

COMPARATIVE ANALYSIS OF SPORTS TECHNICAL SKILLS OF YOUNG FIGURE SKATERS

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ABOUT ARTICLE

Key words: figure skaters, free	Abstract: The presented article examines a				
program, technical skill, program	comparative analysis of the sports and technical				
components, difficulty levels, competitive	skills of young figure skaters of the first youth				
protocols, jumps, spins, International	category. The analysis involved evaluating an				
Skating Union, jump combination.	arbitrary program that looks at the elements of				
	spins, jumps, and choreographed tracks. The				
Received: 12.11.24	results of the study confirmed the significance of the analysis, revealing a lag in the technical skill				
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Published: 16.11.24	of figure skaters from Uzbekistan compared to				
	their foreign peers. This made it possible to				
	propose specific means to eliminate them,				
	including recommendations. The data obtained				
	can be used by coaches to more effectively train				
	young figure skaters, helping to increase their				
	sports achievements and general skill.				

INTRODUCTION

Resolution of the President of the Republic of Uzbekistan Sh.M. Mirziyoyev dated February 4, 2020 "On measures for the development of winter sports", Resolution of the President of the Republic of Uzbekistan dated February 14, 2022 No. PP–127 "On accelerating preparatory work for the successful participation of athletes of Uzbekistan in the next summer and Winter Olympic and Paralympic Games", Government Resolution 06.01.2023 No. 3 "On measures to organize the activities of the Republican Specialized Sports School for Winter Sports" confirms the importance of developing physical culture and sports in the country, including figure skating, and provides measures to create conditions for the development of this industry, train qualified specialists and attract young people to sports [1,2,3].

In connection with the revival of figure skating in the Republic of Uzbekistan, initiatives are being actively implemented in the country to attract young people to this sport, aimed at its popularization, the development of mass sports and the formation of a reserve for national teams. The necessary conditions and infrastructure for winter sports are being created, which also contributes to the successful performances of our athletes on the world sports arena. Thus, the analysis of the technical training of figure skaters becomes an important step towards the development of this sport in the country [10,13,14].

The purpose of comparing the technical training of Uzbek and foreign figure skaters is to identify key factors affecting the level of skill, as well as identify shortcomings in the training process, which will allow us to develop recommendations for improving training techniques, increasing the competitiveness of Uzbek figure skaters and forming a more effective training system, which ultimately will contribute to achieving high results in the international arena [4,8].

MATERIALS AND METHODS

The study was conducted in two stages. The study involved 40 figure skaters conditionally divided into two equivalent groups: 20 figure skaters of the Russian Federation and 20 figure skaters of the Russian Federation.

For a comparative analysis, the competitive protocols of Uzbek athletes from the Tashkent Skates tournament and the results of figure skaters of the same age group from the Regional competitions of the Sverdlovsk region "For the prizes of local Federations – the Europe-Asia Trophy" in figure skating, available on the website of the FFCC of the Sverdlovsk Region for 2023-2024, were used.

At the second stage (February-May 2023), statistical processing of the results of a comparative analysis of the technical readiness of young figure skaters was carried out and conclusions and practical recommendations were formed on its basis.

To assess the level of technical readiness of young figure skaters of the 1st youth category, we used a test rental of an arbitrary program, in which athletes who successfully passed sliding testing set for the current sports season participated.

The rental of free skating programs was subject to the discharge requirements of the International Skating Union (ISU): an arbitrary program should be 2 minutes 30 seconds +/-10 seconds in duration. The program must have a maximum of four jumping elements, which must contain a single "Axel" jump, three different jumps in two turns, any jump can be performed no more than twice; the program must have a maximum of two cascades or combinations, a

cascade or combination can consist of only two jumps in one and a half and/or two turnovers. Jumps of two and a half turns or more are prohibited [7,9, 15].

In a balanced program, there should be a maximum of two rotations: rotation in one basic position without a change of leg (eight rotations) or with a change of leg (six + six rotations), jumping is allowed, one combined rotation with or without a change of leg (ten rotations in total), jumping is prohibited;

In an arbitrary program, one choreographic sequence of any movements must be performed: steps, turns, spirals.

The level of complexity of the elements should be no higher than the second. To fulfill the bit requirement, you need to score a minimum of thirteen points in the technical score [5,11].

RESULT AND DISCUSSION

According to Table 1. the results of the pedagogical analysis of the materials of the control rental of an arbitrary program showed that the level of technical training of young foreign figure skaters is significantly higher than the data of the athletes of Uzbekistan.

Thus, as a result of the analysis of the performance of jumping elements in the free program of young figure skaters of the Republic of Uzbekistan and the Russian Federation, a significant difference in the levels of training of athletes was revealed. Russian athletes demonstrate a higher base cost of jumps and fewer errors, which significantly affects their grades. Figure skaters have a tendency to perform elements with fewer turns and a large number of errors, which also affects the results. While Russian athletes confidently performed double jumps and cascades, their Uzbek rivals were more often limited to single jumps and allowed rough half-turns (quarter turn and half turn) and on jumps such as lutz and flip they pushed off from the wrong edge of the skate. Young figure skaters of the Russian Federation performed a cascade of jumps with more complex jumps, high base cost and a large number of revolutions in the free skate, unlike their peers from the Republic of Uzbekistan.

In a comparative analysis of rotational elements among figure skaters of the first youth category, it was found that foreign athletes more often performed rotations of the second level of difficulty with a change of leg. While only 60% of young figure skaters from RUz were able to complete this element, 30% limited themselves to first-level rotations, and 10% did not receive points due to non-compliance with ISU requirements, performing rotation in only one base position. Moreover, the higher the level, the higher the score, respectively, depends on the level of difficulty of rotation [12].

The analysis (Fig. 1) of the results of the performance of the free skating program of the combined rotation of the figure skaters of the Russian Federation and the Republic of

Uzbekistan in the competitive rental revealed significant differences in the level of performance [6]. 85% of the 1st junior category skaters from Russia successfully completed rotations of the second level of difficulty, while 15% demonstrated rotations of the first level. In Uzbekistan, 60% of the skaters also performed second—level rotations, but 10% showed first-level rotations, 5% showed basic level rotations, and 15% remained unappreciated due to incorrect entry and falls. It should be noted that Uzbek figure skaters had errors in performing the required number of turns in rotations, as well as a weak leg change, which significantly reduced the level of complexity of the elements and affected the final scores.

The most significant, reliable difference between the results of young figure skaters of the first junior category of the Russian Federation and their peers of the Republic of Uzbekistan was revealed in the performance of the choreographic sequence and the track of steps (31.75) at a significance level <0.001.

The large difference in the results obtained indicates the advantage in performing the choreographic sequence and the track of steps by figure skaters of the 1st junior category from Russia. In the control box office of the free program, they performed a choreographic track of the second, maximum level of difficulty for their category, completing seven difficult steps and turns according to the judges' requirements. At the same time, the young figure skaters of the 1st junior category from Uzbekistan completed a track of steps without a level, that is, they demonstrated less than five steps and turns.

A huge difficulty in performing the choreographic sequence for young athletes from Uzbekistan was such complex turns as hook, hook, loop, bracket and twirl, as well as performing elements with additional work of the body and other body parts that complicate steps and turns. The following errors were identified in the performance of the skaters: stumbles, inconsistency of movements with music, loss of control, lack of energy, inconsistency between choreographic movements, poor quality of steps, lack of creativity and originality in performing elements. All these factors significantly influenced the overall level of choreographic training and technical assessments of athletes from Uzbekistan.

Table 1

Indicators of technical readiness of young figure skaters of the first junior category of Uzbekistan and Russia

No. p / p	Components of an arbitrary program	1st junior category of the Republic of Uzbekistan		1st junior category of the Russian Federation		Difference	t	Р
		Х	δ	х	δ			
1.	Jump element 1	2,04	0,94	2,62	0,52	0,58	2,66	<0,05

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2.	Jump element 2	1,41	0,58	2,17	0,71	0,76	3,83	<0,05
3.	Jump element 3	1,07	0,47	1,49	0,42	0,42	3,28	<0,05
4.	Jump element 4	1,05	0,46	1,36	0,40	0,31	2,42	<0,05
5.	Spin	2,06	0,85	2,49	0,42	0,43	2,21	<0,05
6.	Combo spin	2,12	1,05	2,65	0,43	0,53	2,23	<0,05
7.	Step sequences	1,54	0,15	3,68	0,26	2,14	31,7	<0,001
8.	Technical assessment	11,29	3,01	16,49	2,05	5,2	7,08	<0,001
9.	Program components	14,33	2,45	21,07	1,95	6,74	9,57	<0,001
10.	Total score	25,42	4,56	37,53	3,86	12,11	9,65	<0,001

The huge superiority in the performance of all prescribed elements of the free skating program of young figure skaters of the 1st junior category from Russia was reflected in the amount of their technical assessment. A high level of mastery of the elements, high-quality execution of steps and rotations, as well as compliance with all judicial requirements allowed the athletes to significantly outperform their rivals and get higher scores for technique.

The analysis of the data presented in Table 1.2 showed that the difference in the total technical assessment between the skaters of identical categories from Russia and Uzbekistan is 5.2 points. This is a fairly significant discrepancy, especially when you consider that to meet the discharge requirements for the "first junior category" you need to score 13 points.

According to Table 1, the young figure skaters from Uzbekistan received only 11.29 points, which indicates that they did not meet the discharge standards. At the same time, the athletes from the Russian Federation showed a result significantly exceeding the required level, scoring 16.49 points.

Table 2



Comparative table of evaluation of the elements of the free skating program

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A huge significant difference in favor of the figure skaters of the first junior category of the Russian Federation was shown by the components of the program at t 9.57 and the significance level <0.001. (Table 3).

Table 3

Indicators of the components of the young figure skaters of the first junior category of Russia and Uzbekistan

Components	Figure skaters of Russia		Figure skaters Uzbekistan		Difference	t	Р
	Х	δ	Х	δ			
Composition	3,96	0,38	2,93	0,50	1,03	7,52	<0,001
Performance	3,83	0,36	2,76	0,54	1,07	7,42	<0,001
Skill	3,89	0,37	2,73	0,44	1,16	9,06	<0,001

According to Table 3, of the three existing component indicators, the largest difference was observed in such a component as "skating skill". This component reflects the quality of the slide, demonstrating the skaters' ability to use a variety of edges, turns, steps, as well as perform the elements of the program smoothly and naturally, maintaining the dynamics of strength and speed throughout the performance.

Significant differences were also revealed in the "presentation" component, which evaluates the expressiveness, expressiveness and ability of the skater to convey the content of the program to the audience, corresponding to the musical composition, transmitting the contrast of movements and energy to the beat of the music. The shortcomings in this component of the figure skaters from Uzbekistan indicate the need to reconsider approaches to choreographic training.

The composition component also showed significant differences. The low performance of young figure skaters from Uzbekistan in this component indicates an insufficient level of work with movements that should be combined into a single holistic program that corresponds to the principles of proportion, unity, musical pattern and filling of the entire ice space.

In general, the analysis of the components showed that the performance of figure skaters from Uzbekistan in all three components is rated in the "red" category, which indicates poor performance of the elements and general skating technique. While the figure skaters from Russia showed a satisfactory result, being in the "orange" category.

A comparison of the overall ratings of the 1st junior figure skaters from Uzbekistan and Russia (Table 1) also revealed a significant advantage of the athletes of the Russian Federation. The total score of the figure skaters from Uzbekistan was 25.42 points, while the athletes from Russia had 37.53 points, which indicates the superiority of the Russians by 46.73% in the rental of programs.

CONCLUSION

Based on the identified gaps in the technical assessment, it was proposed:

To carry out a detailed analysis of errors made during jumps and rotations (under-spin, incorrect edge, etc.). Based on these data, develop individual training plans for each skater.

Organize specialized training sessions focused on performing jumping elements, especially with an emphasis on cascades and combinations. This will help to increase the base cost of jumps and reduce the number of errors.

To practice two-turn jumps, it is recommended to include in the training process the use of various auxiliary devices and simulators (spars, spinners, platforms, etc.), which are used both on and off the ice.

Based on the identified gaps not only in the technical assessment, but also in the second assessment for the program components, we recommended and proposed to reconsider approaches to choreographic and technical training of young figure skaters from Uzbekistan.

In particular, to develop sliding skills, improve the quality of steps and turns, it was proposed to introduce specialized exercises into the training process for the development of

various ribs (performing deep arcs on internal and external ribs, stability control during transitions from one rib to another, working on smooth and precise lines of movement on ice), regular performing difficult steps and turns, developing gliding skills at high speed, staging and practicing choreographic tracks: performing tasks for smooth and continuous transitions between elements, bundles of turns and steps, taking into account the musical composition and tempo.

To increase the level of complexity of the programs of young figure skaters.

Consider participating in joint training camps with figure skaters from other regions or countries in order to enhance competitive experience and exchange training techniques.

Pay attention to the general physical training of athletes, which will help improve their strength, coordination and endurance necessary for the successful completion of complex elements.

To train coaches in modern methods of preparing and analyzing speeches, including the use of video reviews, so that coaches can give feedback more effectively and develop improvement strategies.

Regularly monitor the progress of the skaters and conduct a comparative analysis of their results in order to identify improvements and adjust training.

In our opinion, the implementation of these recommendations will significantly increase the level of technical training of young figure skaters in Uzbekistan and improve their results at competitions.

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