© Eurasian Journal of Sport Science 2021; 1(2): 86-91
https://eajss.uz

Structure and distribution of training facilities in the micro and pre-competition mesocycle of young gymnasts - «artists»

Akhmedova Jamila Adizovna[1]
[1]Uzbekistan state university of physical education and sport, Chirchik, Uzbekistan

Abstract
Purpose: The goal was to determine the structure and distribution of training resources in the micro and pre-competition mesocycle of young gymnasts engaged in rhythmic gymnastics .
Methods: The study uses methods analysis and synthesis of special scientific and methodological literature; pedagogical observations of the training process of young gymnasts, pedagogical experiment, mathematical and statistical research methods.
Results: The results of the study showed that the pre-competition mesocycle was a natural continuation of the special preparatory stage and was used for direct preparation for the main competition. Its features were determined by the fact that it is necessary to simulate the mode of the upcoming competitions with the fullest possible approximation and to ensure the maximum realization of the athlete's capabilities in decisive performances. In the course of pedagogical research, the optimal parameters of training loads (volume and intensity) were identified and proposed in the process of training young gymnasts, the main focus of training work in the competitive and pre-competition mesocycles, as well as the pre-competition microcycle, was determined. The forms of training sessions at each stage of training athletes are defined.
Conclusion: The article deals with the construction and content of the pre-competition training of young athletes, determines the volume and intensity of the training load in the pre-competition micro-and mesocycle, and establishes the main focus of the training work at the stage of specialized training of young gymnasts. This confirms the expediency of the proposed option for the distribution of training funds in the training process of young gymnasts in direct preparation for competitions.

Keywords: Rhythmic gymnastics, training periods, general preparation and special preparation stages, pre-competition microcycle, pre-competition mesocycle, volume and intensity, special physical training, general physical training, compositions, microstructure.

Introduction

Rhythmic gymnastics is an Olympic sport in which female athletes compete in the technical skill and expressiveness of performing complex body movements in combination with manipulating objects to music (Viner, 2013; Karpenko, 2003).

The modern system of sports training in rhythmic gymnastics implies a whole organizational structure that solves a number of tasks throughout the gymnast's sports career(Viner, 2013; Karpenko, 2003; Khasanova, 2011). In the course of training sessions, the relationship of tasks, means, methods and forms of training of athletes of all age groups is determined; the optimal ratio of training processes, the education of physical qualities and the formation of motor skills, skills and various aspects of fitness; the growth of the volume of general and special physical training, the ratio between which is constantly changing; strict adherence to gradualness in the process of increasing loads; simultaneous development of individual qualities, taking into account the age characteristics of athletes.

The achievement of the highest possible sports results of gymnasts and the quality of the organization of the training process can only be observed at competitions of various ranks. In this regard, the structure of the organization of pre-competition training and the rational distribution of funds at each training stage of young athletes is of increasing interest.

The analysis of the specialized literature of recent years, the results of competitive activities and the training process of young gymnasts, focused our attention on the study of this problem, the optimal structure and organization of the training process in preparing gymnasts for tournaments of various levels. Rationally distribute the funds used in the training of young athletes in the micro-and pre-competition mesocycle.

Methods

The preparatory period in the process of training young gymnasts covered about two months in each of the semi-annual cycles. In the preparatory period of the training, the following main tasks were solved:

- further improvement of physical qualities;

-mastering trick elements with objects, improving technical skills when performing profiling balances, turns, jumps, etc.;

- making new compositions of individual (mandatory, arbitrary), pair, group exercises;
- mastering the exercises of the mandatory program;
- education of expressiveness when performing individual movements;
- improving the dance performance of loads (long classes, performing a large number of elements, and then connections) (Karpenko, 2014; Umarov, 2019; Umarov, 2008).

However, the gymnasts also performed whole combinations of already mastered individual compositions in order to be ready for possible demonstration performances and, in addition, to maintain a sufficiently high level of special endurance.

The preparatory period was divided into general preparatory and special preparatory stages. At the first of them, the main emphasis was placed on general physical training (exercises of their cyclic and acyclic sports).

At the special preparatory stage, more and more attention was paid to special physical training and the formation of a highly rated competitive composition (Govorova, 2001; Khasanova, 2011).

Results and discussion

The analyzed data from the literature sources indicate that the periodization of the training process in rhythmic gymnastics is closely related to the competition calendar, when the main competitions are held in the competition period, and the control and training ones in the preparatory period. Today, rhythmic gymnastics is characterized by a one-year and six-month typical training cycle with a complex structure of the competition period, where the competition and intermediate mesocycles replace each other during the entire training stage.

The results of pedagogical observations gave grounds for determining and implementing the developed structure of the pre-competition micro-and mesocycle, as well as the distribution of training funds in the training process of young athletes.

According to the materials of pedagogical observations, the distribution of training tools for rhythmic gymnastics exercises in the preparatory part of the training process solved the tasks of organizing students, mobilizing them for the upcoming work, preparing and performing the exercises of the main part of the lesson. The means by which these tasks are solved are varieties of walking and running, various dance combinations based on historical, everyday and folk dances, general developmental exercises. Also, exercises help to mobilize attention, prepare the articular-muscular apparatus, cardiovascular and respiratory systems for subsequent work. The part of the lesson in which the main tasks are solved is the main one.

The solution of the set tasks was achieved by using a large arsenal of various movements: elements of classical dance, historical and folk dances, elements of free plastic, acrobatic, general development exercises, various exercises with objects.

The form of the main part depended on the organization of the lesson:

- a simple one-part form, when the exercises were performed only at the support or only in the middle of the hall;
- a more complex, two-part form (at the support, then in the middle).

In the final part of the lesson, the load reduction was carried out with the help of specially selected exercises: relaxation, stretching (moderate intensity) (Kutsenko, 2018). When tired, it was recommended to apply dance movements and combinations using modern dances for emotional adjustment to the subsequent work (Karpenko, 2003). At the end of the final part of the lesson, the results were summed up. While during the control lesson, an assessment of the motor activity of each gymnast was given. The construction of the lesson was determined by 4 conditions:

- proportionality of the individual parts of the lesson;
- selection of exercises and the sequence of their execution;
- alternating load and rest;
- making training combinations in the lesson.

The competition period was characterized by the completion of preparation for the competition. In the competitive period, in order to maintain high athletic performance, much attention was paid to the correct selection of loads and their combination, as well as rest and the use of various restorative means.

In our research, we have followed two concepts regarding the dynamics of training loads. One concept involved a gradual (undulating) increase and decrease in training loads. The second is the great variability (abruptness) of various parameters of training loads, the alternation of large, medium, and

small loads both in individual training sessions and in weekly and monthly cycles.

In practice, it is often necessary to meet with both forms, when a smooth change in the load is replaced by sharp jumps in the volume and intensity indicators.

The beginning of the competition period was characterized by a high volume of training load, which gradually decreased for the competition. During the first weeks of the pre-competition mesocycle, the intensity of training work is relatively low, then it increases and decreases again 5 to 7 days before the responsible competitions.

Among the variants of the average cycles typical for the competition period, the basic ones - pre-competition and competitive mesocycles-were distinguished.

For us, the pre-competition mesocycle was a natural continuation of the special preparatory stage and was used for direct preparation for the main competition. Its features were determined by the fact that it is necessary to simulate the mode of the upcoming competitions with the fullest possible approximation and to ensure the maximum realization of the athlete's capabilities in decisive performances. The most preferred version of the construction of this mesocycle is shown in Table 1.

The competitive mesocycle was the main type of medium training cycles in the period of the main competitions and consisted of a cycle of direct training (a microcycle or a series of them) and a short-term post-competition cycle of unloading nature.

In the competitive mesocycle, in comparison with the pre-competition one, the total amount of work (in terms of the number of elements) decreased, but the share of work on the elements of the highest difficulty group increased, and the training process was intensified due to training compositions and whole combinations.

The average training cycles consisted of various combinations of weekly cycles (microstructures), differing from each other in the size and nature of training loads. Table 2 shows the variants of pre-competition microcycles used by us in the practice of training (Table 2).

In the competition period, other variants of mesocycles are also possible, for example, according to the type of pendulum. Features of the structure of training according to this principle consisted in the fact that along with the variability of loads, rhythmic alternation of two types of microcycles - specialized and contrasting was introduced.

In the first case, the training session was conducted in the form of a model training session. The purpose of contrast microcycles is to create conditions for conducting a specialized

Table 1. The proposed model of the competitive mesocycle of young gymnasts aged 10-12 years at the stage of specialized training (M±σ).

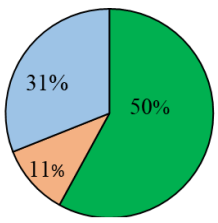
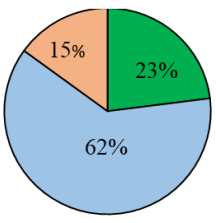
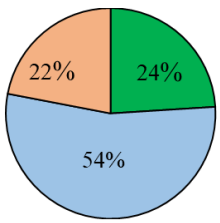
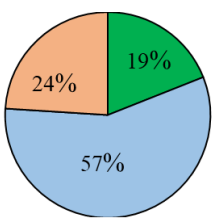
Microcycles		I	II	III	IV
Load volume		Big	Big	Medium	Big
Intensity		Low	High	Medium	High
Quantitative indicators	Volume (sum of elements, connections)	4759.4±146.4 935.8± 19.52	2949.3± 92.6 1154.6± 36.19	2778.8± 74.53 934.6±26.47	2971.9± 47.5 1066.9± 31.16
	Intensity (combinations, elements per	26.0± 0.58 2.98± 0.08	36.8± 1.29 4.96 ± 0.13	31.0 ± 1.04 3.95± 0.07	35.1± 1.08 4.33± 0.14
The main focus of the training, %					



Table 2. **The proposed model of the pre-competition mesocycle of young gymnasts aged 10-12 years at the stage of specialized training.**

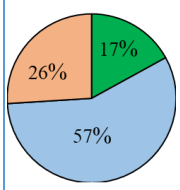
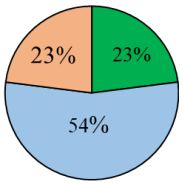
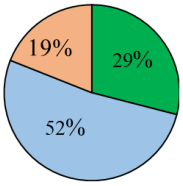
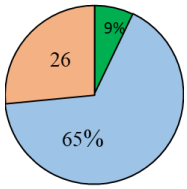
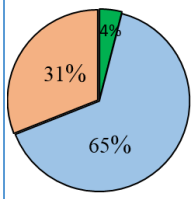
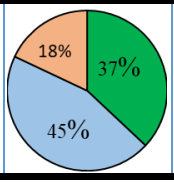
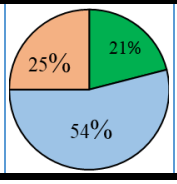
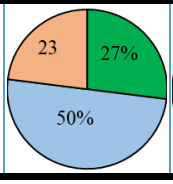
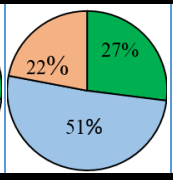
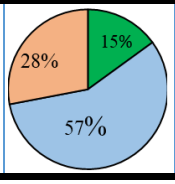
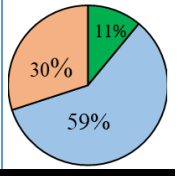
Microcycles		V	VI	VII	VIII	IX
Load volume		Medium	Low	Medium	Big	Medium
Intensity		Medium	Medium	Medium	High	Low
Quantitative indicators	Volume (sum of elements, connections)	2238.1±64.84 796.5±14.26	1682.5±51.68 567.3±14.43	2115.2±40.83 691.2±17.45	3156.3±84.87 1279.8±43.21	2877.7±94.41 1163.6±46.35
	Intensity (combinations, elements per minute)	29.3±0.72 3.7±0.11	19.7±0.57 3.53±0.11	19.8±0.42 3.89±0.10	44.8±1.53 4.64±0.16	44.6±1.74 5.3±0.20
The main focus of the training, %						



Table 3. **The proposed model of a pre-competition microcycle for young gymnasts of 10-12 years (M±σ).**

Weekdays		Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
Load volume		Big	Big	Medium	Low	Big	Medium
Intensity		Medium	Medium	Medium	High	High	High
Quantitative indicators	Volume (sum of elements, connections)	648.5±15.21 182.5±4.37	619.2±23.26 210.2±7.64	575.4±12.85 181.6±4.38	513.5±13.07 162.8±4.13	603.9±16.83 227.5±5.95	552.8±16.96 203.8±5.62
	Intensity (combinations, elements per minute)	5.98±0.19 3.69±0.111	7.64±0.23 4.19±0.116	6.5±0.18 3.31±0.083	5.74±0.15 3.09±0.083	7.2±0.25 4.5±0.128	8.4±0.22 5.3±0.158
The main focus of the training, %							



microcycle at an optimal level.

Recovery and unloading mesocycles were used within the period of the main competitions (between competitive mesocycles), we called

them intermediate.

Microcycles are a complete piece of sports training, expressed in a few days (usually a week). Microcycles are the most variable structural unit, which is determined by a number of factors, the main of which are the following (Table 3):

- the place of this microcycle in the mesocycle, which determines its general orientation, volume, intensity of training load, content, ratio of all-around types, etc.;
- interaction of fatigue and recovery processes;
- biorhythmic fluctuations caused by the ovarian-menstrual cycle;
- state of health, influence of the external environment, etc.

Despite the wide variety of microcycles, we can distinguish the most characteristic one, obtained on the basis of a large material of statistical analysis.

Conclusion

In conclusion of our research, it is noted that the preparatory period considered in the general training system covered about two months in each of the semi-annual cycles. In turn, the preparatory period was divided into general preparatory and special preparatory stages. At the first of them, the main emphasis was placed on general physical training (exercises of their cyclic and acyclic sports). The structure of the training was determined by 4 conditions:

- proportionality of the individual parts of the lesson;
- the selection of exercises and the sequence of their execution;
- alternating load and rest;
- drawing up training combinations in the lesson.

At the special preparatory stage, more and more attention was paid to special physical training and the formation of a highly rated competitive composition.

The competition period was characterized by the completion of preparation for the competition. In the competitive period, in order to maintain high athletic performance, great attention should be paid to the correct selection of loads and their combination, as well as rest and the use of various restorative means.

The study shows that the pre-competition mesocycle was a natural continuation of the special preparatory stage and was used for direct preparation for the main competition. Its features were determined by the fact that it is necessary to simulate the mode of the upcoming competitions as closely as possible and to ensure the maximum realization of the athlete's capabilities in decisive performances.

Thus, the proposed structure of the pre-competition micro-and mesocycle, as well as the appropriate distribution of training facilities, is the most acceptable when organizing the training process in preparation for competitions of various levels.

References

Viner I.A. (2013). Integral`naya podgotovka v khudozhestvennoj gimnastike [Integral training in rhythmic gymnastics]. *Extended abstract of Doctor's thesis*. St. Petersburg (in Russian).

Govorova M. A., Pleshkan A. V. (2001) *Speczial`naya fizicheskaya podgotovka yuny`kh sportsmenok vy`sokoj kvalifikaczii v khudozhestvennoj gimnastike* [Special physical training of young athletes of high qualification in rhythmic gymnastics]. Moscow (in Russian).

Karpenko L. A. (2003) *Khudozhestvennaya gimnastika. Uchebnik dlya trenerov, prepodavatelej i studentov institutov fizicheskoj kul`tury`* [Rhythmic gymnastics. A textbook for coaches, teachers and students of institutes of physical culture]. Moscow (in Russian).

Karpenko L. A., Rumba O. G. (2014) *Teoriya i metodika fizicheskoj podgotovki v khudozhestvennoj gimnastike* [Theory and methodology of physical training in rhythmic gymnastics]. Moscow (in Russian).

Kutsenko Y. E. (2018) Napravlennost` trenirovochny`kh nagruzok yuny`kh sportsmenok v khudozhestvennoj gimnastike na e`tape nachal`noj podgotovki [Orientation of training loads of young female athletes in rhythmic gymnastics at the stage of initial training] *Extended abstract of candidate's thesis.* Moscow (in Russian).

Umarov M. N. (2019) *Tekhnologiya organizaczii i provedeniya uchebny`kh i trenirovochny`kh zanyatij po khudozhestvennoj gimnastike* [Technology of organizing and conducting training and training sessions in rhythmic gymnastics] monograph, Tashkent (in Russian)

Umarov M. N. (2008) Predmet i metody` speczializirovannoj tekhnicheskoj podgotovki v gimnastike [Subject and methods of specialized technical training in gymnastics] *Fan sportga [Science to sport]*, **3,** 22-23 (in Russian)

Khasanova G. M. (2011). Building a competitive mesocycle in young gymnasts at the stage of sports improvement [Training of highly qualified athletes in rhythmic gymnastics]. *Extended abstract of candidate's thesis*. Tashkent (in Russian).

Viner I.A. (2003). Podgotovka visokokvalificirovannih sportsmenok v hudozhestvennoi gimnastike [Training of highly qualified athletes in rhythmic

gymnastics]. *Extended abstract of candidate's thesis*. St. Petersburg (in Russian).

Umarov M.N., Eshtaev A.K. (2004) *Planirovanie i razmeshchenie trenirovochnoj bazy gimnastok na nachal'nom etape podgotovki* [Planning and placement of a training base for gymnasts at the initial stage of preparation]. textbook. UzGIFK, Tashkent [in Russian].

AUTHOR BIOGRAPHY



Jamila Adizovna AKHMEDOVA

Employment

Scientific researcher at Uzbekistan state university of physical education and sport.

Degree

MD

Research interests

Sport Science, Physical Education, Theory and methodology of gymnastics, rhythmic gymnastics.

E-mail: gala-gimfig@yandex.ru