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IMPROVING THE COORDINATION ABILITIES OF YOUNG ATHLETES IN THE INITIAL PHASE OF TRAINING IN SPORTS DANCES

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Purpose: to identify the features of improving the coordination abilities of young athletes at the stage of initial training in dancesport.

Material and Methods: a set of scientific research methods was used (theoretical analysis, systematization and generalization of scientific literature; pedagogical observation, pedagogical testing). The experimental part was attended by 10 sports duets of the first year of study (7-8 years). Were formed two groups (control - 5 couples and experimental - 5 couples).

Results: due to the use of experimental techniques, selection of tools and the optimal combination of loads, taking into account the age characteristics of young athletes, the differences between the arithmetic mean values obtained in the experiment are considered plausible. When conducting a research to determine the development of coordination abilities by means of dancesport, the probability (P) of obtaining similar results (when the arithmetic mean values of the experimental groups are higher than the control) is more than five percent significance, or less than 95 cases out of 100.

Conclusions: the developed method of improving the coordination abilities of young athletes in the process of sports dances provides reasonable provisions for the targeted use of elements for the development of coordination abilities in young athletes, solves the main tasks of the stage of initial training in sports dances, sensitive period of coordination sports.

Keywords: coordination abilities, coordination of movements, the indicators, athletes, sports dances.

Introduction

Currently, sports dances are becoming increasingly popular in Ukraine and around the world. Sports dances are a complex and coordinated sport. Athletes must perform many different complex elements on the floor, including reusable steps, turns, and jumps and so on.

Since dancesport is complex coordination sports with stereotypical (standard) movements of qualitative value and relatively stable manifestation of kinematic characteristics of movements, so among the parties of training of dancers an exceptional place is occupied by the development of coordination abilities.

As shown by scientific research of Mrs. Mullagildina, A., Mrs. Deineko, A., Mrs. Krasova I., Mr. Platonov, V., Sadowski, J. [7; 10; 11] that coordination abilities of man should begin to develop as early as primary school age. The older children are, the longer the learning process of their coordination abilities is. In modern dances, the age of the first great successes is earlier than in most sports, and high results can be achieved only after strenuous exercises.

Successes in the development of sports dances are largely due to the results of scientific research Mr. Bernstein, N., Mrs. Erokhina, O., Mr. Kovalenko, A., Sarabon, N., and others [1; 3; 4; 11]. In this regard, from athletes require a high level of accuracy, speed, stability and comprehensive coordination in time and space.

The purpose of the research: Identifying the features of improving the coordination abilities of young athletes at the stage of initial preparation in dancesport.

Material and Methods of research

The research used a set of scientific research methods: (theoretical analysis, systematization and generalization of scientific literature; pedagogical observation, pedagogical testing). The experimental part of the research involved 10 sports

couples of the first year of study (7-8 years). Two groups were formed (control - 5 couples and experimental - 5 couples).

Results of the research

Studies of these literature sources suggest that dancesport is a unique combination of performing arts and sports. From each of these components dancesport has absorbed the main characteristics. The main characteristics of art - emotionality, aesthetics of perception, empathy for the process of taking place on the stage (parquet). In this sports dances fully correspond to the main directions of art: theater, ballet, painting, music. Along with figure skating and rhythmic gymnastics, belong to the group of complex coordination sports. And therefore many scientific achievements, methodical principles of these kinds of artistic sports can and should be used adapted to sports dances [6].

In real training and competitive activities, all these abilities are manifested not in pure form, but in complex interaction. In specific situations, some coordination abilities play a leading role, others - a supporting one, and it is possible to instantly change the role of different abilities in connection with changed external conditions. This is especially evident in gymnastics, aerobic gymnastics, acrobatics, sports games, martial arts, alpine skiing, sports dances, i.e. in all those types in which the result largely depends on the coordination abilities [2; 7].

Athlete's coordination abilities are very diverse and specific for each sport. However, they can be differentiated into individual types according to the features of manifestation, evaluation criteria and factors that determine them. Based on the results of research, we can identify the following relatively independent types of coordination abilities: spatio-temporal and dynamic parameters of movements; maintaining stability; sense of rhythm; orientation in space; arbitrary muscle relaxation; coordination of movements.

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change the role of different abilities in connection with changed external conditions [2; 7].

In dances with complex coordination, the sequence of providing information about movement is clearly observed. The dance begins "from the floor", and it is extremely important to show and explain in the appropriate sequence: where we step (how we transfer weight); how to put the foot (how the foot works); how the knee works; how the body works; what is the position of the hands; where the gaze is directed (head position) [4; 8].

In sports dances the control over the level of development of coordination abilities usually occurs during the improvement of technical training on the basis of subjective, empirical views and conclusions of the coach. Therefore, this process requires the development of appropriate requirements, specialized tests and an evaluation system.

In order to achieve success in sports dancing, you must have a high level of development of endurance, flexibility, coordination abilities. And therefore, sports dances are recognized as one of the sports that require the development of the scientific foundations of sports training, analysis of means, forms and methods of working with athletes in sports dances [5].

In the scientific and methodological literature, you can find a large number of options for determining "coordination". However, the most expressive of them, given the specifics of sports activities, was suggested by Mr. Bernstein N., who believed that coordination of movements is the overcoming of excessive degrees of freedom of the body, which moves due to the purposeful organization of active and reactive forces [1].

Training of young athletes involves the use of the entire combination of means, methods, and conditions, with the help of which athletes are more prepared for sports achievements. Dexterity, coordination and the rhythm. These qualities are of great importance for successful sports dances.

As Mr. Kovalenko A. notes, in sports dances, the idea of training athletes-dancers is radically changing. In addition to sports-technical and special physical

training, musical-rhythmic, choreographic and compositional training are distinguished [5].

First of all, the initial training stage covers primary school age and proceeds to the next stage, and the initial preparation begins already at the age of 5-6 years old.

This period is designed for 2-3 years of continuous educational work from 3-4 lessons per week for at least 120 minutes each.

Coordination abilities occupy an important place in the physical education of children. The research of Mrs. Erokhina A., Mrs. Mullagildina A., Sadowski, J., Sarabon N. [3, 9; 11; 12] shows that the development of coordination abilities occurs heterochronously. That is, if you deliberately influence coordination abilities during a period of accelerated age development, the pedagogical effect will be significantly higher than in other periods.

When consolidating the studied movements and combinations, elements of novelty were used to maintain interest, new requirements and tasks were set. According to the principle of accessibility and individualization, they are fully consistent with the age and psychological characteristics of athletes-dancers, physical fitness, and the level of their sports and dance skills.

In the process of technical training, dancers need not only to master the complex coordination of movements, but also to learn to keep it in conditions with external obstacles, which is of great importance in sports. This is of great importance in sports activities. For this purpose, at the training athletes-dancers were put in new, unusual for them conditions: changing the usual direction of movements, exchanging between partners, etc.

The competitive combinations studied in training were accessible and complicated as the skills of young dancers developed.

Testing of coordination abilities of young athletes engaged in sports dances was carried out in dynamics: before classes and at the end of research in 10 indicators: 1) shuttle run 3x10 m with running around medicine balls; 2) assessment of the feeling of time; 3) running to numbered medicine balls; 4) jump with a turn; 5) static equilibrium according to the technique of Mr. Bondarevsky; 6) dynamic

balance when making turns on the gymnastic bench; 7) walking with splashing palms in a given rhythm; 8) rhythmic movements of the upper and lower limbs; 9) exercises test to determine motor memory; 10) control over the ability to relax muscles (table 1).

Table 1

Development indicators of the coordination abilities of young athletes in sports dances at the beginning of the research (n = 10)

No.	Indicators	Output at the beginning of the research	
		(X±m)	(V) %
1	Shuttle run 3x10 m with running around stuffed balls (sec)	10,66±0,09	2,97
2	Assessment of the feeling of time	0,87±1,03	9,35
3	Running to numbered medicine balls	23,31±1,02	8,82
4	Jump with a turn	1,68±1,72	6,34
5	Static equilibrium according to the technique of Mr. Bondarevsky	1,78±0,38	23,52
6	Dynamic balance when making turns on the gymnastic bench (sec)	6,57±0,24	13,58
7	Walking with splashing palms in a given rhythm (marks)	3,27±1,12	19,66
8	Rhythmic movements of the upper and lower limbs	3,56±0,89	4,77
9	Exercises test to determine motor memory	18,84±0,6	13,36
10	Control over the ability to relax muscles	3,71±0,25	2,65

To find the relationship between the samples on the basis of the experimental data, the correlation analysis out between the studied indicators of the experimental group was carried; the correlation coefficients are presented in table 2.

As a result of the correlation analysis, high (r = 0,98, r = 0,97, r = 0,96, r = 0,94, etc.) and medium (r = 0,68, r = 0,67, r = 0,65, etc.) the relationship between the parameters that are being studied.

This is due to the fact that all parameters are interconnected and, when optimally distributed in the training process, they effectively influence the effectiveness of the competitive activity of athletes in sports dances.

Thus, when planning the training process for athletes-dancers at the initial training stage, when improving coordination abilities, it is recommended to pay

attention to the spatio-temporal characteristics (r = 0,95), the ability to orientate in space (r = 0,91) and to maintain balance both dynamic (r = 0,96) and static (r=0,94) nature.

Table 2

Correlation interconnections of the results of testing the coordination abilities of young athletes in sports dances (n = 10p <0.05)

Coordination Ability Indicators	Shuttle run 3x10 m with running around stuffed balls (sec)	Assessment of the feeling of time	Running to numbered medicine balls	Jump with a turn	Static equilibrium according to the technique of Mr. Bondarevsky	Dynamic balance when making turns on the gymnastic bench (sec)	Walking with splashing palms in a given rhythm (marks)	Rhythmic movements of the upper and lower limbs	Exercise test to determine motor memory	Control over the ability to relax muscles
Shuttle run 3x10 m with running around stuffed balls (sec)	1									
Assessment of the feeling of time	0,95	1								
Running to numbered medicine balls	0,41	0,67	1							
Jump with a turn	0,87	0,91	0,75	1						
Static equilibrium according to the technique of Mr. Bondarevsky	0,57	0,77	0,94	0,83	1					
Dynamic balance when making turns on the gymnastic bench (sec)	0,92	0,96	0,675	0,94	0,81	1				
Walking with splashing palms in a given rhythm (marks)	0,78	0,90	0,91	0,93	0,96	0,92	1			
Rhythmic movements of the upper and lower limbs	0,40	0,64	0,98	0,75	0,96	0,67	0,89	1		
Exercise test to determine motor memory	0,68	0,87	0,93	0,91	0,95	0,88	0,89	0,93	1	
Control over the ability to relax muscles	0,87	0,94	0,79	0,93	0,79	0,89	0,91	0,87	0,97	1

The sense of rhythm (r = 0.98) and the coordination of movements (r = 0.95) are the most important indicators of coordination abilities for sports dances performers, since these qualities are interconnected with the technical training of the dancers and are manifested not in isolation, but in a complex interaction.

To research the level of development of the coordination abilities of dancers, the control test method was used. The test involved 10 pairs from the experimental and control groups. According to the test results, the arithmetic mean of their X values was determined (table 3)

Table 3

Development indicators of the coordination abilities of young athletes in sports dances

The name of the test	Control group	CV %	Experimental group	CV %
Static equilibrium according to the technique of Mr. Bondarevsky (sec)	29 ±4,01	39,1	31.62 ± 3	26,5
Walking in a straight line with eyes closed (cm)	425 ±68,13	45,3	445.5 ±61,9	39,3
Ten Eights (Kopylov test) (sec)	10.62 ± 1,28	34,1	6.62 ± 0,9	40,3
Rhythmic movements of the upper and lower limbs (The number of cycles)	6.62 ± 0,98	41,9	7.87 ± 1	34,2
Visual assessment of the quality of the execution of the flywheel and splint-like movements	2.87 ±0,30	29	2,87 ± 0,2	22,3
Determination of motor memory (number of times)	4.5 ± 0,57	35,6	4.37 ±0,6	40,4

According to the obtained results, it was found that the group is heterogeneous: all values of the coefficient of variation are CV> 15. Therefore, improving the coordination abilities of young athletes at the initial training stage in sports dances is the basis for further high results.

Conclusions / Discussion

In the process of analysis of scientific and methodological literature [4; 5; 6; 7; 9; 10, 11] the features of improving the coordination abilities of young athletes at the initial training stage in sports dances were revealed. Any movement, no matter how new it may be, is always carried out on the basis of old coordination ties. The more young athletes have a stock of motor skills, the easier it is to learn new movements, while developing coordination abilities. Improving the development of coordination

abilities is the foundation for achieving high results in the competitive activity of young dancers in sports dances.

As a result of the pedagogical experiment, we determined how much the movements of sports dances of the European program affect the development of the coordination abilities of adolescents during six months of training.

To analyze the obtained results, methods of mathematical statistics were used. Thus, in the control group, the ability to preserve motor memory (28.57%) achieved the greatest development, and spatial orientation (9.74) achieved the smallest. In the experimental group, the greatest development was observed in the ability to coordinate movements (70.83%) and in preserving motor memory (71.39%)), and the least - in the ability to relax muscles (12.9%). Differences between the results obtained during the experiment are considered significant.

It was established that the testing and the obtained test results of athletes-dancers showed a very low level of development of coordination abilities. Thus, when planning the training process of young athletes at the initial training stage, it is recommended to pay attention to these indicators when improving coordination abilities.

Prospects for further research. It is planned to devote further research to identifying other value priorities in the direction of sports dances and finding ways to solve them.

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