

An influence of dancing track rhythm studying on its performance in rhythmic gymnastics at the initial stage of the training process

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Dancing track, as a mandatory element appears in the competition exercises gymnasts from 2013. However, until now not studied the basic methods and techniques of their development gymnasts of all ages and skill. Many authors argue that the assimilation of rhythm leads to a facilitated assimilation of exercises. In rhythmic gymnastics, there were no studies on the effect of rhythm digestion on the performance of individual exercises, which was the prerequisite for our study.

Purpose: *to study the influence of mastering the rhythm of the dance tracks on their performance in gymnasts at the stage of initial training.*

Material & Methods: *to identify the impact of assimilation of the rhythm of dance tracks on their performance gymnasts at the stage of initial preparation of the analysis of scientific and methodical literature, the rules of rhythmic gymnastics have been used, pedagogical experiment.*

Results: *the assimilation rate, which performed the dance track, a positive effect on their learning and performance of the gymnasts at the stage of initial training.*

Conclusion: *study of dance tracks efficiently and expediently carried out with the assimilation of the rhythm of their performance.*

Keywords: *track, dance, rhythm, gymnasts, rhythmic, preparation, initial.*

Introduction

Dancing track has an important role in the exercises of gymnasts, during their performance the gymnasts express the main theme of the musical work in which the exercise is performed; convey the character and rhythm of the music, expressing it in movements. They were introduced into the official rules of the competition in rhythmic gymnastics in order to provide entertainment to the exercises of gymnasts.

In the rules of the competition describes the styles of dances that gymnasts can perform in competitive exercises, a more detailed description of the varieties of dancing performed in the textbook I. A. Wiener [4].

However, specialized literature on rhythmic gymnastics does not describe the methodological guidelines for studying dance; it is a problem for coaches when they learn in training. According to the data of the questionnaire, in most of the coaches they use methodological instructions for studying dance according to the literature of choreographic and dance groups or invite dancing specialists for additional training.

In connection with this, the search for ways to provide scientific and methodological support for the study and further implementation of dance tracks in rhythmic gymnastics is an actual problem.

Many experts say that having learned the rhythm of exercise, it is easier for an athlete to fulfill it [1; 4; 8]. After examining the methods of developing a sense of rhythm in the study of musi-

cal literacy, we find out that all musicians study the rhythm of music, which they then perform on musical instruments or under which they sing. The same principle must also be applied when carrying out the movements that are being studied.

As a result of the analysis and systematization of the features of performing dances of different styles and directions, one common feature of the performance of dances – musical size under which they are performed, namely 2/4, 3/4 or 4/4 or more complex forms 3/8, etc. In the studies V. Y. Sosina describes the features of performing exercises for each musical size [10].

In labor and sports practice, the ability of a person to “work out” for a long time in the rhythm in which he has to carry out this or that work [1; 6; 8].

Many authors point to the essential role of the assimilation of the rhythm of movements in the process of their study, as well as the smooth rhythm of the fulfillment of movements, assimilated in perfection [1–3; 6; 8; 9; 11; 12–13].

The formation of a rhythm is considered as the formation of a dynamic motor stereotype as a complex and balanced system of cortical neural processes corresponding to certain temporal, spatial and force characteristics of motor actions performed in a certain rhythm [8].

In a number of works attempts have been made to isolate the rhythm of certain movements and their formation [11; 13].

In dance movements, certain phases of action are singled out, which make up their structure. During the execution of movements, these phases take time and follow one after another. The temporal relationships of the parts of the movement and the order of their alternation, the change in the muscular tension, constitute the rhythmic structure of the exercise. According to the rhythmic structure, one can judge the structure and complexity of the movement [1].

In the studies of T. V. Sizova [9], the influence of the development of a sense of rhythm on the performance of rhythmic gymnastics exercises among university students was described, and reliable positive indices of the influence of the development of a sense of rhythm on the performance of exercises in accordance with the musical accompaniment.

Dance track in exercises of rhythmic gymnastics must be performed in harmony with the musical accompaniment, it is necessary to express music in movements. To be able to express the rhythm of music through the movement, you need to feel the rhythm of the music under which the dance track is performed [11].

In order to perfectly perform any kind of dance it is necessary to feel the rhythm of the music under which it is performed, including also the sense of musical size [11].

Rhythm in music – is a combination of size and tempo. Tempo – is the “speed” of music, and the musical size is the number of basic lengths of sounds or pauses by one bar [11; 12].

Simple musical dimensions are divided into two-lobed and tri-lobes. A two-lobed one consists of one strong and one weak lobe (once or twice), and a tri-lobed one – with one strong and two weak.

Studies of specialists [2; 11] show that the use of dances in the training process positively affects the rhythmic abilities of athletes engaged in artistic gymnastics.

The purpose of the research

To study the influence of mastering the rhythm of the dance tracks on their performance in gymnasts at the stage of initial training.

Material and Methods of the research

The study involved 40 girls who are engaged in rhythmic gymnastics at the stage of initial training, 20 gymnasts in the control and experimental groups. Gymnasts of the experimental group studied dance tracks with assimilation of musical size and rhythm, the gymnasts of the control group studied the dance tracks, repeating them for the coach, the teacher-choreographer.

To determine the effect of mastering the rhythm of dance tracks on their performance, the gymnasts at the initial preparation stage used analysis of scientific and methodological literature, rules of rhythmic gymnastics competitions, pedagogical experiment, methods of mathematical statistics.

Results of the research and their discussion

Considering the above, a program was developed for the for-

mation of a sense of rhythm in gymnasts at the stage of initial training, which provides for the study of dance tracks with the assimilation of the rhythm and the musical size of their performance. After analyzing the scientific and methodological literature, a variety of dances, which are studied by gymnasts at the stage of initial training, were found, they were classified according to the musical size of the performance. Variations in the performance of dance tracks in rhythmic gymnastics have also been developed, taking into account the requirements of competition rules. In the developed program gymnasts learned a certain musical size and rhythm in each separate training, and studied the dances that are performed exactly in this size.

Gymnasts of the experimental group learned the rhythm of performing the dance track by simple exercises, applause, in gaming tasks for better rhythm reproduction and other ways provided in the program.

The gymnasts of the control group studied dance track when setting up competitive exercises in the main part of the training session, in the final part of the training session in the tasks of improvisation, and also during choreography, which is provided for the standard training program [2] without the use of means for mastering the rhythm in which dances are performed.

After applying the developed program, we conducted an expert evaluation of the performance of the dance tracks in the gymnasts of both groups on a five-point rating scale and obtained the following results (table 1). In the experimental group of gymnasts expert assessment of the performance of dance tracks it was significantly higher than that of the control group of gymnasts, studied dance only for visual delivery method (Fig. 1).

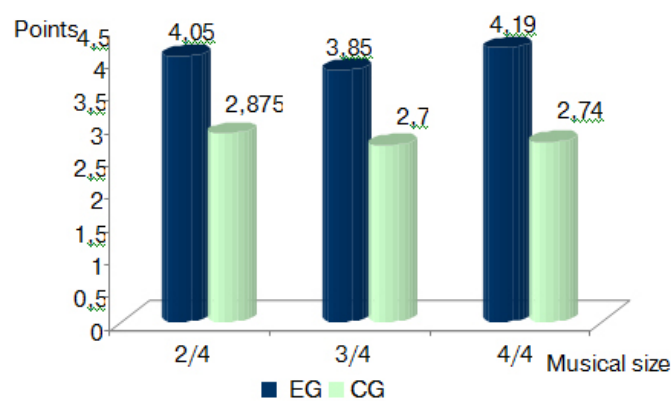


Fig. 1. The results of the expert evaluation of performing dance tracks in gymnasts after the experiment

In gymnasts of the experimental group, the score for performing dance tracks in the amount of 2/4 was 4,05 points, in 3/4 – 3,85 p., in 4/4 – 4,19 points, is significantly higher than the assessment of the gymnasts of the control group, where these indicators are respectively 2,875, 2,7 and 2,74 points ($p < 0,05$, $p < 0,001$).

Highest estimations for performing dance tracks were for gymnasts of the experimental group in the amount of 4/4 – 4,19 points, which is caused by frequent exercises for such an account, that corresponds to the given sizes (gait, perform-

ance of exercises, etc.), and the lowest estimations – for the performance of dances in the amount of 3/4 – 3,85 points, which is caused much less often by the performance of exercises in such an account. The gymnasts of the control group assess the performance of dances in different musical sizes are almost the same (Fig. 1).

Also, relying on the requirements of the rules of the competition on the need to change the rhythm of performing dance tracks, an experiment was conducted with a change in rhythm. Gymnasts began to perform the dance tracks in one rhythm, which in the process changed to another (for example, the performance of the dance “polka” was diversified by adding a step, stomp, clap, etc.). We chose 3 types of dances that were performed in different musical sizes, and during their performance several modified the sequence of steps (Table 1).

The results of evaluating the performance of dance tracks with a change in rhythm are presented in Fig. 2.

When performing tracks with rhythm changes in the gymnasts of the experimental group, the estimates did not have a significant difference with the gymnasts of the control group ($p > 0,05$, Fig. 2) and were: for the execution of option No. 1 (dance elements “Hopak”, with a size 2/4 is changed to 3/4 adding a step) – in the experimental group, the average score was 3,15 points, in the control group – 2,31 points; for the execution of option No. 2 (elements of the dance “waltz”, which from the size of 3/4 is changed to 4/4 by adding a step) – In the experimental group – 2,75 points, in the control group – 1,95 points, for the execution of variant No. 3 (elements of the dance “polka”, which changes from the musical size 4/4 to 2/4 by reducing the repetition of the varieties of dance steps of four two), respectively – in the experimental group – 3,55 points in the control group – 2,225 points (Fig. 2).

Compared with the performance of dances without changing the rhythm, the score for performing dances with rhythm changes is on the average 0,9 points lower for gymnasts of both groups (Fig. 2). This is explained by the difficulty of performing such tracks for gymnasts of initial training. However, such tracks are much more spectacular and increase the attention and interest of spectators and judges.

The conducted studies confirm the position about the positive influence on the formation of a sense of rhythm on the assimilation of dance tracks without changing the rhythm during execution.

Conclusions

Application of the program for the formation of a sense of

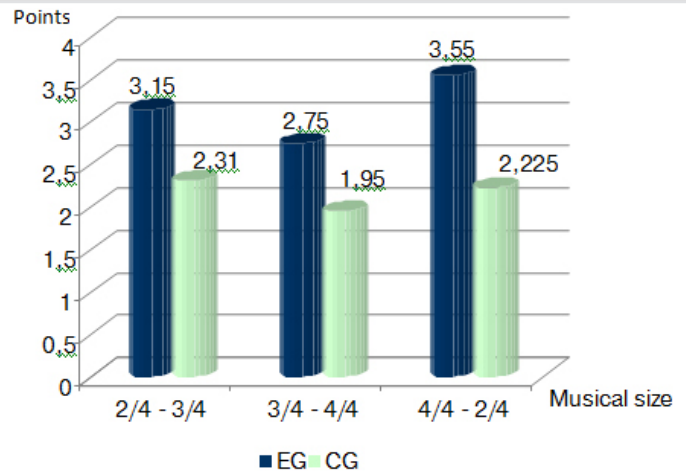


Fig. 2. The results of an expert evaluation of the performance of dance tracks with rhythm changes in gymnasts after the application of the experiment

rhythm in the training process of athletes engaged in rhythmic gymnastics at the initial preparation stage, which provides for the study of dance tracks with the assimilation of the rhythm and the musical size in which they are performed, has a reliable positive effect on the performance of dance tracks in a single musical size.

Thus, in the gymnasts of the experimental group, the score for the technique of performing dance tracks in the same rhythm and musical size is an average of 1,25 points higher than that of the gymnasts of the control group ($p < 0,05$).

The score for performing dance tracks with rhythm changes in the gymnasts of the experimental group is higher than that of the gymnasts of the control group by an average of 1 point for each version of the dance tracks performance, but it is not statistically significant ($p > 0,05$).

The score for performing dance tracks with rhythm changes in gymnasts in the experimental and control groups is, on average, 0.9 points lower than the score for performing dance tracks without changing the rhythm ($p < 0,05$). This is explained by the difficulty of performing such types of dance tracks by gymnasts during the initial preparation.

Prospects for further research. It is planned to carry out research on the study of dance tracks with mastering the rhythm and musical size, and to check the quality of performing dance tracks with changing rhythm in gymnasts in the subsequent stages of preparation.

Table 1
Types of dances that were performed in different musical sizes

No.	Musical size	Name of the dance	Description of dance performance in standard size	Description of the dance performance in the changed size
1.	2/4 – 3/4	Hopak	Performing the steps of the hopak by changing the foot for each step	Performing the steps with each foot 2 times (or a step back, the same forward and back again, then change legs)
2.	3/4 – 4/4	Waltz	Performing waltz steps (3 steps and foot steps)	Performing waltz steps (4 steps and foot steps)
3.	4/4 – 2/4	Polka	Performing sidestep and other polka steps by 4 repetitions	Performing sidestep and other polka steps by 2 repetitions

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