DYNAMICS PARAMETERS IN JUDO WORKOUT EFFORT

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Abstract
The plan of training include: Dynamics of the evolution of performance capacity, structures, methods, exercises, training volume and intensity of exercise, the duration of breaks and their nature, the energy exchange, estimated value of applications, forms and preparation, evaluation forms and their dates, duration of each component.
Annual training plans and training macrocycle, there are early forms of planning, approves the training programs and can be found in the description of the training to be carried out in order to achieve this goal.
Annual objectives can be performance goals aimed at the result that you need to accomplish it the athlete, the place that it should handle it in the ranking or promotion in the upper echelons of sports performance, getting the classification categories and training objectives that relate to the main components of athletic training (preparation of technical, tactical, physical, theoretical, psychological).
Calendar of competitions shall be drawn up by the coach for each sport or group on the basis of the official calendar prepared by the Romanian Federation of Judo in which may also include competitions or friendlies with the purpose of verification.

Keywords: judo, dynamics, effort, plans, structured.

JEL classification: I20, I22

1. Introduction

"Training is the activity of Planning drafting precise objectives of detailed training and performance, as well as of the means, methods and forms of organization appropriate goals" (Hantău, I. 2005).

"The training for sport is a complex process carried out systematically and continuously, to adapt gradually to the athlete's body to the intense physical and mental effort, involved participation in competitions" (Dragnea A. & Teodorescu Mate, S. 2002).

"Planning is a human operation, which consisted of scientific provision of design or contents, the completion of an operation and am has a longer or shorter time." (Cărstea, Gh.1993)
"The training Structure determines the number of macrostructures per year of preparation and planning we can get training on monocyclu, bicyclu or multiple. It determines the number and type of mezostructure, whose content is given the methodological requirements of the training and conduct of competitive effort, and the objectives of the mezostructure determines the tasks, content, duration and the peculiarities of microstructure "(Hantău, I. 2005).

Training request represents a physical process caused by changes of morpho-functional and adaptive psychological in close dependence on the nature or the strength requirements.

"The physical effort in judo is characterized by carrying out specific techniques that runs up to the stress of changing homeostasis level doubled the appliances and systems involved in the optimal and maximal level" (Deliu, D. 2003).

"Improving the capacity of the organism is determined by the gradual increase of the efforts, which ensures adaptation processes. Raising efforts (dynamic efforts) tends toward the possibilities of the sportsman, reported at the level of preparation as well as the particularities of the individual "(Hantău, I. 2005).

2. Content

Dynamic effort training implies carrying continuous training process, aiming to permanent evolution of it by increasing the continuous of all parameters and that tends always to the maximum values, which are in a constant evolution.

Dynamic parameters of the effort involves their growth in relation to the final effects of the training process, throughout its growth and declines of meeting the various parameters of the effort required by the objectives of lessons, macrocicle or longer phases of preparation, also determined the characteristics of the physiological, biochemical, anatomical and physiological processes of adaptation.

"Increase efforts in training is done at the expense of increasing the volume of the effort but especially on increasing the intensity of the effort and can be achieved within each training lessons in micro cycles or longer periods of preparation ",(Hantău, I. 2005).

Dynamic parameters in your workout effort involves determining the best ratio between volume and intensity. Thus in the first stage of preparation efforts dynamics is characterized by gradual increase in volume and intensity with a focus on increasing the amount of effort.

In the early stages of the competition, even in transition and microcicle recovery, volume and intensity will decrease. Towards the end of the preparatory period and during the stages of the competition shown the progressive reduction of the volume of work at the same time increasing the intensity of the effort.
Increase and/or decrease the parameters of the effort is uneven, the best being the wave form, in the form of wave and address in particular the volume and intensity of the exercise.

The evolution of the efforts can be characterized by:

- where the characteristic dynamics of small efforts in micro cycles;
- where environments that characterize the general trend of small waves of 3-6 micro cycles that make up a mezocycle;
- large waves that expresses the trend of mezocycle waves that make up a training macrocycle.

To accomplish the goals and objectives of the final preparation is necessary to establish correlations to influence positive between change of effort of the microcycle, mezocycle and macrocycle. Thus the first part increases the volume to achieve the maximum in small waves, medium to large and amid maximum volume to achieve the stabilization and then his gradual reduction will progressively increase the intensity of the effort indicators up to maximum values. Depending on the specific tasks of micro cycles or microcycle position to the main competition, the correlation of the effort can be manifested through efforts of grown and low volume intensity in the first half.

"The correlation between dynamics of micro cycles effort, a series of macrocycle, and is expressed through interactions between physiological processes, biochemical and psychological, determined by the amount of effort and the degree of fatigue but also those of rest and recuperation" (Hantău, I. 2005).

Dynamic training, efforts can be planned by the coach, setting the wave volume growth up to high, the intensity of the wave in the correlation of the volume, for the quantification of the effort in training but also lessons in longer stages of training, based on the knowledge of the athletes, in order to avoid negative effects (the installation state of fatigue and overtraining).

Dynamic parameters of the effort in training in judo training macrocycle, concludes the whole range of principles and requirements of training. The effort in a workout training macrocycle, there must be a dynamic and ascending to reach maximum in the last competition of the great importance of timing the official competition. The training will ensure continuity by switching from extensive to intensive efforts efforts. Ensure the recovery capabilities of the body’s effort to transition to a phase of application what it can achieve in a series and special micro cycles. Determination of the optimal relationship between the structure of the training and the competitive calendar.

Dynamic effort training judo training macrocycle, differ in based on the readiness of judoka, who has an upward trend, the end of each training macrocycle, constituting a new step of adjusting the macrocycle the past. "Such maximum sports atinsă într form a microperiod, which is characterized by certain objective
quantitative and qualitative indices, the following macrocycle these indexes will improve and shape the sport will experience new dimensions enhancement" (Hantău, I. 2005).

The evolution of sports development knows several phases: the acquisition and improvement of sports form, keeping her from temporary highs and then her temporary loss, these being the basic criterion of division into periods and division into stages training.

Fundamental preparatory period lasts 3-4 months in macrocycle semiannuale (bicyclu) and 5-7 on Monday in the annual (monocycle) provides the installation of sports by increasing the body's functional capacities, the development of the motor skills and enriching the skills and accomplishments of the baggage train. During this period, dynamic effort is characterized by the gradual increase of the intensity of the effort, without exceeding the maximum possibilities, but most notably by increasing the amount of effort that constitutes the main factor in ensuring stable sporting shape. It will track the development speed and strength parameters, optimization and perfection of the art movements of his effort.

"The specific preparation of training macrocycle provides installation of sports form by setting a ratio between volume and intensity, so that the work to be as close to that of the competition. During this period, increased efforts will be made on the basis of increasing the intensity of the effort by means of warfare effort like (SHIAI, for example) along with the gradual reduction of the volume of the effort. Around this time, increased attention will be given to improve the technique and means of preparing the full character judoka. Also during this period are characteristic of mezocycle preparation and verification "(Hantău, I. 2005).

Competition period (the goal of) has a duration of 1-2 months in macrocycle semianuale and 4-5 months in the annual macrocycle and is characterized by the completion and sports shape maintaining with form of sports in days tips the most important competitions, evidenced by the technical and tactical training, specific strength by enhancing competition through psychological preparation specify and a optimum physiological background and appropriate efforts to contest. The dynamics of the planned in effort based on the main objective that competitions should not exceed 3-5 in a year, among them intercalând training contests (8-10 friendly contests) that is subject to the objective. Between the two main challengers of the objective must be a minimum of 2 months to achieve full and complete restoration of the capacity of effort of judoka.

"After a competition goal, important dynamic effort must record a fall through a microperiod of downloading, which will ensure the recovery of the body of the athlete's potential. If we have a short, dynamic competition effort will record an upward curve that will achieve maximum competition objective. But if we have a long summer period (3-4 months) is not going to keep standing up for effort curve
that overtraining may occur through the body's energy reserves are exhausted; Thus, competition will alternate with the mezocycle series in which intermediate intensity will decrease and also the contents and conditions of conducting training classes will change appropriately "(Hantău, I. 2005).

It will pay particular attention to the periods prior to the competition, which will make individualized training with a focus on improving the technical and tactical, and physical preparation while at the level reached at the time.

The transition period is a necessity, psychological, and physiological method in training in process to ensure rest and replenish the body after large efforts judoka during the competition.

The transitional period lasts from 3 weeks to 8 weeks depending on the competitive calendar, the demands of competition, the level of preparedness of judoka and other factors.

"The content of the transitional period to know more ways of expression. Making a correlation between passive and active leisure with decreased functional possibilities, ensuring total physical and mental restoration of judoka; or an microperiod passive or active rest, followed by micro cycles of high intensity workout to achieve the competition requests; or use of the active rest in conjunction with efforts to maintain the nonspecific at an optimal level of basic components of your training. Towards the end of the transitional period will go to General training exercises in relation to the means of active rest, preparing the transition to a next training macrocycle preparatory period "(Hantău, I. 1996).

Dynamic parameters of the effort in training and mezocycle, microcycle in series combination is determined by the changes in functional and structural adaptation to effort. Thus mezocycle is the structural unit of the workout, as a well defined and consists of 3-6 micro cycles.

Mezocycle have a private structure in the sports and training are determined by the growth and decrease in the functional capabilities of the body in one month, thus we can say that mezocycle are monthly preparation stages.

The dynamics of the structure of the mezocycle effort is conditional on: the level of training, League system, during breaks between competitions, the effects of exercise training and competitions, the means of restoration.

Depending on the goals and objectives of the various series, we meet micro cycles in order to achieve full preparation for raising the training components to restore and create conditions for the realization of the processes of adaptation efforts in previous microcycle, for specific training objectives.

"For judoka performance you can use" progressive "exhaustion from one microperiod to another, leading to the mobilization of functional possibilities of the
body and at the same time large-duty psychic sphere. These objectives shall be achieved by alternation of micro cycles 2-3 large requests with a microperiod download allows you to restore the functional possibilities of the organism and realizing adapting processes "(Hantău, I. 2005).

In a series of efforts dynamics is determined by the level of preparation of judoka, differing on the stages of preparation for the longer term. The growth rate is determined by the type of mezocycle, influenced in turn by the period of preparation of the macrocycle.

Intensity is the parameter which increases from one period to another, until he begins to determine the limiting processes of adaptation.

Dynamics parameters in microcycle training effort and their structure is determined of contents microcycle. Structure of the means used, their number, the number of repetitions of each, load used, they reported at the time as well as the volume and intensity of their workouts with the relationship between the two parameters Specifies the dynamics of the effort.

For determining the dynamics in a microperiod effort has borne in mind the possibilities of judoka and processes of adaptation of the organism to the requests arising from the size of the effort. "Such an effort can be: maximum, high, medium or low, and it appreciates the influence that it has on the body and the body's reactions to the claims to which it is subjected" (Hantău, I. 2005).

The judoka microcycle feature performance is given by the strenghts of intense workouts and may present different aspects; daily efforts that affect the same functions; efforts that acts about certain functions; the inclusion of peacekeeping efforts between large efforts; the inclusion of recovery between the lessons with very large requests.

Characteristics of the requests in the efforts of different sizes, filled with physiological and biochemical aspects, determine the structure and dynamics of the microcycles effort.

"Maximum effort can be achieved in a single lesson or by aggregating efforts of 2-3 training lessons and the decreased ability of the body, and the effort to rebuild following a very precise trajectory; in the first 2-3 workouts using a low-effort capacity; in training 4-6 reverts to the previous effort; in exercises 7-9 using the phenomenon of overcompensating; in 10-12 workouts are restoring the capacity of the initial effort of the body, allowing you to perform a new maximum effort. We conclude that maximum efforts should not be used at an interval of less than 10-12 days of competition the goal "(Hantău, I. 2005).

Maximum effort can be equated with 10-12 portions of RANDORI, approx. 50-60 minutes free for combat training.
"Great effort can be equated with 6-7 innings of RANDORI, about 30-35 minutes of intense combat, leading to decreasing the body's effort capacity and rebuilding can be done by various methods; in exercises 1-2 use low-effort capacity; 3-4 workouts in return to effort levels above; in 4-5 workouts there is the phenomenon of overcompensation and in training 6-7 restore occurs at the level of effort capacity of the body. Physiological and biochemical changes are smaller compared to the maximum efforts and thus decrease their influence on effort capacity is more limited. You can plan your 2-3 training lessons with great efforts, followed by a workout with little effort or total break in training microcycle "(Hantău, I. 2005).

Environmental effort produces moderate changes over the body and can use a sequence of 3-5 average efforts for workouts with the cumulative effect of these, at judoka's performance. Environmental efforts can translate into 3-4 portions of RANDORI, equivalent to approximately 15-20 minutes of battle and you can use between microcycled with maximum efforts or in recovery microcycle. After this type of effort, the body restore after a few hours and judoka can resume the same kind of effort to the next workout.

The effort smaller minimum effect in all the body's functions and in particular at judoka's performance.

To increase the level of training is necessary as the effort of a training unit to be carried out during the previous effort with overcompensation effect maximal body judoka. Recovery and over-compensation, the different functions of the body, does not constitute a uniform and therefore will have a timing special in attention for the next workout with maximum effort, or the sea.

"To achieve a maximum effect of the training in phase of overcompensation, foreseeable financial consequences of a workout can be medium size the following day towards the first workout; or a workout with great effort in the fifth day of the above; or a workout with maximum effort in a 7-day training towards earlier "(Hantău, I. 2005).

For an alternation, as possible, to the efforts of various sizes with recovery periods, should be considered the influences they have on the body, specific development efforts judoka various driving qualities.

It will track and will take into consideration the body's ability to adapt to the training effort and the rest restores all or through active rest, especially at judoka's performance.

Burden of the training in micro cycles shall be subject to the objectives and the mezzo workout in which is located the microcycle. During the preparatory process of tasks aimed at developing training driving qualities, increasing the capacity of the general body, but effort and learning new technical processes and strengthening and perfecting technical procedures previously learned. During the summer it seeks
technical and tactical training, specific effort capacity maintaining competition and driving qualities, in particular specific speed and stamina.

Optimal sliding scale structures of sport training and with the evolution of the effort curve at different stages of preparation and in macrocycle, and a series of micro cycles, may change and adjustment, determined by objective factors which may arise in the process of training with judoka from School Sports Club.

**Conclusions**

Judo lesson is the structural specific and of sport training in judo, based on thorough knowledge of the working conditions, the level of preparation of judoka and individual concrete possibilities at the time.

Lesson plan is drawn up on the basis of microcycle weekly tasks and includes a sliding scale of means with methodical repetitions, which number represents the volume of training effort, the number of shares reported in units of time, representing the intensity of the workout, the breaks between repetitions, the necessary methodological, etc.

"Planning and carrying out the training lesson, starts from the design and are unable to meet objectives in optimal conditions, by binding to the previous lessons but also with the next, each training lesson being that one link well defined in process of weekly cycle. For community leaders acquisition and improvement of a technical process, or for the development of a certain driving qualities, it is necessary a large number of lessons and each lesson as such must rely on previous and to prepare a lesson on the next, thus producing the adaptation of the organism "(Hantău, I., 2005).

Duration of the lesson of the judo training is determined by the objectives that must be achieved, training period in which we find ourselves and the level of preparedness of judoka.

Judo lesson structure contains a logical sequence of activities that include them, this in comparison with the level of preparation of judoka and the period of preparation in which we find ourselves at some point and refers to the Organization of the team, preparing the body for the effort, the appropriation of the technical procedures or new technical-tactical combinations, consolidation or perfecting the skills previously learned, driving improvement of the driving qualities application of knowledge, skills, and skills in combat conditions, the gradual reduction of the effort, the conduct of appraisals and recommendations lesson. Synthesizing, lesson structure of judo, we can divide into three main parts: introductory, concluding main and, each of which can contain one or more of the components listed above.

The introductory part comprises organizing and preparing the body for collective effort that can be accomplished with the nonspecific and specific exercises
exercises (TAISO, UKEMI, TANDOKU-RENSHU) and may have a length of 20-30 minutes. The content and duration of this part of the lesson is determined by the level of preparation of judoka, the main tasks of the lesson, the lesson in microcycle weekly, training etc.

The main objectives are fundamental for ensuring the scheduled components of sports training in judo and can target multiple components or just one of the components of the training and physical training lessons can pursue a quality motor, two or more, or the ability of the body's effort. The duration of this part may have a length of 40 to 90 minutes and determines the type of judo lesson and the principal means used are specific ones (TANDOKU-RENSHU, UCHI-KOMI, NAGE- KOMI SOTAI-RENSHU, YAKU-SOKU-GEIKO, BUTSUKARI-GEIKO, KAKARI-GEIKO, GAESHI, RENKAKU, RANDORI SHIAI). The closing follows the depression of the body recovery effort following the requests made by the lesson and can have a duration of 5-10 minutes.

"Judo lesson Types are determined by the objectives, characteristics of microcycle or longer periods of preparation and we can have: the lesson of the study, with the main objective of improving the quality or technical processes we being preparatory periods at judoka meets in performance; training lesson that pursues training through the training and all the factors are characterized by increased effort in terms of volume and intensity; lesson study and practice can be used in the second part of the preparatory period or at the beginning of the competition; the lesson of control relate to the establishment and effectiveness of the means and methods used in the preparation, in terms of technical, tactical, physical; the lesson modeling specifies the period of training and competition unfolds in similar conditions of competition; the lesson of restoration is characterized by low volume and a we can meet during the annual cycle of training, after lessons with large requests and efforts, or before the 1930s goal "(Hantău, I. 2005).

SMALL DICTIONARY OF MARTIAL ARTS- JUDO

„ASHI-WAZA = Technical procedures executed with the foot
BUTSUKARI-GEIKO = Study indicator meeting with non-partner
GAESHI = Counterattack
JUDOKA = Practicing judo
KATA-WAZA = Technical procedures carried out with shoulder
KATA-GURUMA = Technical procedures throwing around the shoulder
KANSETSU-WAZA = Technical process been choked of
KAKARI GEIKO = Battle continues for resistance
KOSHI-WAZA = Technical procedures executed with the right hip
MA-SUTEMI-WAZA = Technical procedures of sacrificial
NAGE-WAZA = Techniques carried out in feet
NAGE KOMI = Technical processes with execution throwing partner
NE-WAZA = Technical procedures made on ground
OSAE-WAZA = Technical procedures of immobilization
RANDORI = Training free
RENKAKU = Combinations of more technical procedures
SEOI-NAGE = Throwing over your shoulder
SHIME-WAZA = Technical procedures of strangulation
SHIAI = Training in competition
SOTAI-RENSHU = The study of one or more movements of technical processes
SUTEMI-WAZA = Sacrifice techniques
TACHI-WAZA = Technical processes carried out in feet
TAISO = Specific exercises for warming up
TANDOKU-RENSHU = Running processes without technical partner
TE-WAZA = Technical Procedures performed with throwing arms
TOKUI-WAZA = Favorite technique
UCHI-KOMI = Technical processes execution without throwing partner
UKEMI = Falls off in Judo
YAKU-SOKU-GEIKO = Repetition of technical processes in motion
YOKO-SUTEMI-WAZA = Technical side sacrifice techniques” (Louis,F.1993)

REFERENCES