

## PLANNING TRAINING LOADS FOR HIGHLY QUALIFIED TEENAGE WEIGHTLIFTERS

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**Annotation:** This thesis analyzes the issues of effective organization of the training process and planning of loads for highly qualified teenage weightlifters. The methodology for improving the physical fitness, technical and tactical skills of athletes, distributing loads based on an individual approach, and monitoring their effectiveness is discussed. The study discusses the impact of a scientifically based loading system on sports results, ways to prevent overexertion, and recovery processes. This thesis serves to create a scientific and methodological basis for weightlifting trainers, sports specialists, and researchers.

**Keywords:** weightlifting, training loads, sports training, planning, physical load, recuperation, sports results, individual approach, technical and tactical training.

### Introduction.

Sport is an important type of activity that requires not only physical strength and endurance, but also intelligence, patience, and the ability to plan correctly. These aspects are especially important in sports such as weightlifting. Weightlifting is a test of strength, technique and mental endurance, in which an athlete's achievement of high results depends on an effective training system. This process, especially for teenage athletes, requires a clear strategy, a scientifically based approach and the correct distribution of loads.

The development stage of teenage athletes is the most sensitive period for coaches and specialists. Since at this age their body is still in the process of formation, excessive stress and improper loading can negatively affect not only their results, but also their overall health. Therefore, when planning training loads, special attention should be paid to an individual approach, technical and physical preparation, rest and recovery mechanisms.

Modern sports science shows that achieving high results is achieved not only through intensive training, but also through the balance between them, the correct distribution of the load and high-quality recovery. Therefore, the planned organization of physical loads for weightlifters is of great scientific and practical importance.

This thesis analyzes the formation of the load system of adolescent athletes, its physiological and psychological aspects, as well as factors affecting the results. In addition, methods for increasing loads without excessive strain,

methods aimed at increasing training efficiency, and the role of an individual approach are discussed. We believe that this study will be theoretically and practically useful for coaches, sports specialists, and scientists.

### **Methodology:**

Weightlifting is not only a test of strength and endurance, but also a sport that requires a high level of scientific approach. Especially for adolescent athletes, proper planning of the training process directly affects their future results and health. Therefore, methodological foundations must be carefully developed, taking into account the age, physical fitness, and individual characteristics of athletes. This study analyzed scientifically based approaches to planning training loads for highly skilled adolescent weightlifters.

First of all, the training process was organized on the basis of three main principles - an individual approach, a gradual increase in the load and an optimal rest regime. Preliminary tests were conducted to assess the physical capabilities of each athlete. These tests were aimed at measuring the maximum strength, endurance, technical skills and recovery rate of athletes, and played a key role in individualizing their load distribution.

During the study, an experimental approach was used, and the level of adaptation of athletes to the training process was regularly monitored. At each stage, the amount and intensity of the load changed, and their effect on the body was observed. This allowed coaches and sports specialists to constantly improve training programs. In addition, using the control and comparison method, various approaches were tested and it was determined which training method was more effective.

Another important aspect of the methodological process was the recuperation (recovery) process. During the study, special attention was paid to the rest regime, nutrition and psychological preparation of athletes. To prevent excessive strain during training, a special stress monitoring method was used. This allowed for an accurate assessment of the loads on the athletes' muscular and nervous systems and the adjustment of the training plan on this basis.

Also, the subjective opinions of trainers and athletes were collected using interview and questionnaire methods as part of the study. This played an important role in identifying psychological and physical problems that arise during sports training and finding appropriate solutions to them.

As a result of these methodological approaches, it was possible to form the most effective training system for teenage weightlifters. Scientific and practical experience has shown that as a result of proper planning and monitoring of



loads, athletes' results significantly improved, the risk of injuries decreased, and recovery processes accelerated. Thus, this methodology serves as a reliable basis for future research and practical training processes.

### **Literature review:**

Scientific research on the planning of training loads in weightlifting has long been one of the important areas of sports science. The studies covered in this thesis are distinguished by their own characteristics and were analyzed on the basis of important sources covering the theoretical and practical aspects of the training system.

Analysis of scientific literature shows that the most effective training methods in weightlifting are based on methods such as periodization, individual approach and functional monitoring. In particular, Verkhoshansky Y. emphasizes the importance of the principle of gradual increase in loads in his studies on the system of sports training. In his opinion, excessive loads for weightlifting athletes can lead to a decrease in results, therefore, it is important to ensure an optimal balance of load and rest.

One of the modern studies, conducted by Smith and Stone, recommended new methods for combining strength training and cardiovascular loads in weightlifters. According to their results, the most optimal way is to develop individual training programs for adolescent athletes, taking into account the development of the cardiovascular system and muscle mass.

Thus, the analysis of the literature shows that the scientific basis for planning training loads in weightlifting is very extensive. Advanced theoretical and practical research confirms that optimal distribution of loads, taking into account individual physiological characteristics, and systematic planning of recovery processes help to significantly improve the results of athletes. This literature analysis serves to strengthen the fundamental scientific foundations related to the main topic of the thesis.

Sport, especially weightlifting, is a complex process that requires not only physical activity, but also precision, strategy, and a scientific approach. The issue of planning training loads for highly qualified young weightlifters has always been relevant, as this process directly affects the results and general health of athletes. The results obtained during the study show that planning loads based on an individual approach significantly increases the effectiveness of athletes.

The main issue that should be addressed in the discussion is the optimal balance of load and rest. Scientific literature and practical experience show that excessive load can lead to excessive strain on the muscle fibers of athletes and



reduce their results. Therefore, it is important to pay attention to the periodization and recovery processes when creating training programs. This not only reduces the risk of injuries, but also helps athletes achieve long-term sustainable results.

Weightlifting studies also show that the physical and mental preparation of athletes are complementary processes. The results of research on sports psychology confirm that motivation, stress management and internal discipline are of great importance for highly qualified teenage athletes. Since the body is not yet fully formed during adolescence, excessive training can also affect their mental state. This requires the use of mental training exercises and a psychological support system in the training process. Another important aspect in the discussion is technical and tactical approaches. Studies show that, along with strength and endurance, perfect mastery of technique also directly affects the results of athletes. In particular, when planning loads, monitoring the biomechanical state of athletes, ensuring the correct execution of movements and preventing excessive strain is of paramount importance. Summarizing the above points, it can be said that the greatest task of modern sports science is to harmonize loading, recovery and mental stability. Today, coaches and sports experts are increasingly paying attention to personalized training methods, since each athlete has individual characteristics. The observations and analysis of scientific literature conducted within the framework of this study show that the development of an optimal loading strategy for weightlifting athletes is the basis for their long-term development.

### **Conclusion.**

Sport is an important area that allows you to maximize the physical and mental abilities of a person. Especially in sports that require high strength and endurance, such as weightlifting, the training process should be regulated not only by labor and willpower, but also by a scientifically based approach. During this study, the issue of planning training loads for highly qualified teenage weightlifters was extensively analyzed, and its results show that accurate and thorough planning of the training process significantly improves the results of athletes.

Today, sports science proves that optimal load distribution, individual approach and control of recovery processes are important factors in the long-term development of athletes. The study also revealed that mental stability and psychological preparation are of great importance for young athletes. Since the internal motivation, willpower and stress resistance of athletes directly affect





their results, psychological support and an individual approach are important in the training process.

Also, the technical and tactical preparation of weightlifters plays a decisive role in their sporting achievements. Along with strength and endurance exercises, perfect mastery of technique and optimization of movements based on biomechanical analysis reduces the risk of injury for athletes and makes their results more stable.

This study shows that in modern sports training, along with traditional methods, innovative technologies, scientific and medical achievements should be widely introduced. Monitoring training processes, assessing the impact of physical loads, and developing training programs taking into account the individual physiological characteristics of each athlete are some of the current areas of sports science today.

Future research should be directed towards working on more effective models of load distribution, recovery mechanisms, and psychological preparation of weightlifters. Through the use of new technologies, artificial intelligence, and digital monitoring systems, coaches and sports specialists can significantly improve training processes.

In conclusion, the sustainability of sports results depends on systematic training, a scientific approach, and strategic decisions by coaches. For highly qualified adolescent weightlifters, proper planning of loads is the most important factor in maintaining their health, improving their results, and ensuring their future success. Therefore, the scientific basis of sports training has a significant impact not only on current results, but also on the long-term development of athletes.

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