not be permitted to operate. Second, even though sports education is considered private tutoring and may not require the mandatory teaching certification required for public schools, it is still vital to perform background checks on all staff members involved in youth education. Relevant government ministries and legal organizations should establish strict industry access background checks for individuals with misconduct or civil cases that may be deemed to pose a threat to early childhood education. Third, all trainees are strongly encouraged to obtain third-party insurance coverage. In a modern market framework, commercial insurance could be the last line of defense in the event of a serious personal injury sustained during sports education. Only until all layers of regulatory mechanisms are in place could the market expand steadily.

WT strategy: All of the weaknesses and threats identified in this SWOT-AHP analysis indicate that there is a dearth of qualified sports management professionals on the market. In contrast to qualified sports instructors, who may be hired from a pool of sports pedagogy graduates and professional athletes, sports managers require a comprehensive education over several years. In this regard, this gap severely hinders the high-quality development of the current sports education market. As far as we are aware, a few specialist institutions of higher education, including one in Changsha, are being set up to educate sports management experts. While there will be a lagged effect, we believe that many, if not most, of the current obstacles could be addressed in the coming years, and a high-quality sports education market is on the horizon.

5. Limitations

This study was limited by the use of regional samplings to ascertain the strategic vector. While our recommendation to design a conservative strategy is likely reasonable given the current macro environment, regional agglomeration in China’s educational resources is a well-known issue [53] and may thus necessitate different regions to adopt differentiated strategies. In this study, Changsha and Tianjin are both megacities with robust population bases and consumers with higher margins to support the creation of high-quality sports education content such as VR training and new IP. Business administrators operating in
highly developed economic zones, such as East China and the Jing-Jin-Ji region, should consider our recommendations to enhance their core competitiveness through the use of new technology and interactive media. While consumers in developing regions of China may be more sensitive to pricing and demand for excellent basic sports education, business administrators at this development stage should prioritize organized operating structures and qualified human capital to maintain reasonable medium-term margins.

Moreover, this hybrid SWOT-AHP analysis not only compensates for limitations in existing qualitative research but also provides a systematic framework for future studies to conduct analogous quantitative research in other regions of China. Therefore, it is suggested that Chinese researchers adopt this straightforward and reasonably objective methodology and undertake additional SWOT-AHP analyses of the sports education market in other locations. With additional research methods such as the difference-in-differences model, it is possible to horizontally compare the development circumstances of different regions and summarize more precise and comprehensive strategies for the high-quality development of the Chinese sports education market.

6. Conclusions

This study shows that the strategic azimuth is 157.5° and the strategic coefficient is 0.49, placing the vector within the adjustment type for the striving zone. Accordingly, a conservative business strategy is recommended for the sports education markets in Changsha and Tianjin.

The findings of this study are of significant implications for the ongoing development of the sports education market under the “Double Reduction” policy and serve as a useful basis for policymakers and nationwide enterprises planning a sustainable market. Despite its high growth, the market is inadequately regulated. During this phase, government regulation will play a crucial role in guiding the market, and through standardization and legalization, market participants will be able to avoid disorderly competition. The lack of specialized land for sports education is dragging the market’s growth, which would also delay the broad objectives planned in the National Fitness Program and “Healthy China 2030.” Under these conditions, the local People’s Governments should take the initiative to provide policy incentives to private investors for new land construction permits, share existing sports courts in public schools with the general public, and coordinate a digital platform to precisely monitor land use of in real-time to maximize land use efficiency.

While the market development is boosted by both policy tailwind and monetary easing now, any existing and new market participants should rigorously evaluate their short-term, medium-term, and long-term goals before spending large sums of money in this highly competitive industry. The short-term objective should be applicable to all market participants, namely the recruitment of well-trained sports talent for childhood education and the improvement of emergency preparedness. The medium-term objective should be to constantly invest in research and development of exceptional educational content while maintaining a healthy profit margin. Finally, China is a socialist country with Chinese characteristics. A business that seeks long-term growth should align its philosophy with the people-centered development philosophy of the Chinese government.

In conclusion, this study and views center around the SWOT-AHP analysis and provide a scientific framework for future research to be undertaken in other regions of China. We hope our strategies can steer the market into a sustainable path to promote the transition to a high-quality economy and population health at the national level.

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Informed Consent Statement: Informed consent was obtained from all research participants.

Data Availability Statement: Data and resources are available upon request.

Conflicts of Interest: The authors declare no conflict of interest.

References

21. 100SUMMIT. The disruptor of the new 100 billion yuan sports education market. Available online: https://www.100summit.com/cn/details/id/4225 (accessed on 5 December 2022).


39. Liu, M.; Ding, H. Top Level Design, Policy Guidance and Promotion Path of Integration of Sports and Education to Promote the Healthy Development of Adolescents. Available online: http://www.gov.cn/zhengce/content/2021-10/21/content_5545112.htm (accessed on 31 August 2022).


42. Zhao, B.; Ma, L.; Wan, F.; Zhang, F. Dilemma and countermeasures of Chinese traditional fitness clubs from the per-spective of high quality development: Based on the investigation of some large and medium-sized cities in China. J. Shanghai Univ. Sport 2021, 37, 26–35. [CrossRef]


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