SELECTION AND ASSESSMENT OF LOADS TRAINING UNDER THE ENERGY CRITERION IN THE BOXING

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Abstract
The research reflects an experimentation process within the implementation of coaching loads boxers, that was proclaimed "national champion" in Albania. The purpose of this research is that the selection and sequencing of coaching loads supported criteria of energy echanisms. yet their evaluation and distribution on the idea of special formulas that provide a systematic training process continuity and accelerate the expansion of coaching indicators. To support the objectives of this research an experimentation process was realized about the organization and implementation of coaching loads within the following areas:
1. Definition of load types training ground, supported energy mechanisms progress, where non-lactic anaerobic activity occupies about 10%, lactic anaerobic activity 50% and aerobic activity 30%. 2. Evaluation of load content and size, where are defined space -threshold volume, forms of loads in aerobic and anaerobic aspects and content of units and training sessions. 3. Determination of coaching loads impact through two main methods :
a. Load volume coefficient method. The coefficient relies on the belief of a unit volume and the training session, in proportion, to the limit where are stored the event threshold /values. b. Intensity of load coefficient method, from which derives the "action intensity coefficient", as evaluation factor for internal load. 4. Rational distribution of coaching loads by size of impact, taking into consideration the renewal deadlines. during this case the renewal disbursed in 1-2 hours after small loads and 48-72 hours after high loads, especially if they need anaerobic character. In conclusion: Organization and implementation of coaching loads, supported criteria of energy mechanism is an activity researching and applicable in practice, with measurable indicators and concrete values for the preparation of the boxers training, implemented for the primary time in our country. the consequences of this process emerged with indicators satisfactory physical, functional and coordinating of all our boxers, which was strongly reflected in increased sports performance.

Keywords:
Loads, energy mechanisms, coefficient, anaerobic non-lactic loads, anaerobic lactic loads, aerobic loads, volume, intensity, cargo, training session

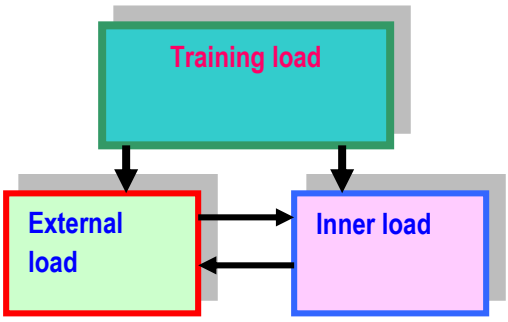
Introduction

The research presented reflects a fighter training experience of SK "Tirana", that was proclaimed "national champion" in Albania, in 2014. Of this group of athletes have emerged champions national and international level boxers. Highlight one in all the simplest boxers of our country, Jurgen Uldedaj, medalist in several international events, which reaped some deserved victory, twice a palm at the ecu championships Anapa (Russia) in December 2013 and Zagreb (Croatia) in October 2014 and medallion at the globe tournament A.Aghalarov Baku (Azerbaijan) in December 2014, the burden 81kg. The aim of this research is to spot and estimate the scale of the load on the idea of indicators special coefficients in

terms of volumetric-functional side sill and blink / min, during the implementation of the training process with amateur boxers. The research examines eight best boxers SK "Tirana" during one-year period: December 2013 to December 2014. The age of those boxers likened at 18-19 years age bracket where physical-functional opportunities are within the space peak of development. Organization and implementation of coaching load has formed the first factor for the systematic formation boxer, who isn't elected directly, but gradually and during a gradual path, taking into account: Results through training loads are overdue which rely upon the dimensions of the impact of physical-motor exercises, and by gradually increasing strain. (Matvejev L., 1981, Harre, 1969, Helal H., 1982). During the implementation of sports training further reinforced our conceptions of the component structural load (external side and inner side) have a robust bond and therefore the mutual influence between them. during this unity interconnection, as is that the outside, as is and may be the inner side of the load. "Loads training is nothing, but a study of incentives amount trainer, enabling positive changes to extend physical indicators, functional and coordinating". (F Debar, 2012)

As above, the totality of external stimuli side, which is that the product of the activity of measurable structural elements load (action density, volume, intensity, duration of action and rest intervals between acts), is that the cause for the changes internal functional and biochemical, which reflected a certain size within the body of a boxer, the lower proportion to the best. (scheme 1

Scheme 1. Components ingredients training load (F Debar, 1994)

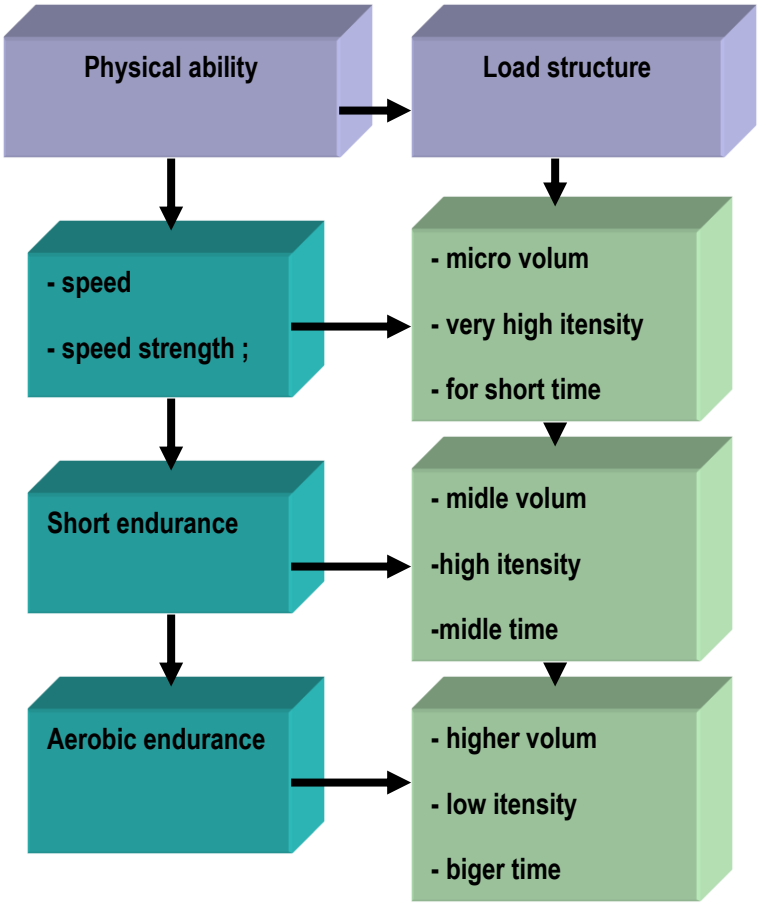


During the training process, saw a detailed link between training indicators and corresponding level of coaching loads, which further optimizes the coordination of its constituent elements, especially the degree and intensity of motor actions:

- Optimal load volume brings more quantitative changes in internal physiological activity, particularly for the preservation of functional indicators and physical-motor;
- Optimal intensity of actions load structural element that brings qualitative increase, improving training market.
- New indicators of coaching can't be stored long without exercise volume parameters studied. So, within the training process, the methodology of preparation should be flexible and inventive and alter, when

indicators of coaching not still grow or not stored long. Effects of load closely related to the training task arises for solutions, knowing that:
- Preparation of anaerobic origin a lactic- skills of speed, explosive strength, speed, skill coordinative- requires action with high intensity, low volume, small extension fixer full holiday;
- Preparation of lactic anaerobic capabilities origin - Special sustainability medium and short, requires high volume, and duration of action, relatively high intensity and vacation incomplete;
- Preparation of aerobic stability requires large volume and duration and comparatively low-intensity action. (Scheme 2)

Scheme 2: Dependence between physical-motor skills and elements structural load (Dibra F., 1994)



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For determining the various varieties of training loads are mainly supported physiological factors and energy that characterize modern amateur boxing, where anaerobic activity non-lactic occupies about 10%, lactic anaerobic activity, 50% and aerobic activity, 30% (Jorgoni, 2007, p . 191, Merle L. Foss,

Steven J, 1998 etc., p 78)
On the idea of those data, we determined the kind of coaching loads and their content by appropriate means:
- Loads anaerobic non-lactic, where actions during the series lasting from 4-10 sec:
- Loads anaerobic lactic, where actions during the series lasting from 15 to 180 sec;
- Aerobic loads, where the actions lasting from 3 min to 40 min and more. In accordance with the aims of research, within the process of preparation of boxers, attention and particular attention is paid to general effects as a results of the systematic implementation of training loads, which have as a measure "the magnitude of the impact load, otherwise known as "Load the dimensions of the impacts". Training loads impacts size means the inner reactions, as a results of the implementation of various cargo complex training. (Dibra F., 2007, p. 107-110)
As above, to assess the magnitude of the consequences are calculated all the particular effects of loads applied within the training process (aerobic, anaerobic, anabolic etc.), Load structural elements (volume, intensity, duration of action, etc.) And boxers reaction in addressing them. In this process of change, allow us to trace the training loads under different scales on the body of a boxer, being labeled it as big load, medium or small. (Scheme 3). In determining and evaluating the training load according to the size of the effects of impact, we had into account some specific features: (Table 1)

Scheme 3: Load the size of the impact training (Dibra F., Bushati S, 2014)

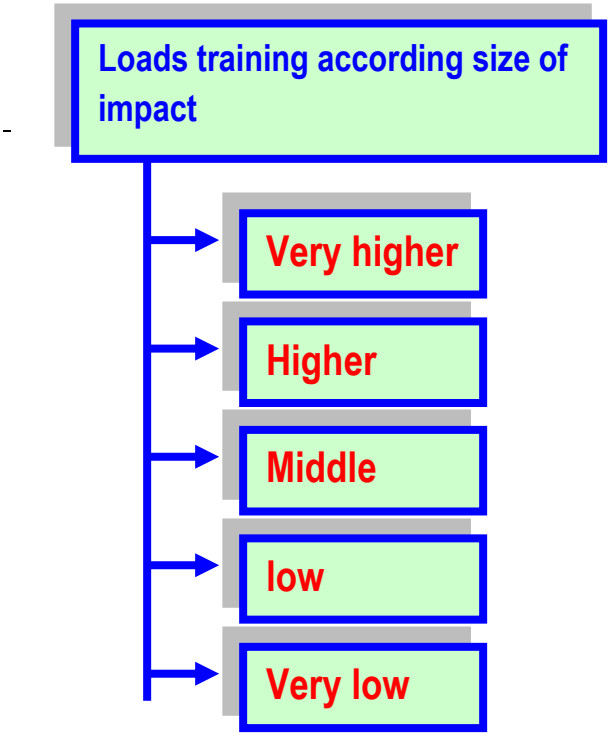

*Table 1: C*haracteristic *features of load under the mass of influence (Dibra F. 2007 Jorgoni A. 2005)*

Type of load	Distinctive features	Renewals
High	- Accompanying with great fatigue tedious for 2-3 days in a row; - It is accompanied by profound changes-functional physical and psychological, that face many difficulties; - Applies about 2 times in 3-4 weeks.	Within 3-4 days
Great	- Accompanying with great fatigue and general overall -functional physical and psychological; - It is accompanied by profound changes in physical-functional, facing difficulties; - Applies about 2 times a week.	Within 2-3 days
Medium	- It is accompanied by physical fatigue medium-functional and psychological easier faces; - It is accompanied by profound changes physical-functional; - Apply 2-3 times a week.	Within 18-24 hours
Small	- Accompanying with little fatigue, physical and psychological functioning, easy facing; - Accompanying with minor changes the physical-functional; - Apply more often, usually after large loads and medium.	Within 4-6 hours
Many small	- Accompanying with very little fatigue, physical and psychological functioning; - Accompanying with very minor changes of physical-functional facing easily - Implemented as a secondary session, SHP more ash, after loads of large and medium.	Within 1-2 hours

Depending on the criteria distinguishing physiological, we realized a cargo distribution-type training according to reports and special requirements of annual cycle training periods. (Tab. 2)

Table 2: Distribution-type training loads during the annual cycle

Type of load	Stage preparation general	Stage preparation Special	Period matches
Cargo anaerobic non-lactic	20%	20%	10%
Cargo anaerobic lactic	30%	40%	50%
Cargo aerobic	50%	40%	30%

Special interest in the training process has presented the assessment is load content as a very important task and permanent, which is applied whenever appropriate discretion. For solving this task are based on some specific methods applied *in basic* training, where we focus on the particular method of load coefficient of volume and intensity coefficient method load. (F Debar, 2007, p. 100-111, Jorgoni A 2005 etc.). *a. Coefficient method of load volume,* gives us "coefficient of volume load". This coefficient is based on the realization *of the* greatness of *a training unit,* in percentage, up to the limits where the stored *values-threshold* development. In this case the training units training solve specific tasks: to speed, stability, strength, etc. (Tab.3).

Table 3: Spaces-threshold load volume (F Dibra, Bushati S., 2014)

Type of load	**Developed**	**Type of units of training in accordance with the volume-threshold load**
Cargo anaerobic non-lactic - Action from 3-10 sec - Intensity too high	-Speed Explosive-force Fast-force; Maximum-force; -Ability, Coordinating – native.	-Units running short segments (Volume-threshold, from 200 to 400 m; - Unit exercises with light weights and high schools. (Volume threshold from 4 up to 10 series, with 20-40% of the real possibilities) - Units with exercises pliometric (Volume threshold from 20 to 40 rebounds) - Units with casting exercises (Volume threshold from 80 to 150 Kerim) - Units with full toss balls (Volume threshold from 80 to 10 jumps) etc.
Cargo anaerobic non-lactic -Action From 15-45 and 45-180 sec High - intensity	Special - sustainability - Complex preparation matches Specific -Preparation match	- Units with circular drill 12 exercises (Volume-threshold from 1 to 3 repetitions); - Units with circular drill 6 exercises (Volume-threshold from 2 to 5 times); - Units with 3 circular drill exercises (Volume-threshold from 3 to 6 repetitions); - Units with special exercises and specific partner (volume-min. to threshold from 10 to 20 min.); - Units for the preparation of the force-force (Volume threshold from 15 min to 30 min) - Units with competing training (volume-threshold from 10 min. To 30 min.) etc…
Aerobic loads. Action By 3-30 min more. -Inten T. low	Functional trail -sustainability Aerobic	Fartlek training-units (Volume-threshold from 10 to 40 min) Training-units alternately 15-30 min (Volume-threshold from 10 to 40 min) Training-units with identical 15-35 min extension (Volume-threshold from 10 to 40 min) etc...

Based on the size of the unit coefficient training volume criterion (INC), we derive the size
of the load coefficient of the training session (KSS), knowing that its contents are usually organized training *2-3 tasks.* The coefficient of volume training session *comes from the sum of the volumes of training units, their proportionate amount, in percentage.*

$$KSS = \frac{SHVNS}{SNS};$$

KSS = ; where: *(SHVNS);* the sum of volumes of training units; *(SNS),* the amount of units training in basic part of the training session. (Tab.4)

Tab.4: Rate-type load volume training session (Dibra F.2007)

Size of load	**Session two tasks training**	**Session three tasks training**
High	90-95% of the average volume of units training session	85-90% of the average volume of training session
Great	85-90% of the average volume of units training session	80-85% of the average volume of training session
Medium	75-80% of the average volume of training session	70- 75% of the average volume of training session
Small;	50-60% of the average volume of training session	40-50% of the average volume of training session
Many small	40-50% of the average volume of training session	30-40% of the average volume of training session

a. *Method load intensity coefficient,* gives us "coefficient of intensity of operations"
as a factor of the size of the load evaluation by functional interior. Data are based on indicators blink / min. heart on consignment and complete serenity. (Korvonen and Vuoriman, 1988).
Formula for extracting is:

$$KIV = \frac{PV - PQ}{PMAX - PQ} \text{ x } 100;$$

KIV = x 100; where *(PV;* pulse / min on consignment; *(Pmax);* coefficient giving the blink, at 200 beats / min; *(PQ),* pulse / min in complete calm, measured usually in the morning,
after waking. The final index by applying the formula appears in percentage.
Thus, for example, when a boxer reaches (PV) in 180 ul / min and pointer (PQ) in 50 ul / min, (KIV) amounts to about 87% (indicator pointing to large load). Based on the formula above, draw coefficient of intensity, not only to a single action, but all unit operations training. In this case the indicators collected blink / min after each operation of the unit divided by the amount of repetition of actions, and come up with an average index (in%)
for training unit coefficient (KIN). Thus, when a boxer over ten iterations has scored a

total amount of 1850 palpitations, the average blink / min of it will be 185 ul / min. (1850: 10 = 185 blows). Given the data above boxer and implemented formula, draw coefficient intensity training unit, 90%, which means the unit-load training.
On this road methodical, draw the coefficient of intensity training session (KISS), which *comes from the sum of the coefficients of the intensity of training units, their proportionate amount, in percentage.*

$$KSS = \frac{SHVNS}{SNS};$$

Where (KSEI); the sum of the coefficients of the intensity of training units; (SN); amount of training units,
Thus, for example, during a training session with three units are achieved following values: (90% first unit, the second unit 80% and 70% third unit, total (90 + 80 + 70 = 240: 240: 3 = 80 %), So coefficient intensity training session in the figure is 80%, an indicator near the upper limit. (Tab.5)

Tab.5: Assessing the relative size of the load according to the coefficient the intensity of the action (Dibra F., 2000)

Loads	**KIN (%)**	**KIS (%)**
High	88-90	82-85
Great	80-85	78-80
Medium	65-70	63-68
Small	50-55	50-55

VO: (KIN; coefficient intensity training unit; *(SIC),* the coefficient of intensity training session). The rational allocation of charges according to the size of the impact training has been a very important next task, which is anticipated within a 4-week mezzo cycle, which have been a few goals. - Alternation and coordinating all training loads (maximum, large, medium, small), to promote the activity of the main incentives to complete actions by the values -eve motor development; - Achieve and maintain without sacrificing the unity of exercise with relaxation, renewal and continuity necessary to systematically and smoothly disturbing exercise. (Tab.6)

Tab.6: Distribution-type training loads during mezocikleve size 4-week training (Dibra F., 1996)

Days of the week	**Run-up**				**Period race (a race in months)**				**Competition period (two races per month)**			
	Weeks training Preparation stage. Overall po.				Weeks training Preparation stage. Spec.				Weeks training Period race			
	l	ll	lll	IV	l	ll	lll	IV	l	ll	lll	IV
1	Me	L	Vo	L	Me	Ms	Vo	Ms	Me	Ms	Me	Ms
2	Vo	Vo	Me	Vo	Vo	Vo	Me	Vo	Vo	Vo	Vo	Vo
3	Ms	Vo	Vo	Vo	Vo	Ms	Vo	Vo	Vo	Vo	Vo	Vo
4	New	New	New	New	New	New	New	Vo	New	Vo	New	Vo
5	Me	Ms	Me	Me	L	Me	Me	Without	Ms	Without	Me	Without
5	Vo	Ms	Ms	Ms	Vo	Ms	Vo	Without	Vo	Without	Vo	Without
7	Pu	Pu	Pu	Pu	Pu	Pu	Pu	G	Pu	G	Pu	G

VO: (Re) days renewable; (Pu) days off; (Free) active holiday; (Vo) jag; (MS) medium load; (Ma) huge burden; (L) high load; (G) race day. Experience showed that the gradient of cargo during training mezzo-cycle be implemented according to some reports given, in accordance with the main stages of the annual cycle (Tab.7)

Table 7: Distribution- type of training load size, in percentage (Dibra F., Bushati S. 2014)

Loads	**Mezzo cycle 4-week Eta. Cumulus, reply.**	**Mezzo cycle 4-week Et. special training**	**Mezzo cycle 4-week For. With two races**
- High; - Large - Matches	25%	22%	18%
- Medium	18%	15%	11%
- Small	29%	35%	42%
- Renewable - Break before race	14%	14%	15%
Active weekly rest	14%	14%	14%
Amount	100%	100%	100%

-Based criterion for distributing loads according to their training was the deadline for renewal of a boxer. For the going on rotating drill without proper renewal energy materials leads to a bad perspective, associated with serious damage to health. As above, reinforced concepts that *underlie renewable energy processes and physiological for fighting fatigue and continuity of training loads.* (Volkovo EA, 1972), The process of renewal is implemented in conjunction with several factors, such as the terms of reforming the raw energy level training loads etc. (Jorgoni A 2005 F Debar, 2007) .Tab.8

Tab. 8 : The terms of the renewal of some raw energy (F Debar 2007 Jorgoni A, 2005)

Raw energy	**Renewal of Partial**	**Renovation Secondary**	**Renovation full**
Phosphogen (creatinofosfati)	In 30-50 sec (50%)	At 60-120 sec (70%)	At 180-300 sec (100%)
Glycogen	2 hours (40%)	At 4-5 hours (55%)	In 24-48 hours and more (100%)

Regeneration is also depending on the time of removal of metabolic products that reduce operational side of the boxer, such as (for example) in the tissues of lactic acid, which is formed during the process of glycol sis. *The sooner and avoided more lactic acid in*

the tissue, the realized accelerated regeneration (Fox, 1974). According to the authors Jorgoni A, 2005 F Debar, 2007, the amount of lactic acid concentration in the blood after training loads and avoid relatively shrank in these terms (Table 9):

Table 9: Timing of removal of lactic acid in the tissue

Deadlines for lactate acid in the blood l	**Reducing the amount of lactate acid in the blood la**
After 8-10 minutes	to about 25%;
After 20-25 minutes,	to about 50%
After 1-1.5 hours	to about 70%
After 24-72 hours	to about 100%.

Regeneration takes place in deadlines and different levels, depending on the specific cargo carried by the athlete during the training process. (Grosser and NEUMEIER). Tab. 10 . The set of training cargo activity creates different gradations of fatigue, requiring renewal deadlines (Tab.11)

Table 10: Renewal subject to specific training loads

Loads	**Renovation Partial**	**Renovation Secondary**	**Renovation full**
Anaerobic a - lactic	1-2 hours	10-12 hours	24-32 hours
Anaerobic lactic	2-3 hours	11-12 hours	24-48-72 hours
Aerobic	1.5-2.0 hours	10-12 hours	24-36 hours

Tab.11: Relative Timing of recovery after cargo training (Dibra F., 1992)

Type of load (fatigue)	**The terms of renewal**
High	60-72 hours
Great	35-48 hours
Medium	20-24 hours
Small	6-8 hours
Many small	1-3 hours

In conclusion:

Organization and implementation of training loads, based on criteria of energy mechanism is an activity researching and applicable in practice, with measurable indicators and concrete values for the preparation of the boxers training, implemented for the first time in our country. The effects of this process emerged with indicators satisfactory physical, functional and coordinating of all our boxers, which was strongly reflected in increased sports performance.

In the process of preparing boxer amateurs take advantage anaerobic loads (a lactic and lactic), dominating them on the method of preparation, in accordance with the duties training tools and methods according to the respective levels. In found therein process, cargo diversion and coordination training exercise with the renewal remain a primary task. Boxers must be exercised in the training process in the cargo space-threshold training: from 18-25% of training sessions (high loads, large and race); by 11-19% (medium loads) from the 29-42% (small loads); by 14-15% (load renewable); 14-16% of training sessions (active holiday at the end of each micro cycle).

Implementation of the associated loads so careful with v-*assessment* systematic the magnitude of the effects, according to the coefficients of volume and intensity of load, to control the internal situation and better modeling exercise.

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