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THE METHODOLOGY OF OPTIMIZING THE TRAINING LOADS OF FEMALE GYMNASTS

M.Raxmonova

Teacher of the Department of theory and methodology of Multi-Sport

Sports of Fergana State University

Abstract: in order to achieve a high level of sports skills in rhythmic gymnastics, it is considered very important to develop such a quality as flexibility among those involved. The process of developing elasticity was carried out in stages. The norm of exercises aimed at developing flexibility is small, but the exercises were used systematically in each session.

Keywords: flexibility, load, duration of training, preparatory stage,recovery,optimization,intensity of training.

Stages of the training process and load standards

Stage	Training objective	Training intensity	Duration of the session	Recovery time
Preparatory stage	Development of the technical base	Average	45-60 minutes	10-15 minutes
Specialcompetitionn	Development and strengthening of special actions	High	60-90 minutes	15-20 minutes
Pre-competition stage	Results-oriented training	High	90 minutes	20-30 minutes

The analysis of the table below describes a step-by-step approach to planning the training process of female gymnasts. This analysis is based on the purpose, intensity, and duration of each stage.

1. Preparatory stage. Goal. At this stage, the main technical base of the girls is being formed. It is aimed at developing coordination of movements, balance, stretching and endurance.

Training work. A moderate load is given as young athletes become familiar with new techniques. Their health and readiness should be carefully monitored for safety reasons.

Duration. The training duration is limited to 45-60 minutes. Children of this age may find it difficult to keep their attention for a long time. Therefore, a short but effective exercise system is used.

Recovery.training work. A moderate load is given as young athletes become familiar with new techniques. Their health and readiness should be carefully monitored for safety reasons.

Duration. The training duration is limited to 45-60 minutes. Children of this age may find it difficult to keep their attention for a long time. Therefore, a short but effective exercise system is used.

Recovery. After each exercise, 10-15 minutes of rest or light restorative exercises (stretching, breathing) are introduced.

2. The stage of special training. Goal. At this stage, a special technique of athletes' movements is developed. The complexity of the movements increases, combinations and high technical requirements are added to the exercises.

The intensity of the workout. It is given a high load, since at this age the physical development of girls is at an optimal level. Training requires a high level of endurance and flexibility.

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The intensity of the workout. It is given a high load, since at this age the physical development of girls is at an optimal level. Training requires a high level of endurance and flexibility.

Duration. The training duration is 60-90 minutes, which is quite enough for the technical development of the girls and preparation for the competition.

Recovery. Recovery takes 15-20 minutes, in which active rest (massage, light exercises) occupies an important place.

3. The pre-competition stage. Goal. At this stage, the exercises approach the competition conditions. He works on the full implementation of individual and group result-oriented programs.

The intensity of training. It requires high intensity, as the girls have to adapt to the competition mode.recovery. Recovery takes 15-20 minutes, in which active rest (massage, light exercises) occupies an important place.

3. The pre-competition stage. Goal. At this stage, the exercises approach the competition conditions. He works on the full implementation of individual and group result-oriented programs.

The intensity of training. It requires high intensity, as the girls have to adapt to the competition mode. The emphasis is on developing endurance and steady technique.

Duration. The duration of the session reaches 90 minutes. At this stage, girls get used to doing long-term exercises.

Recovery. The recovery time is 20-30 minutes, this time is necessary for complete rest or recovery of the body after difficult exercises.

The importance of scientific justification of training loads. A youth-oriented approach.th. The duration of the session reaches 90 minutes. At this stage, the girls get used to doing the exercises.

Recovery. The recovery time is 20-30 minutes, this time is necessary for complete rest or recovery of the body after difficult exercises.

The importance of scientific justification of training loads. A youth-oriented approach. The fact that the goals and loads of each stage are determined according to age and level of physical fitness increases the effectiveness of training.

The principle of phasing. Gradually increasing the load reduces the risk of overwork and injury in young athletes.

Recovery time. Allocating time for recovery and rest for each stage has a positive effect on the overall development of athletes.

Preparation for the competition: High-intensity training at the pre-competition stage ensures that the girls are prepared with a focus on results. The above table and analysis will help the gymnast to organize the most optimal and safe training regime for the individual development of girls. The table below shows the weekly training loads according to age and stage of training.

Weekly training plan for young artistic gymnasts

Day of the	Preparatory stage	Special preparatory stage	Pre-race stage

week			
Monday	Physical fitness	Technical elements	Full performances (90 min
Tuesday	(40 min)	(60 min)	Special elements (80 min)
Wednesday	Technical elements	Endurance training	Rest
Thursday	(45 min)	(70 min)	Complete programs (90 min
Friday	Rest	Rest	Complete programs (90 min
Saturday	Exercise	Combinations	Movement control
Sunday	(50 min)	(80 min)	(70 min)

This plan includes a step-by-step methodology for training young gymnasts. They are organized into preparatory, special training and pre-competition stages, with the goal of each stage aimed at developing the physical and technical skills of athletes.

At the preparatory stage, training is aimed at the formation of short-term and basic skills. At the stage of special preparation, the intensity increases, attention is paid to the study of complex elements and the development of endurance. In the pre-race stage, however, full program execution, error correction, and adaptation to race conditions are prioritized.

On weekends. Two days a week are allocated on weekends, which is important to prevent recovery and tension.t the preparatory stage, training is aimed at the formation of short-term and basic skills. At the stage of special preparation, the intensity increases, attention is paid to the study of complex elements and the development of endurance. In the pre-race stage, however, full program execution, error correction, and adaptation to race conditions are prioritized.

On weekends. Two days a week are allocated on weekends, which is important to prevent recovery and tension. These days are saved at each stage.

Training content. Through the sequence of physical fitness, technical skills, combinations and the creation of competition situations, athletes develop in every possible way.

Flexibility. The content of training at each stage is designed to suit the needs and capabilities of age groups.

Increase in training intensity. The duration and complexity of training is gradually increased, which serves the development of athletes.

Focus on recoveryraining content. Through the sequence of physical fitness, technical skills, combinations and the creation of competition situations, athletes develop in every possible way.

Flexibility. The content of training at each stage is designed to suit the needs and capabilities of age groups.

Increase in training intensity. The duration and complexity of training is gradually increased, which serves the development of athletes.

Focus on recovery. The weekend at each stage allows athletes to recover physically and mentally.

Race preparation. At the final stage, training is aimed at performing full programs and repeating the conditions of the competition, which strengthens the mental and physical training of athletes.

During the training, physiological indicators of gymnastic girls are monitored.

Physiological monitoring of training loads

< / Score >	Regulatory	Permissible value at the time of training	Recovery time value
Heart rate (YuQS)	60-80 beats/min.	120-160 dice / min.	70-90 zar/daq.
Respiratory frequency	16-20 breaths/min	25-35 breaths / min	18-22 zar/daq.
Blood pressure (SB / DB)	110/70	140/90	120/80

The table lists the main physiological indicators necessary to control the health of athletes during and after training loads: the number of heart contractions (YuQS), the frequency of breathing and blood pressure.

Heart rate (YUT): norm: 60-80 beats/min. Training time: 120-160 rounds / minhe table lists the main physiological indicators necessary to control the health of athletes during and after training loads: the number of heart contractions (YuQS), the frequency of breathing and blood pressure.

Heart rate (YUT): norm: 60-80 beats/min. Training time: 120-160 rounds / min. The heart rate increases within the permissible limit when athletes engage in high physical activity.

Recovery: 70-90 beats / min. The approach of YuQS to the norm after training indicates the effectiveness of recovery.

Respiratory frequency: norm: 16-20 breaths/min. Training time: 25-35 breaths/min. During the activity, breathing is accelerated to provide energy.

Recovery: 18-22 breaths / min. In recovery, this indicator approaches the norm.

Blood pressure (SB/DB): norm: 110/70 mm.espiratory frequency: norm: 16-20 breaths/min. Training time: 25-35 breaths/min. During the activity, breathing is accelerated to provide energy.

Recovery: 18-22 breaths / min. In recovery, this indicator approaches the norm.

Blood pressure (SB/DB): norm: 110/70 mm. Training time: 140/90 mm. At the time of physical loading, an increase in blood pressure should be within the permissible limits. Recovery: 120/80 mm. During recovery, blood pressure stabilizes.

In conclusion, physiological indicators change in response to training loads, but they should not exceed the established permissible limits. In the process of recovery, the approach of indicators to the norm indicates that the health of athletes is good. This monitoring method is necessary to individually adjust the load and protect athletes from excessive strain.

Steps to optimize training loads

Stage name	Actions
Diagnostic stage	Assessment of the physical condition of the participants (anthropometric and physiological measurements).

Create a training plan	Develop plans according to the individual indicators of each athlete.
Monitor training	Control of intensity and duration in the training process on the basis of physiological normatives.
Analyze results	Re-optimization of the plan by analyzing the indicators of training-loading and recovery.

This table shows a step-by-step approach to effectively manage training loadings and maintain athletes ' health.

Diagnostic stage. Anthropometric and physiological measurements are made to determine the initial physical condition of athletes.

Drawing up a training plan. A flexible training plan is developed based on the individual characteristics of each athlete.

Exercise controlhis table shows a step-by-step approach to effectively manage training loadings and maintain athletes ' health.

Diagnostic stage. Anthropometric and physiological measurements are made to determine the initial physical condition of athletes.

Drawing up a training plan. A flexible training plan is developed based on the individual characteristics of each athlete.

Exercise control. During the training, the intensity and duration of the load are controlled based on physiological standards.

Analysis of the results. Based on the data obtained, the effectiveness of training is analyzed and, if necessary, plans are re-drawn up.

In conclusion, this approach is necessary to maximize the capabilities of athletes and prevent overload, and serves to individualize and optimize the training process.

Recovery processes (rest and nutrition regimen)

Types of recovery	Duration	Content
Passive recovery	8-10 hours	Sleep well at night
Active recovery	10-15 minutes	Massage, stretching exercises
Eating	4-5 times	Consumption of foods rich in protein, carbohydrates and minerals

Athlete recovery processes include important aspects such as passive rest, active rest, and nutrition:

Passive rest. The duration is 8-10 hours. Content-through good and high-quality sleep at night, physical and mental recovery is ensured.

Active rest. Duration 10-15 minutesthlete recovery processes include important aspects such as passive rest, active rest, and nutrition:

Passive rest. The duration is 8-10 hours. Content-through good and high-quality sleep at night, physical and mental recovery is ensured.

Active rest. Duration 10-15 minutes. The content is to reduce muscle tension through massage and stretching exercises and bring the body to a milder state.

Catering. Duration 4-5 mAh. The composition of eating foods rich in protein, carbohydrates and minerals serves to restore the energy reserve of athletes.

Conclusion. The correct Organization of the recovery process increases the effectiveness of athletes and prevents excessive strain. Passive and active rest and balanced nutrition together ensure optimal recovery.

Assessment of training results

Evaluation criterion	Stage received status	Stage finish condition	Percentage increase
Sports results	Participation in competitions (execution of base elements only)	The addition of technical elements (combinations) in competitions	20-30% increase
Level of motion technique	Quality of actions: 50% (lots of technical errors)	Quality of movements: 70-80% (stable technique)	30-40% improvement
Physiological indicators	Heart rate (YUT): 130-150 dice/min during exercise	Heart rate (YUT): 120-140 ur / min during exercise	10-15% improvement (adjustment to load)
	Breathing frequency: 30-35 breaths / min	Breathing frequency: 25-30 breaths / min	15% improvement
	Maximum elasticity: 20 cm	Maximum elasticity: 25-30 CM	20-30% improvement

Sports results. At the beginning of training, the girls ' base technique (jumping, balancing, simplified combinations) is used in competitions. At the end of the stage, however, they are expected to switch to stable execution of more complex combinations. The percentage of increase is calculated based on the results of the competition and the grades given by the coach.
Degree of motion technique. At the beginning of the stage, many technical errors are observed in the movements performed by the girls (inability to maintain balance, incorrect coordination). In the end, however, technical stability and accuracy increase. A decrease in the number of errors and an increase in the level of complexity determine the growth indicators.
Physiological parametersegree of motion technique. At the beginning of the stage, many technical errors are observed in the movements performed by the girls (inability to maintain balance, incorrect coordination). In the end, however, technical stability and accuracy increase. A decrease in the number of errors and an increase in the level of complexity determine the growth indicators.
Physiological parameters. At the beginning of training, girls have a high heart rate and breathing frequency, which indicates a complete lack of adaptation to the load. At the end of the stage, these indicators decrease, which indicates an adaptation of the body to training.
Flexibility. Flexibility is an important indicator for young gymnasts, in which a 20-30% increase (decrease in distance from the ground to the tip of the arm) is expected.

REFERENCES:

1.Rahmonova, M. (2024). Badiiy gimnastikada akrobatika mashqlarining rivojlanishi. Research and implementation, 2(5), 129-133.

2.Rahmonova, M. (2024). Badiiy gimnastikaga qizlarning psixologik tayyorgarligi. Research and implementation, 2(6), 68-72.

3.Rahmonova, M. (2024). Bolalar gimnastikasida jismoniy egiluvchanlik sifatini rivojlantirish. Research and implementation, 2(6), 64-67.

4.Rahmonova, M. (2024, May). Gimnastika sportining atamalarini ahamiyati va mazmuni. In Conference on Digital Innovation:" Modern Problems and Solutions".

5.Rahmonova, M. (2024, May). Ertalabki gigienik gimnastika insonlarning turmush tarzidagi o'rni va ahamiyati. In Conference on Digital Innovation:" Modern Problems and Solutions"