

SIGNIFICANCE OF PERIODIZATION IN SPORTS TRAINING

Ovais Ahmad Rather¹, Naseer Mushtaq Rather² and Naseer Ud Din Wa

^{1,3}M.PED Student at Government College of Physical Education
Ganderbal.

² M.PED Student at University of Kashmir Hazratbal Srinagar.



ABSTRACT

The concepts 'training' and sportsman's 'preparation' in the main coincide, but are not identical. Periodization and training are the main components and the basic form of preparing the athlete. Periodization and preparing are the fundamental segments and the essential type of setting up the competitor. As it were, it is efficiently arranged readiness with the assistance of the activity strategies which understands the primary elements of affecting competitors' advance. The substance of preparing incorporates all the fundamental kinds of planning of the sportsman – physical, specialized, strategic and mental. Precise preparing enhances the competitor's wellness level. It is the premise of his readiness for donning accomplishments. In the meantime, preparing impressively affects the competitor's physical and otherworldly advancement and his procurement of key information and abilities. Today even a profoundly skilled sportsman isn't in a situation to win an award unless he has a specific least of the previously mentioned factors. It has likewise turned out to be progressively certain that these elements can't be created to the coveted level in 1 or 2 years. It is fundamental for a man to create satisfactory level of physical wellness right on time throughout everyday life and after that constantly keep up it through consistent interest in an all-around planned action program to advance his aggregate physical prosperity adaptability alongside quality, speed and continuance is one of the exceptionally essential segments of physical wellness (Uppal 1983). Sports periodization is the planning of athletic training using a progressively cyclic format with the goal of timing peak performance during the athlete's major competitive events. Cyclic training organizes a team's approach, protects against overtraining, and enables athletes to continue to improve. When designing a strength program, coaches should implement different training cycles in order to maximize athlete performance when they need it most. Sports periodization organizes an individual's approach to this goal and is the most effective way to train. Design elite and sound periodization table that match your players' lifting experience and ability to maximize performance. Building an effective periodization table is key to success in every competition.

Keywords: -Training, Sports, Adaptability, Planning.

OBJECTIVES OF THE STUDY

- To examine the Significance of Periodization in sports training.
- To study the role of Periodization in order to achieve the goals of an athlete
- To study how Periodization can be beneficial in promoting the process of sports training.

RESEARCH METHODOLOGY

The study is based on secondary source of information. The information has been collected from reliable sources and presented in a well determined manner to highlight out the Significance of Periodization in Sports Training. The study is purely exploratory and analytical in nature.

INTRODUCTION

Periodization is the systematic planning of athletic or physical training.[1] The aim is to reach the best possible performance in the most important competition of the year.[2] It involves progressive cycling of various aspects of a training program during a specific period. Conditioning programs can use periodization to break up the training program into the off-season, pre-season, in season, and the

postseason. Periodization divides the year round condition program into phases of training which focus on different goals.

The roots of periodization come from Hans Selye's model, known as the General adaptation syndrome. The GAS describes three basic stages of response to stress: (a) the Alarm stage, involving the initial shock of the stimulus on the system, (b) the Resistance stage, involving the adaptation to the stimulus by the system, and (c) the Exhaustion stage, in that repairs are inadequate, and a decrease in system function results.[3] The foundation of periodic training is keeping one's body in the resistance stage without ever going into the exhaustion stage. By adhering to cyclic training the body is given adequate time to recover from significant stress before additional training is undertaken. The response to a new stress is to first respond poorly and the response drops off. For example when the body is first exposed to sun sunburn might develop. During the resistance stage adaptation improves the response to a higher level, called super compensation, than the previous equilibrium. The example would be that a suntan develops. The exhaustion stage is a continuation of the stimulus at too high a level and the increase gained from adaptation is now offset and all gains are lost. The example would be that wrinkles, spots, or even skin cancer develop. The goal in sports periodization is to reduce the stress at the point where the resistance stage ends so the body has time to recover. In this way the exhaustion stage does not reduce the gains achieved; the body can recover and remain above the original equilibrium point. The next cycle of increased stimulus now improves the response further and the equilibrium point continues to rise after each cycle. Selye (1957) labeled beneficial stresses as "eustress" and detrimental stresses as "distress. Russian physiologist Leo Matveyev and Romanian sport scientist Tudor Bompa expanded and further organized the periodization model. Matveyev has been regarded as the father of modern periodization. He analysed the results of the Soviet athletes of the 1952 and 1956 summer Olympics and compared successful and not so successful athletes and their training schedules. From these training plans periodized schedules were developed for the 1960 Olympics. With the success of the Soviet athletes, Matveyev's plans were spread all over the Eastern Bloc in their annual coordination meetings. From there it also spread to Romania, where Tudor Bompa developed the system further. In the 1968 it was used for the first time in the GDR and in 1972 in West Germany.[4] After the fall of the Soviet Union, periodization started to become modified. While Matveyev followed Pavlov[which?] and assumed that everybody should use the same periodization, individualized systems, using more and more biological data, were introduced.

Sports periodization is the planning of athletic training using a progressively cyclic format with the goal of timing peak performance during the athlete's major competitive events. Cyclic training organizes a team's approach, protects against overtraining, and enables athletes to continue to improve. When designing a strength program, coaches should implement different training cycles in order to maximize athlete performance when they need it most. Sports periodization organizes an individual's approach to this goal and is the most effective way to train. Design elite and sound periodization table that match your players' lifting experience and ability to maximize performance. Building an effective periodization table is key to success in every competition.

TYPES OF PERIODIZATION

Training should be organized and planned in advance of a competition or performance. It should consider the athlete's potential, his/her performance in tests or competition, and calendar of competition. It has to be simple, suggestive, and above all flexible as its content can be modified to meet the athlete's rate of progress.

- **The macro-cycle (1 or 2 years)**

A macro cycle is an annual plan that works towards peaking for the goal competition of the year. There are three phases in the macro cycle: preparation, competitive, and transition. The entire preparation phase should be around 2/3 to 3/4 of the macro cycle. The preparation phase is further broken up into general and specific preparation of which general preparation. Takes over half. An example of general preparation would be building an aerobic base for an endurance athlete such as running on a treadmill and

learning any rules or regulations that would be required such as proper swimming stroke as not to be disqualified. An example of specific preparation would be to work on the proper form to be more efficient and to work more on the final format of the sport, which is to move from the treadmill to the pavement. The competitive phase can be several competitions, but they lead up to the main competition with specific tests. Testing might include any of the following: performance level, new shoes or gear, a new race tactic might be employed, pre-race meals, ways to reduce anxiety before a race, or the length needed for the taper. When the pre-competitions are of a higher priority there is a definite taper stage while lower priority might simply be integrated in as training. The competitive phase ends with the taper and the competition. The transition phase is important for psychological reasons; a year of training means a vacation is in order. A typical weekend warrior might take three months while a professional athlete might take as little as two weeks.

- **The meso-cycle(2 – 6 weeks)**

A meso-cycle represents a phase of training with duration of between 2 – 6 weeks or micro-cycles, but this can depend on the sporting discipline. A meso-cycle can also be defined as a number of continuous weeks where the training program emphasize the same type of physical adaptations, for example muscle mass and anaerobic capacity. During the preparatory phase, a meso-cycle commonly consists of 4 – 6 micro-cycles, while during the competitive phase it will usually consist of 2 – 4 micro-cycles depending on the competition's calendar. The goal of the plan is to fit the meso-cycles into the overall plan timeline-wise to make each meso-cycle end on one of the phases and then to determine the workload and type of work of each cycle based on where in the overall plan the given meso-cycle falls. The goal in mind is to make sure the body peaks for the high priority competitions by improving each cycle along the way.

- **The micro-cycle (Up to 7 days)**

A micro-cycle is typically a week because of the difficulty in developing a training plan that does not align itself with the weekly calendar. Each micro-cycle is planned based on where it is in the overall macro-cycle. A micro-cycle is also defined as a number of training sessions, built around a given combination of acute program variables, which include progression as well as alternating effort (heavy vs. light days). The length of the micro-cycle should correspond to the number of workouts - empirically often 4-16 workouts - it takes for the athlete or fitness client to adapt to the training program. When the athlete or fitness client has adapted to the program and no longer makes progress, a change to one or more program variables should be made.

- **The annual plan**

The annual plan is important in that it directs and guides performance training over a year. It is based on the concept of periodization and the principles of training. The objective of training is to reach a high level of performance (peak performance) and an athlete has to develop skills, bio motor abilities and psychological traits in a methodical manner.

- **Preparatory phase**

This phase consists of the general preparation and specific preparation. Usually this can be subdivided into three different phases. One should always remember that this is a base creation phase with the objective to attain the previous training state, and the longest period of periodization must be devoted towards the preparatory period. The performance depends on preparatory period, and is divided into three phases:

- **Phase I) to regain previous training**Low volume, but maintaining high intensity is there.Competitions took place in this phase.
- **Phase II) Low training volume & High training load to develop the factors needed for performance.**Works on specific exercise.

➤ **Phase III) Decrease in the intensity of load and increase in tactical training and aim at improving tactical under competition condition.**

- **Competitive phase**

This phase may contain a few main competitions each containing a pre-competitive and a main competition. Within the main competition, an uploading phase and a special preparatory phase may be included. This also includes hypertrophy

- **Transition phase**

This phase is used to facilitate psychological rest, relaxation and biological regeneration as well as to maintain an acceptable level of general physical preparation. This phase lasts 3–4 weeks (perhaps longer) but should not exceed five weeks under normal conditions and may be sports specific. It allows the body to fully regenerate so that it is prepared for the next discipline. There is no competition in this phase.

BENEFITS OF PERIODIZATION IN SPORTS TRAINING

- **Provides Structure**

Having a pre-structured plan can help turn a fitness “wish” into a reality. Many of us have a desire to get fit, whether it’s to lose weight or simply to improve our fitness. Without a structured plan, however, these goals are nothing more than wishes. Figure out when you can realistically work out. Schedule workouts into your calendar. Enlist the help of your friends and family. Think like an athlete and plan ahead!

- **Gives You Motivation**

Periodized training plans help you mentally push through intense workouts. A structured training plan that includes pre-set off days, or even full recovery weeks, can be extremely motivating. It can be easier to work through intense blocks of training if you know the intense workouts are goal-appropriate and temporary. During recovery weeks, book a massage, dial down the intensity and volume of your workouts or try different workouts (such as a dance class) to allow yourself a mental and physical break.

- **Prevents a Fitness Plateau**

Periodized training plans help you burst through a fitness plateau and beat the workout blahs. Doing the same thing over and over again not only becomes boring; it also eventually ensures that you hit a fitness plateau. Nothing kills motivation more than boredom and a lack of results.

Focuses On Your Weaknesses

We all have weaknesses. Maybe you could be more flexible. Or maybe you’d like to improve your pull-up strength. As a triathlete, my weakness is biking. If you know you have a “weak link”, periodize your workout plan so you cycle through workouts that emphasize your weaknesses.

- **Avoids Injury and Prioritizes Recovery**

Consistently repeating the same workout can lead to overuse injuries. Plus, a lack of adequate recovery puts you at risk of overtraining. Your brain and body both need breaks from the monotony of working out. Athletes often recover by taking an off-season. For the average gym member or runner, an off-season might mean devoting a month to low impact activity, or spending a month doing unconventional exercise such as dance classes.

CONCLUSION

By comparing the studies on Importance of Periodization in Sports training, it is indicated that Periodization is a way of training that breaks the year into chunks, in order to get you to perform at your best when it matters most. By integrating a year round program, not only can we progress as athletes, but if

done right, it can help us to perform our best, when we need it the most. Periodization can be very beneficial to the sports training programme in many ways. It can make everything well organized and well executed hence result in a tremendous accomplishment of the set goals.

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