

## Features of the tactical training of gymnasts performing in group exercises

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**Purpose:** to analyze the experience of trainers regarding the features of the use of tactical techniques in the construction of modern compositions of group exercises in rhythmic gymnastics.

**Materials & Methods:** 41 rhythmic gymnastics trainers with a working experience of 1 to 40 years participated in the questionnaire, among whom were 3 honored trainers of rhythmic gymnastics in Ukraine. The trainers were asked to fill out a questionnaire, the questions of which concerned the problems of tactical training in rhythmic gymnastics. Methods used: analysis of scientific and methodological literature, questionnaires, methods of mathematical and statistical processing of the obtained data.

**Results:** 74% of trainers do not have enough information about tactical training. Only their own observations and the experience of leading trainers are used to choose tactical behavior with gymnasts in the preparation of group exercises 60% of respondents.

**Conclusions:** modern scientific literature does not contain enough information and practical recommendations on the development of tactical thinking and the improvement of tactical training of gymnasts in group exercises of rhythmic gymnastics. Questionnaire results showed that at the present stage of development of rhythmic gymnastics, tactical training is not given due attention, since 55% of trainers do not apply operational control over the effectiveness and speed of tactical decisions of gymnasts, do not take into account the advantages of gymnasts when choosing musical accompaniment, costumes and elements of composition, during training gymnasts to the complex elements of technology prefer only the method of multiple repetition.

**Keywords:** group exercises of rhythmic gymnastics, training methodology, tactical training, tactical techniques, experience of trainers.

### Introduction

Today, group exercises are increasingly attracting the attention of experts and fans of rhythmic gymnastics. Their compositions are distinguished by originality of construction, technical complexity, virtuosity of performance, originality of musical accompaniment, etc. Unlike individual ones, group exercises are more diverse and complex in nature of motor actions. They present overturning objects to each other, elements of bodily contact, which must be performed in the interaction of two or more athletes. The growth of sports achievements in rhythmic gymnastics, as in any sport, associated with the improvement of training means and methods, where the issues of tactical training of gymnasts are of particular importance [3; 4; 7; 8; 10].

An analysis of scientific sources on the problems of tactical training in various groups of sports makes it possible to argue that tactical training in modern conditions of highly competitive competition is a significant reserve for improving performance in complex coordination sports [1; 2; 8]. On this basis, the actualization of the issues of tactical training in rhythmic gymnastics is promising, given its current stage of development, it requires a constant search and application of new original elements in competitive compositions, due to permanent changes in the rules of competitions FIG [6].

Currently, in conditions of fierce competition, it is important for coaches to choose the most successful tactics for the team in group exercises. The main components of a successful performance in group exercises are the coordinated, clear and merged work of the athletes during the performance, the originality and effectiveness of the presented competitive program, the display of the "strengths" of the team, an effective and rational training process and the like. All these components are included in the tactical training of gymnasts in group exercises of rhythmic gymnastics. The lack of scientific and methodological support for tactical training in rhythmic gymnastics causes the trainers to have difficulties in preparing athletes for participation in group exercises of rhythmic gymnastics. This, of course, affects the effectiveness of the training process and the effectiveness of the competitive activity of Ukrainian athletes in general. Indeed, tactically correct behavior will help athletes minimize stress during the competition, make the right decision and achieve a high final result. However, the criteria for tactical training are not sufficiently developed for group exercises of rhythmic gymnastics and require further improvement, which led to the relevance of this work [4; 6; 12; 14].

**Purpose of the study:** to study the practical experience of tactical training of group exercises in rhythmic gymnastics and to assess the level of implementation of tactical actions of Ukrainian trainers in the construction of modern compositions of group exercises for participation in competitions.

## Material and Methods of the research

A questionnaire survey was conducted among trainers in order to collect information about the importance of tactical training in training and competitive processes, about the peculiarities of introducing a methodology for training athletes in tactics in modern conditions, about the modern tactical behavior of trainers in preparing athletes for participation in competitions in group rhythmic gymnastics exercises, about the presence of and the availability of scientific and methodological sources of information about this type of training in rhythmic gymnastics. The questionnaire was attended by 41 rhythmic gymnastics trainers with work experience from 1 to 40 years. Among them are 3 Honored Coaches of Ukraine in rhythmic gymnastics. According to the teaching experience, all respondents were divided into two groups: the first group included trainers with a teaching experience of 1 to 10 years, and the second group - with a teaching experience of 11 to 21 years or more.

Research methods: analysis of scientific and methodological literature, questionnaires, methods of mathematical and statistical processing of the obtained data.

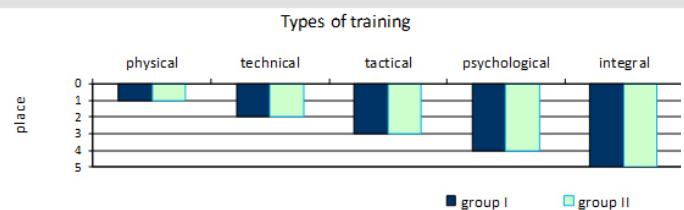
## Results of the research

The current state of rhythmic gymnastics requires a constant search and application of new original elements in competitive compositions in combination with the work of the subject, "risks", "skill", "dance steps", which is due to recent changes in the rules of FIG competitions [6; 10]. In connection with the need to improve stability and reliability of competitive exercises [7; 9] the importance and need to justify tactical training as a new way to improve the training system in rhythmic gymnastics, which is associated with the formation of tactical thinking, increases the adoption of optimal decisions in competitive activity, as well as with the construction of compositions in accordance with the level of training and individual characteristics of gymnasts [13; 14].

According to the regulatory framework for tactical training in rhythmic gymnastics, its main tasks are: the effective distribution of complexity elements, basic and specific movements in the composition on the principle of preventing the actions of rivals; development of tactics of activity in competitive conditions, that is, a special daily routine, options for warm-up, training and behavior in the competition places; ensuring the variability of tactical decisions should be made by the gymnast under the influence of interference factors in the conditions of competitive activity [1; 5; 11].

In order to assess the level of implementation of the tactical actions of Ukrainian coaches in the construction of modern compositions of group exercises and training athletes to participate in competitions, a questionnaire method was used. So, trainers were asked to determine the significance of various types of training for rhythmic gymnastics. In the first place in importance, coaches in various pedagogical experience put physical preparedness ( $W=0,48$ ,  $W=0,69$ ) (Figure 1).

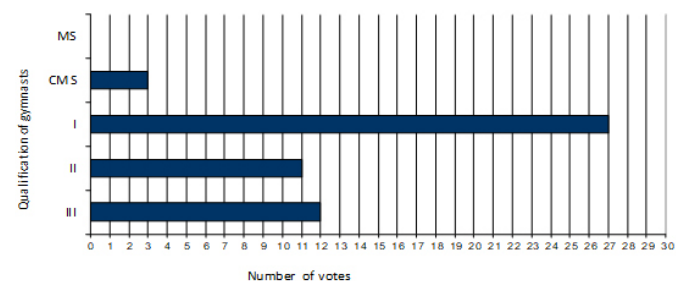
The most important, 20% of trainers from the first group and 20% – from the second, consider technical training. Tactical training was put in third place by 50% of the coaches of the first group and 43% of the second group. Psychological training, in the opinion of 40% of the coaches of the first group and



**Fig. 1. Thoughts of trainers on the importance of training in rhythmic gymnastics (n=41)**

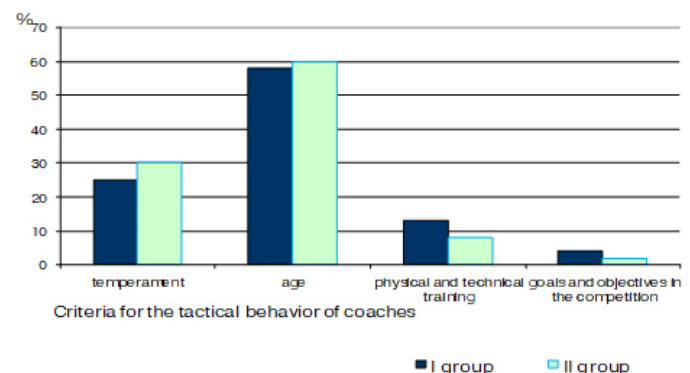
38% of the second, takes fourth place. On the 5th place, 47% of the coaches from the first group and 67% from the second group put integral training.

It is advisable to introduce tactical exercises into the training of gymnasts of the 1st category – 85% of trainers think. In the opinion of all respondents, it is impractical to introduce tactical training with sportswomen as masters of sports, and only three trainers believe that it is optimal to start training with the CMS (Figure 2).



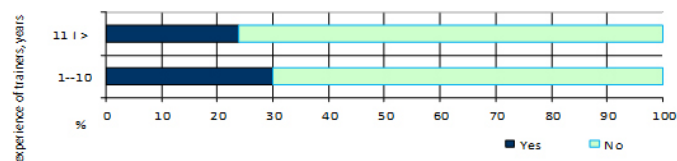
**Fig. 2. Respondents' opinions on the need for tactical exercises in the training of gymnasts of various qualifications (n=41)**

When choosing tactical behavior, 58% of coaches of the first group and 60% of coaches of the second group first take into account the age of the gymnast, then 25% of coaches of the first group and 30% of the second take into account her temperament, 13% of coaches of the first group and 8% of coaches of the second group are guided by technical and physical training, and last but not least 4% of coaches of the first group and 2% of coaches of the second group take into account goals and objectives in specific competitions (Figure 3). Such a choice of trainers, in our opinion, is explained by an insufficient number of information sources. If respondents believed that a well-chosen tactic would improve results, they would choose tactical behavior depending on the goals of the competitive activity.



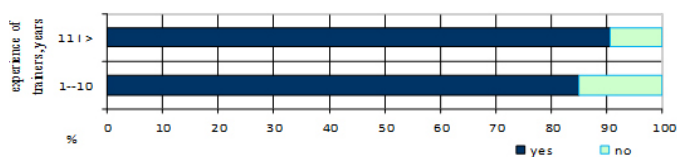
**Fig. 3. Significance of factors determining the choice of tactical behavior model for trainers with gymnasts (n=41)**

According to respondents, when choosing a model of their tactical behavior, 60% of coaches are guided by their own observations in competitions and the experience of leading trainers and athletes. Respondents noted that video recordings and specialized literature are either inaccessible sources or do not contain the information they need. Enough course on tactical training consider themselves 30% of the coaches of the first group and 23% of the second group (Figure 4). This, in our opinion, is due to the fact that in rhythmic gymnastics there are a limited number of available sources about the problems of tactical training. Most respondents who have recently graduated consider themselves to be more informed than more experienced coaches. This indicates that today, in the preparation of trainers and teachers, more attention has been paid to studying the section of tactical training issues.



**Fig. 4. Dynamics of changes in the indicator of awareness of tactical trainers (n=41)**

It was found that creative tasks for the development of tactical thinking in the training process are not used only by 5% of trainers with experience of 11 years or more. Among coaches with less work experience, creative tasks are ignored in 15% of coaches (Figure 5).



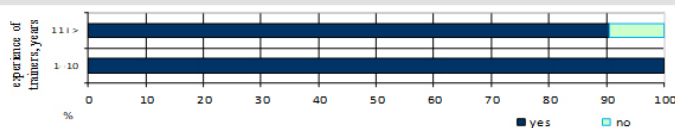
**Fig. 5. Dynamics of changes in the rate of application of creative tasks for the development of tactical thinking in the educational process of gymnasts (n=41)**

Operational control of the effectiveness and speed of tactical decisions by gymnasts during training sessions and competitions is used by 57% of coaches of the 2nd group and 55% of coaches of the 1st group.

All trainers belonging to the first group and 91% of their colleagues with a long experience of work set a task for gymnasts for every competition.

It was found that 92% of the coaches of the second group and absolutely all coaches of the first group are involved in the active participation in the composition of the gymnasts, thereby providing higher speed and greater effectiveness of the tactical decisions of the athletes in the competitive process. Gymnasts who took an active part in composing the composition are better oriented and easier to perceive (Figure 6).

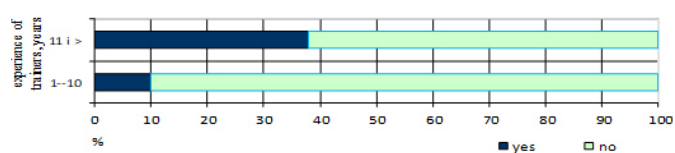
When choosing musical accompaniment, preferences of young gymnasts are taken into account by 60% of trainers with work experience from 1 to 10 years. Only 38% with great experience take into account the wishes of the gymnasts and 62% choose the musical accompaniment on their own. Only 7,7% of trainers with experience of more than 11 years choose musical accompaniment for older gymnasts themselves, and



**Fig. 6. Respondents' opinions regarding the level of need for gymnasts to actively participate in the composition (n=41)**

all the rest are guided by the choice and preferences of gymnasts.

When choosing compositional elements, more experienced trainers more often take into account the wishes of younger gymnasts than their colleagues with less work experience (Figure 7).



**Fig. 7. Significance level of the wishes of young gymnasts when choosing elements of composition (n=41)**

Only 10% of trainers with experience from 1 to 10 years and 38% over 11 years take into account the wishes of young gymnasts when choosing composition elements. Although most coaches consider this question not important enough, however, it can positively affect the tactical decisions of the gymnast. By inventing or choosing elements, the gymnast immediately thinks up options for her actions in case of unsuccessful implementation. If the trainer himself puts the exercises to the gymnast, then she expects tactical instructions from him.

When choosing composition elements for senior athletes, the thoughts of the trainers for different work experience coincided. Only 5% of respondents make up compositions without the participation of gymnasts.

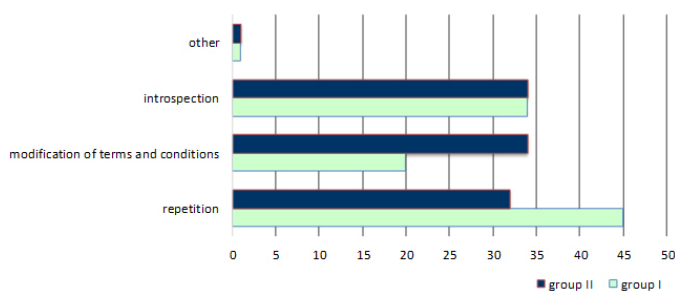
When choosing a costume, the wishes of young gymnasts are taken into account by 70% less experienced coaches and 71,5% of their colleagues with an experience of more than 11 years. When choosing a costume, the preferences of older gymnasts are not taken into account by 5% of respondents with an experience of 1 to 10 years and 9,5% with an experience of more than 11 years, determining the style and appearance of the gymnast on their own, at their discretion.

85% of less experienced coaches and 85,8% of their colleagues with experience of more than 11 years introduce gymnasts with the competitors' capabilities, conditions and rules of future competitions. Trainers believe that lack of awareness can cause situational problems, adversely affect the tactical decisions of gymnasts.

The most popular methodology for improving competitive programs and complex elements of technology in gymnasts is repeated repetition (34% – the first trainers and 45% - the second group of trainers). Self-analysis, which is used by 33% of respondents, takes the second place in frequency of use. This once again underlines the lack of awareness of tactical trainers. In third place is a methodological technique for vary-



ing conditions, which coaches consider the least effective. Only two respondents suggested other methods: game and explanations (Figure 8).



**Fig. 8. Ratio of teaching methods used by trainers in the process of improving the technique of complex elements in gymnasts (n=41)**

All respondents believe that the development of creative imagination at the initial training stage positively affects the formation of tactical thinking in gymnasts in the future.

### Conclusions / Discussion

An analysis of the scientific and methodological literature on the problem of tactical training in rhythmic gymnastics showed that at the present stage of development of rhythmic gymnastics tactical training is the least studied type of training. It is necessary for all sports, since the rational use of their capabilities requires athletes to calculate the most effective, rational and economic actions. In rhythmic gymnastics, in particular in group exercises, *ceteris paribus* and data, tactical training can be a decisive factor for athletes in achieving results.

Based on the analysis of the practical experience of tactical training of respondents (n=41), it was found that coaches do not consider tactical training to be the main for achieving high results, putting it in 3rd place with 5 types of training (W=0.4). According to 27 respondents (66%), tactical exercises should be started from the II category. All trainers believe that the development of creative imagination at the initial training stage further affects the formation of tactical thinking among gymnasts. The main source of information about tactical training when choosing a model of tactical behavior with gymnasts is

their own observations in competitions and the experience of leading trainers and female athletes (60% of respondents). 70% of coaches with a pedagogical experience of up to 10 years and 77% of coaches with experience of 11 or more years consider themselves insufficiently informed about tactical training. Creative tasks for the development of tactical thinking in the training process are not used only by 5% of trainers with experience of 11 years or more. Operational control of the effectiveness and speed of tactical decisions of gymnasts during training sessions and competitions is used by 57% of respondents with long experience and 55% with experience of up to 10 years. The pedagogical tasks for gymnasts at every competition are set by all the coaches of the first group and 91% of their colleagues with long experience. 92% of the coaches of the second group and all coaches of the second group and all coaches of the first group are involved in active participation in the preparation of compositions, thereby providing higher speed and effectiveness of tactical decisions of athletes in the competitive process. The most popular methodic for training gymnasts in the complex elements of technology is, according to 34% of respondents, multiple repetition. The second place in frequency of use is taken by self-analysis, which is used by 33% of trainers.

Thus, the results of the survey showed that at the present stage of development of rhythmic gymnastics tactical training is not given due attention. Considering that tactical training in modern conditions of highly competitive competition is a significant reserve for increasing the effectiveness of competitive activity and in connection with the identified scientific and applied problem of inconsistency of the existing level of knowledge about tactical training in rhythmic gymnastics with the modern needs of practice, certain theoretical and methodological provisions for tactical training in various sports can be extrapolated to the tactical training technique in rhythmic gymnastics.

**Prospects for further research.** Further research will be aimed at analyzing the tactical criteria for individual tactics of athletes specializing in group exercises of rhythmic gymnastics, and determining the effectiveness of tactical techniques for choosing originality components and the external design of group exercises compositions for teams of various qualifications.

**Conflict of interests.** The authors declare that no conflict of interest.

**Financing sources.** This article didn't get the financial support from the state, public or commercial organization.

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Received: 09.09.2019.

Published: 31.10.2019.

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