

Analysis of the Evolution and Development Trends of Youth Tennis Tournaments in China

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Abstract: *This study provides an in-depth analysis of the trajectory of China's junior tennis CTJ (China Tennis Junior) tournaments between 2022 and 2023 and examines the impact of these changes on junior tennis in China. With the support of government policies, the improvement of the socioeconomic environment, and the focus on sports in family education, the number of CTJ tournaments jumped from 70 in 2022 to 568 in 2023, and the number of participants also increased significantly. By applying descriptive statistical analysis and trend analysis methods, we reveal the changes in tournaments in terms of level settings, gender ratios, and participation by age groups. The findings suggest that the increase in the number of high-level tournaments has provided a broader competitive platform for outstanding players, while the wide participation of the U10 and U12 age groups highlights the importance of early education in tennis. Based on these findings, this paper suggests that tennis development should be promoted by expanding the coverage of tournaments, optimizing tournament structure, and further strengthening early physical education. These findings not only provide data support for the current state of youth tennis in China but also provide valuable references for future policy making.*

Keywords: Youth, Tennis Tournaments, Evolution and Development, Trends

1. Introduction

In recent years, with the gradual development of CTJ (China Tennis Junior) tournaments, China's junior tennis has made remarkable progress. As an important part of the sport, CTJ tournaments not only provide a valuable competitive platform for young players but also lay a solid foundation for cultivating future tennis stars. Especially in the context of the national policy of “integration of sports and education”, youth sports, especially tennis, have seen unprecedented opportunities and attention (Zhou, 2021). important reference basis.

Youth sports events play a crucial role in the national sports system, especially in the development of future top athletes. Since the inception of the CTJ tournament (China Tennis Junior), it has gradually developed into a core tournament system covering all age groups from U10 to U18, and the level of the tournaments has been gradually upgraded from junior to senior. Through these tournaments, juniors from all over the country are able to showcase their talents on a level playing field, and at the same time, these tournaments have become an important channel to promote the development of local tennis culture (Li & Wang, 2022). Despite the expanding influence of CTJ tournaments, however, in-depth academic studies on their development trends are still scarce and urgently need to be systematically analyzed.

With the successive release of data on Chinese junior tennis tournaments in 2022 and 2023, an in-depth analysis of the trends and changes reflected in these data can shed more light on the status and evolutionary trajectory of CTJ tournaments. This study centers on several core questions: first, how has the number of CTJ tournaments changed between 2022 and 2023? Second, are there significant adjustments in the gender and age structure of participants? Finally, what are the driving factors behind these changes and how do they affect the overall development of junior tennis in China? By exploring these questions, we hope to provide solid data support and theoretical references for future planning and policy making of junior tennis events in China.

Specifically, the study focuses on the fluctuations in the number of tournaments, the changes in the composition of participants, and the distribution characteristics of different levels of tournaments. These analyses not only help to understand the continuously transforming role of CTJ tournaments in China's tennis system but also point out the direction for its future development (Wu, 2023). From the perspective of practical application, grasping the development dynamics of CTJ tournaments is highly informative for both policy makers and tournament organizers. The results of this study are expected to provide a scientific basis for the development strategy of youth sports and promote the optimization of tournament arrangements and the rational allocation of resources. In addition, the study will lay the foundation for subsequent discussions on the long-term impact and effect evaluation of youth sports (Zhang & Liu, 2021). Overall, this paper not only enriches the academic research on the development of youth tennis in China but also provides new perspectives and thoughts for promoting the sustainable development of sports in China.

2. Methodology

2.1 Research Design

This study mainly adopts a quantitative approach and seeks to reveal the development trend of China's junior tennis CTJ tournaments by comparing and analyzing the data related to the tournaments in 2022 and 2023. The focus of the study is to examine the changes in the number of tournaments, the number of participants, the distribution of tournaments and the participation of different age groups between these two years, as well as to explore the potential factors contributing to these changes. To ensure the rigor of the analysis, this paper combines both descriptive statistics and trend analysis.

2.2 Data Source

The data used in this study are all derived from the 2022 and 2023 tournament data officially announced by CTJ (China Tennis Junior), covering the total number of tournaments, the number of participants, the distribution of tournaments at all levels, and the participation of players of different age groups in each year. In addition, the annual reports published on the official website of CTJ, and related literature are also referenced to ensure the comprehensiveness and authority of the data (China Tennis Association, 2022, 2023). As the data were all public official information and did not involve any personal privacy, there was no ethical risk in this study. The entire data analysis process strictly adhered to academic norms to ensure the objectivity and accuracy of the results.

2.3 Data Analysis Methods

Methods of data analysis

Descriptive statistical analysis: basic statistics on the number of races, the number of participants and their distribution over two years, visualizing the changes and helping to understand the scale of the races and the gender and age structure of the participants (Field, 2018).

Trend analysis: based on descriptive statistics, further evaluates tournament development trends, including growth or decline in the number of participants, changes at all levels of the tournament, and adjustments in age group participation. These trends provide an important reference for future race planning (Pallant, 2020).

Comparative analysis: by comparing two years of data, we provide an in-depth analysis of the changes in CTJ tournaments and the driving factors behind them, with a special focus on the impact of policy adjustments and the socioeconomic environment on tournaments (Hancock & Mueller, 2017).

2.4 Research Limitations

This study has a short time span, covering only two years of data, 2022 and 2023, and although it can bring some insights, future studies should consider including data from longer time periods in order to obtain more comprehensive conclusions. In addition, this paper relies heavily on quantitative analysis, and a combination of qualitative methods (e.g., interviews or questionnaires) in the future will help provide a deeper understanding of the phenomenon in question (Creswell & Creswell, 2017).

3. Results and discussion

3.1 Analysis of Changes in the Number of Events

By comparing the data of 2022 and 2023, we found that the number of CTJ (China Tennis Junior) tournaments increased significantly between the two years; in 2022, only 70 tournaments were organized, whereas in 2023, the number soared to 568 tournaments, which is almost an eight-fold increase (see Table 1). This trend not only reflects a significant increase in the promotion of junior tennis in China on a national scale but also shows the positive promotion of national sports policies and the growing interest and support of the general public for junior tennis (Zheng & Yang, 2020).

Table 1: Comparison of CTJ Event Numbers in 2022 and 2023

Year	Events of CTJ	Growth Rate (%)
2022	70	-
2023	568	+811%

The number of CTJ (China Junior Tennis) tournaments has jumped from 70 in 2022 to 568 in 2023, and there are several key reasons behind this leap:

3.1.1 Policy Driven

In recent years, the Chinese government has attached great importance to the integration of sports and education and especially invested a great deal of resources in the field of youth sports. The “China Youth Sports Development Plan (2020-2030)” clearly proposes to increase the layout and optimization of youth sports events to enhance the competitiveness of national sports. The introduction of these policies has provided a solid guarantee for the rapid expansion

of CTJ events and has been an important driving force for the surge in the number of events (China State Council, 2020).

3.1.2 Improved economic environment

As the economy continues to develop and family income levels steadily rise, more and more families are able to support their children's participation in relatively high-cost sports such as tennis. At the same time, the increase in corporate sponsorship has also injected financial vitality into the organization of tournaments. Improved economic conditions have made more cities and regions capable of hosting CTJ tournaments, contributing to the expansion of tournament scale (Li & Wang, 2022).

3.1.3 Changes in Social Concepts

In recent years, the concept of healthy living has gradually taken root in people's minds, and more and more parents recognize the positive impact of physical activity on their children's physical and mental development. Parents are not only willing to invest in training costs, but also actively encourage their children to participate in various sports events. This rise in social awareness has undoubtedly injected a strong impetus for the rapid growth of CTJ events (Xu, 2021).

3.2 Changes in Participant Numbers and Structure

In line with the significant growth in the number of tournaments, the number of participants in CTJ tournaments has also risen dramatically between 2022 and 2023. 13,416 players participated in the tournaments in 2022, whereas in 2023, the number surged to 64,154, a nearly five-fold increase (see Table 2). This not only demonstrates the rapid popularity of junior tennis in China but also reflects the enthusiasm of a growing number of young people to take up the sport.

Table 2: Comparison of CTJ Participant Numbers in 2022 and 2023

Year	Participants of CTJ	Growth Rate (%)
2022	13416	-
2023	64154	+378%

With the increase in the number of participants, the gender structure and age distribution of the contestants also showed some changes. The data show that the proportion of male participants in 2022 and 2023 was consistently higher than that of female participants. In 2023, the number of male participants amounted to 37,770, accounting for 59% of the total number of participants, while the number of female participants amounted to 26,384, accounting for 41% (see Table 3). Although boys are still in the majority, the proportion of girls' participation is gradually increasing, which is likely to reflect increased social attention to women's sports as well as increased positive attitudes toward women's participation in sports (Baker, 2020).

Table 3: Gender Distribution of CTJ Event Participants in 2022 and 2023

Gender	2022	2023	2022 (%)	2023 (%)
M	8331	37770	62%	59%
F	5085	26384	38%	41%

In terms of age group distribution, the U12 and U10 groups had the largest number of players, amounting to 22,957 and 18,484 respectively, accounting for 64% of the total number of participants. This suggests that the developmental focus of youth tennis is mainly concentrated in these two age groups, perhaps because this is a critical period for developing fundamental

tennis skills (Morris & Hollenstein, 2020). At the same time, the U14 and U16 groups also showed a significant increase in participation, indicating that many players remain enthusiastic and actively involved in tennis as they enter adolescence (see Table 4).

Table 4: Age Distribution of CTJ Event Participants in 2022 and 2023

Age	2022	2023	2022(%)	2023(%)
U10	4212	18484	31%	29%
U12	4559	22597	34%	35%
U14	2586	13791	19%	22%
U16	1831	8107	14%	13%
U18	228	815	2%	1%

To summarize, between 2022 and 2023, CTJ tournaments have achieved significant growth in terms of number and number of participants. Behind this change is the strengthening of policy support, the improvement of economic conditions as well as the social awareness and importance of junior tennis. Such development not only shows the great potential of junior tennis in China but also provides a valuable reference for future sports policy making and tournament planning.

3.3 Distribution and Development of Tournaments at Different Levels

By comparing the data of CTJ tournaments in 2022 and 2023, we can clearly see that the number and participation of tournaments at different levels have changed significantly. In 2022, CTJ tournaments were mainly concentrated in C-level (junior) and B-level (intermediate) tournaments, which were held 23 times and 12 times respectively (see Table 5). By 2023, on the other hand, the number of Class A (senior) events climbed rapidly to 60, Class B events increased to 95, and Class C events surged to 159. Such growth not only reflects a more diversified tournament system but also indicates more opportunities for youth players of different competitive levels to showcase themselves.

Table 5: Comparison of CTJ Event Numbers by Category in 2022 and 2023

Category	Events in 2022	Events in 2023	Growth Rate (%)
A	1	60	+5900%
B	12	95	+691.7%
C	23	159	+591.3%

By comparing the CTJ tournament data for 2022 and 2023, it is clear that the number of tournaments and participation at all levels has changed significantly. In 2022, CTJ tournaments were mainly focused on Class C (beginner) and Class B (intermediate), with 23 and 12 tournaments held, respectively (see Table 5). By 2023, however, the number of Class A (senior) events has grown significantly to 60, Class B events have increased to 95, and Class C events have surged to 159. This change reflects the growth of the tournament system in terms of diversity and inclusiveness and means more opportunities for junior players of different competitive levels to compete.

Growth and Specialization of Premium Events

The significant increase in the number of A-level events in 2023 reflects the growing specialization and competitive level of CTJ tournaments. A-level events attract more high-level players and provide an important competitive stage for potential juniors, laying the foundation for their future professional development (Green & Houlihan, 2020). This trend suggests that

CTJ tournaments are building a complete progression from grassroots to professional as the level of tennis in China rises.

The continued popularity of intermediate-level tournaments

B-level tournaments in 2023 underscores their critical role in the CTJ system. As a bridge between beginner and advanced levels, these tournaments provide growing players with valuable hands-on opportunities to help them steadily improve their skills. Research points to the fact that B-level tournaments are both challenging and practical, making them an essential stage in the development of junior players (Baker, 2021).

Widespread coverage of junior tournaments

The significant increase in the number of C-level tournaments indicates that more and more juniors are joining the sport of tennis through basic training and competition. The popularity of junior tournaments not only attracts a large number of novices to participate but also helps them build a solid technical foundation and accumulate valuable competition experience, which promotes the widespread promotion of tennis among the junior population (Morris, 2019).

3.4 Comparison of Age Group Participation

By analyzing the participation of different age groups in 2022 and 2023, there is a significant difference in the attractiveness of CTJ tournaments to youths of all ages. In 2023, the number of participants in the U10 and U12 age groups was 18,484 and 22,957, respectively, which is significantly higher than that of the other age groups, which suggests that these age groups are the main participant groups in youth tennis (see Table 6). This trend reflects the widespread popularity of tennis at the childhood and elementary school levels and the positive impact of early sports participation on the overall development of youth (Eimer et al., 2019). Table 6. 2022 vs. 2023 CTJ participation by age group.

Table 6: Comparison of CTJ Participants by Age Group in 2022 and 2023

Age	Participants in 2022	Participants in 2023	Growth Rate (%)
U10	4212	18484	+338.7%
U12	4559	22597	+403.6%
U14	2586	13791	+433.4%
U16	1831	8107	+342.8%
U18	228	815	+257.5%

The U10 and U12 age groups accounted for 64% of the total number of participants, a percentage that underscores the remarkable success of CTJ tournaments in developing young tennis players. Early participation in sports not only helps to improve children's physical fitness but also lays a solid foundation for their future competitive development. As they get older, U14 and U16 players progress to more specialized training and competition, a period when tournaments are crucial for improving their technical skills and competitiveness (Coté et al., 2021).

Although participation in the U18 age group is relatively low, data from 2023 suggests a significant increase in participation in this age group, reflecting the fact that CTJ tournaments provide a valuable competitive platform for youth aspiring to a professional career as the pressure to choose a career path increases (Fraser-Thomas et al., 2020).

Overall, the diversification of CTJ tournaments and the increase in participation across age groups have demonstrated their great potential for developing future tennis talent. These figures not only reflect the healthy growth of junior tennis in China but also provide solid support for the future talent pool. By building a stage suitable for the development of players of different age groups, CTJ tournaments are helping China's tennis to move to a higher level.

3.5 Driving Factors Behind the Development of CTJ Tournaments

The rapid development of the CTJ (China Tennis Junior) tournament has been driven by several factors. These factors have not only expanded the scale and improved the quality of the tournament, but also profoundly contributed to the overall progress of junior tennis in China. First, policy support has played a key role. Through national policies such as the “integration of sports and education”, the status of youth sports has been significantly elevated, providing a solid policy foundation for the expansion and quality assurance of CTJ tournaments (Chinese State Council, 2020). Second, the improvement of the economic environment has injected a strong impetus for the development of the event. With rising family income levels and increasing corporate sponsorships, more resources flow into the sports industry, especially tennis, which has a higher capital investment, driving tournament specialization and wider participation (Xu, 2021; Zhang et al., 2021). In addition, the importance placed on sport and physical education by families and educational institutions cannot be ignored. More and more parents and schools regard physical education as an important part of their children's overall development and actively encourage young people to participate in tennis, thus providing a solid social foundation for the tournament's sustainable development (Fraser-Thomas et al., 2020).

3.6 Impact on the Development of Youth Tennis in China

The rapid development of CTJ tournaments has had a far-reaching impact on China's junior tennis and provides an important reference for future sports policy making and development trends. First, the significant growth in the number of tournaments and participants has effectively increased the popularity of junior tennis, allowing more young people to have the opportunity to participate in tournaments and accumulate practical experience and skills. This trend is not only evident in first-tier cities, but also gradually spreads to relatively less economically developed areas (Eimer et al., 2019). Second, with the continuous improvement of the tournament system, especially the increase of high-level tournaments, more and more high-level players have emerged through the CTJ tournament platform, which builds a clear pathway for them from basic training to professional development and further strengthens the reserve force of Chinese tennis (Baker, 2021). Looking ahead, with continued policy support, an improved economic environment, and increased emphasis on sport by families and educational institutions, the development of junior tennis in China is promising, and the success of CTJ tournaments suggests that future development may further enrich the types of tournaments and their coverage, while strengthening scientific guidance and support to ensure the overall and healthy development of youth sport (Green & Houlihan, 2020). Houlihan, 2020).

4. Conclusion

By analyzing the data of China's junior tennis CTJ tournaments in 2022 and 2023, this study reveals that CTJ tournaments have achieved significant growth in terms of number, scale and participation, driven by a combination of multiple factors, including national policy support, improved socio-economic environment, and emphasis on family and education. This has not only expanded the influence of junior tennis in the country but also built a multi-level

development platform from beginner to advance for players of different levels, promoting their growth and paving the way to professionalization.

The development of CTJ tournaments fully reflects the vibrant vitality of youth sports in China and provides a valuable reference for the formulation of future sports policies. The diversification of tournaments and the continuous climb in the number of participants, especially the wide participation in the early development stages of U10 and U12, show that the CTJ system has played a key role in cultivating and selecting outstanding tennis talents, laying a solid talent foundation for the future of Chinese tennis.

Looking ahead, with the further optimization of policies and the rising importance of society to sports, CTJ tournaments are expected to further expand their coverage and influence, especially in economically underdeveloped regions and low-income families, and provide more young people with fair opportunities to participate. At the same time, the CTJ system will continue to lead the development of youth tennis in China, help cultivate more outstanding players with international competitiveness and enhance China's position in the global tennis arena. Through continuous innovation and development, CTJ events will play an even more important role in the future of youth sports.

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