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PHYSICAL TRAINING- PLANNING AND EVALUATION

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Abstract
The result is to anticipate, to foresee. To provide means to plan. Organization of practice is essential in sports. Organization of physical preparation is simpler than the technical-tactics that make more problems. Taking into account these remarks, we know from the beginning that it is useful to analyze the components of physical training as finally articulated them, to their programs and their predicted effects. Coaches must be guided by notions permanently "variations of work tasks, the general qualities transfer to the specific job. "What I try to develop, will find specific technical does this in handball?" We need an organic and functional programming resources of the athlete. Physical training plan period will be treated in each of these resources and will permanently change the training tasks. The difference between the sample and the athlete needs quantitatively determine the needs of specific work, performance objectives.
It is a matter of dosage between the amount awarded physical training during preparation, on the one hand and on the other during competitions.
Physical training intervention is to register with technical and tactical components contribute to the development of performance of the athlete, treating physical means necessary discipline, in what concerns us here-November handball. All sports equipment is dependent on these natural resources. Analysis is required prior to sports-related tasks handball before physical training to develop content. It is therefore important to be suitable to evaluate the athlete with the demands and more discipline in the post or in teams
Conclusions: It is important to plan for physical training during inter-season and the season, but is also important to rebalance, to shape and work load vary depending on the effects observed. On the other hand, the more effort is better in terms of quality, the more care should be taken to recover.
Game plan in the design and implementation, will be dependent on individual characteristics of players making up the team.It is therefore essential to evaluate potential players for his coaching in some ways that will contribute to sports performance: technical skills, tactical skills, mental skills, physical capabilities.
Keywords: physical training, evaluation, planning

Introduction

The result is to anticipate, to foresee. To provide means to plan. Organization of practice is essential in sports. Organization of physical preparation is simpler than the technical-tactics that make more problems.

Taking into account these remarks, we know from the beginning that it is useful to analyze the components of physical training as finally articulated them, to their programs and their predicted effects. Coaches must be guided by notions permanently "variations of work tasks, the general qualities transfer to the specific job. "What I try to develop, will find specific technical Does this in handball?" We need an organic and functional programming resources of the athlete. Physical training plan period will be treated in each of these resources and will permanently change the training tasks. The difference between the sample and the athlete needs quantitatively determine the needs of specific work, performance objectives (J. Weineck, 1997).

It is a matter of dosage between the amount awarded physical training during preparation (precompetitional) on the one hand and on the other during competitions.

Changes Of Training Tasks

Continued use of a load and a consistently high workload, leading to supraantrenare. It is necessary to build a work program which provides a modulation between volume and training intensity

Guideline On Seasons And Cycles

It is necessary to give a main theme for physical training in a given unit of time. (Speed, strength, maximal aerobic power, etc.).

Use Indicators

Requirements require high performance coach to be increasingly closer look at the organization work. Is always necessary to anticipate. In this context, highlighting and will use indicators to assess the shape sport in its various expressions and helps making quick decisions. High-level

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performance management depends on the details (E.L. Fox, 1984).

"Eye" Coach is a subjective indicator, although often accurate, it must be combined with objective benchmarks: Cardiac recovery index, the explozivitatii, and speed are all accurate indications.

Annual Planning

Establishment involved in building planning are:
-week
-cycle-3 weeks
-block
-period

Week

"Week" organization is of course different depending on the cycles.
Here's an example of a weeks training period with orientation "force".

Example No. 1

monday	Tues day	wednesday	thursday	friday	saturday	Sunday
force	Jumping	force	speed	force	intermittent	Rest

Example No. 2
Weeks of training period with orientation speed

monday	Tuesday	wednesday	thursday	friday	saturday	sunday
speed	jumping	force	speed (rhythmicity)	force	intermittent. 10"\10"	rest

Example No. 3
Week oriented on intermittent effort

monday	Tuesday	wednesday	thursday	friday	saturday	sunday
force	intermit. 10"\10"	jumping	intermit 10"\10"	force	intermit. 10"/10" speed	rest

Example No. 4
Week of competitive period

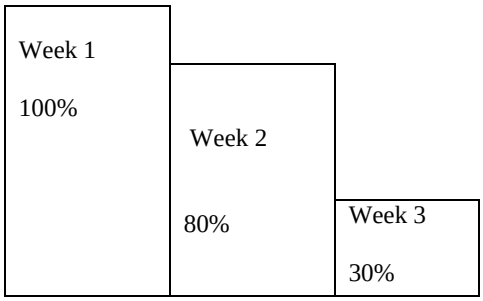
monday	Tuesday	wednesday	thursday	friday	saturday	sunday
intermit.	max. force		force	Speed	game	rest

In this case, should we consider that the major objective is the match on Saturday.

Account must therefore keep a few principles:
- Do not start the program never force during the tournament, without previous training. The results will be negative.
- To have no negative effect on the match on Saturday, sessions will be introduced lower power intensity over the previous period where we had no official matches.
- Preparation of an important match is always decreasing the amount of work that week (compared to the previous one), but he did reduce the intensity.
- Enter recovery sessions.

Cycle

The notion of "cycle" is an essential part for individual sports (eg athletics) but it must obviously adopted collective sports. Ideal duration of the cycle is 3 weeks for subjects explosive force.
The drawing below illustrates the profile of 3 weeks



Profile of individual disciplines working cycle:
Dominant components are: - FORCE

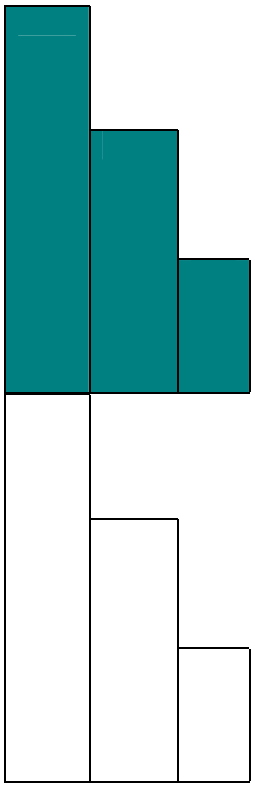
	week1	week2	week3
DOMINANT	FORCE	SPEED	MAX. AEROBIC POWER

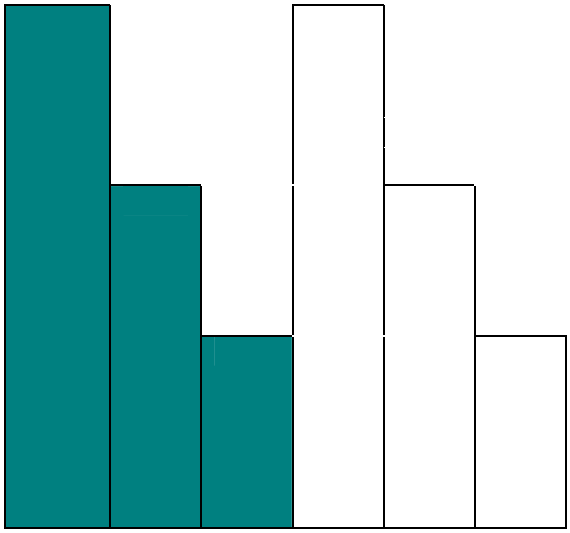
"Cycle to 3 weeks"

Block

For individual subjects we found that the work force, for it to be consistent and useful, must last at least 6 weeks or 2 cycles.

We speak so in this case the notion of "block". This action brought by "Verceshanschi" consists in the emphasis on the physical qualities for a longer time period (2 cycles).





CYCLE NO 1 CYCLE NO 2

Block Of Force

This organization "in block" is possible in handball during the months from May to June. (After the end of the season).

Period

Period consists of several cycles or blocks. Hockey season may be divided into 3.4 or 5 times.

-period 1: 4-5 weeks (late May-late June)

- 2 time: 6-8 weeks (end of July to debut in September)

-period 3: the championship round matches

- 4 time: 4-5 weeks (January)

- The 5: return matches.

Example of annual planning in handball

Example will be given is that of a male team growing up Division 1.

Period 1

WEEK 1	WEEK2	WEEK3	WEEK4	WEEK5
29 may- 3 jun	5 jun-10 jun	13 jun-17 jun	19 jun-24jun	26 jun-1 jul
REST	1-track 3-musc.	1- track 3 musc.	1-track 3-musc.	REST
TESTS				

Load and volume of work during this period was scheduled to increase progressively:

-80% In week 2

-90% In week 3

-100% In week 4

Orientation for this course is to develop explosive force and strength.

Period 2

This training period consists of 2 cycles every 3 weeks preceded by 1 week quarters.

- Cantonment of week 11: altitude-aerobic work (climbing on the mountains, bike), work for speed, jumping etc ..
- No cycle 1 (week 12, 13.14): strength and explosive power
- Cantonment of seven 15: Technical and tactical explosive force
- No cycle 2 (week 16, 17, 18): technique and speed.

PERIOD 3.

W1	W2	W3	W4	W5	W6	W7	W8
explosive force	speed	force	speed	explosive force	Aerobic	force	speed

This period covers the games in the championship round.

Weekly rate is focused on technical and tactical, requiring a careful modeling of physical work. Recovery is also a fundamental aspect and especially the kind of recovery that does not necessarily mean

passive rest.
The odd weeks (example here) load was reduced, so that they match matches go.

Perioada 4

w1	w2	w3	w4	w5
aerobic force	aerobic force 1 game	explosive force	Speed pma 3 games	Speed pma 2 games

This period generally lasts 5 weeks. We will consider as a new phase of training.
In the example above, the period is composed of 3 cycles:
- Cycle 1: W1 and W2-oriented strength and aerobic work
- Cycle 2: W3 orientation explosive force
- Cycle 3: W4 and W5-orientation: the speed and PMA

Period 5

Cover compionatului return matches.
The construction is like the period 3

Conclusions

It is important to plan for physical training during inter-season and the season, but is also important to rebalance, to shape and work load vary depending on the effects observed. On the other hand, the more effort is better in terms of quality, the more care should be taken to recover.

Physical training intervention is to register with technical and tactical components contribute to the development of performance of the athlete, treating physical means necessary discipline, in what concerns us here-November handball. All sports equipment is dependent on these natural resources. Analysis is required prior to sports-related tasks handball before physical training to develop content. It is therefore important to be suitable to evaluate the athlete with the demands and more discipline in the post or in a team (at work for such detention, which measures a player 2 m and evolve as a pivot does not need the same program as and a wing player).

To summarize, I will say now that the content of physical training (working on muscle strengthening, aerobic, speed, etc..) Has meaning only to the extent that specific requirements activity (in this case handball).

Evaluation

Game plan in the design and implementation, will be dependent on individual characteristics of players making up the team.

It is therefore essential to evaluate potential players for his coaching in some ways that will contribute to sports performance:

• technical skills
• tactical capabilities
• mental
• physical capabilities

We will consider here strategies for assessment of physical potential. We found that we are interested in 2 areas in particular for handball.
-explosive qualities of the players, technical support necessary for its expression
-ability to recover quickly after maximum effort, allowing the player to repeat his gestures during the match for all completing the daily tasks of training and competition but the whole season without having a significant drop in potential (M. Pradet, 1989).

Explosivity

Explosivity in handball gesture translates into speed, the detention and the maximum force, so the force is likely to be mobilized and used in a very short time in a specific gesture (neutralization striker, 1 against 1, etc.). This relationship between speed and power makes us think the notion of power (G. Cometti, 1988).

Speed

-Timed time on: 5m/10m/20m/30m/4x5m
-for an accurate assessment is recommended to use photocells,
-index for 5m, 10m and 4x5m are the most significant activity for handball. They show the ability of start-up speed of the player.

Detention

-Measure:
• CMJ (countre movement jump)
• reactivity (6 jumping about on 2 legs)
• Jump on 2 feet with knees bent
(First 2 tests are performed with a Bosco platform)

Maximum force

Measure weight amounts to:
-pushed lying
-semigenuflexiuni
-pulled from the neck
-Tests are performed with a simple Olympic bar. On the contrary expressed in watts power tests we can achieve only with specific devices. Not having this evaluation, it is recommended to work in the gym.

Analysis Of Tests

The tests can only be justified to the extent that they are interpreted, analyzed and the results of these reflections are reinvested in training strategies. On the other hand is imperative that the player to know the total analysis and engage in individualized training program, without which there can be no progress.
Player A-Performing as wing:We know tha:t is very good at speed on 10m, 20m and power. Speed is lower at 4x5m. This deficiency is found in relationship 1 against 1. It is therefore necessary to work on foot power.

Player B-Performing as a left back :The speed of the 10m is good for his height. On the

contrary his power and detention are poor. Work is required for the legs followed by pliometric exercises.

Field Cardio-Pulmonary

What is relevant evidence that the coach needs to establish a training strategy in the aerobic field ?

> Maximal heart rate
> Heart rate at rest
> Recovery after 3min and after 5min
> Index of recovery
> Aerobic speed track
> Hall aerobic speed (shuttle)

These indicators may be collected starting from some tests done on-site "very powerful and relatively easy to do so.

De BRUE test
LUC LEGER test track
LUC LEGER test "commute" in the hall on 20m.
1.De BRUE test
Is done on the track. The players run behind a bike that has a speed race prestabilita.Viteza departure is 8km / h. The speed increases to 0.3 km / h every minute. When player can not stop it from cycling. Speed bicycle at the time is the maximal aerobic speed (VAM) of that player.

2.LUC LEGER TEST track
Back on track, place landmarks every 50m around the track. The player must pass through the right of each milestone while hear a "beep" recorded on a tape. Every minute speed increases. The end result is the same as BRUE test.

3.TEST LUC LEGER, on 20m
Are made in the room. Players run "go-Fri-one" over a distance of 20m (handball in width). Running speed is given by the "BIP's" recorded on a tape. Speed increases on a regular basis every minute. When players can not stop following cadence. Last landing or is detained as a result. Convert the result gives us the maximal aerobic speed .
Notice: this result is less than that achieved on the track with 2-3km/h.Deci VAM Hall of less than 2-3km / h than V.A.M. track.

Operation test BRUE

V.A.M. made the player is 18km / h. Maximal heart rate (1) is 204 pulse / min. Heart rate is 149 after 1min pulse / min (2). Heart rate is 116 after 3min pulse / min. Heart rate after 5min is l00puls/min.
Technical index-recovery (ITR) = 1-2 or 205 p / m - 149 p / m = 56 pulse (ITR)
-difference between maximal heart rate and frecv.card after 1min after the demise effort is ITR
NOTE: in a handball I.T.R. higher than 40 pulse / min is relatively satisfactory.

Evaluation starting from an runs test in the gym with 30/30 (30"'run, 30"walk)
Player A has made 2 sets of 12 reps each room on 30/30 in 20m distance. Intensity was 105% of V.A.M. or 132m (track).
Adapting to a very good effort =
ITR = very good recovery after 1 min = 78 pulse / min.
Recovery after 3min = very good = 82 pulse / min.
Conclusion: excellent index. They allow us to modify the working time (eg 10/20) to cause new adaptations closer to handball.
Player B has made 2 sets of 12 repetitions, 30/30 in room ply 20m. Intensity was 105% of V.A.M. or 130m. Adaptation to effort = very poor.
ITR = very low = 32puls/min.
Recovery after 3min = low, pulse was 119 beats.

Conclusions

He must continue training to obtain the best indicators of recovery. For the analysis to be complete players will perform tests wearing a sport tester device arctic example. Heart of the end of the test curve is transferred to a computer that will give us indices and higher.

Frequency of use of tests: explosivity evaluation tests and the assessment that cardiac capacity is used:
-the end of the season before achieving planning training in June,
-to start preparations in August.

Further during the season depending on different policy players whom they are addressed tests. Testing if young players Training Center will be the same as those of a professional team. These young players are in full development and training and testing necessary call.

Tests are more restricted:

For explosivity we used regularly during the season in the 10m test that is simple to perform and easily integrates into the process of training.
On the contrary force we will do regular tests on maximum force.

For the aerobic players are regularly equipped with Sport-Tester during training sessions short distances and curves are also analyzed heart and allow us to check if players do not have problem of recovery.

At the level of professional teams, these tests are carried out in a moment of respite in January to see if general indication of the group have declined. Individual assessment can be made and if a player who was injured will now make a program designed to return to the place team.

ITR-The difference between the number of heart beats recorded at the end of a maximal aerobic effort and the number of beats recorded 1 min after the termination of an effort. ITR's can be recorded in passive or active recovery.

Example:
At the end of effort = 199 pulse / min
1 min after cessation of effort = 149 pulse / min
ITR = 50. In handball admit that an ITR higher than 40 pulse / min is satisfactory.

PMA-The power to make one thing during a joined effort with an energy expenditure equal to maximal oxygen consumption (VO2 max).

VMA-maximal aerobic speed, speed of travel for which the oxygen is fully applied.

VO2 max- The maximum amount of oxygen that a person consuming it in unit time during an exercise intensely enough for the lead to exhaustion and that put into action an important muscle. It is expressed in liters per minute (L / min) or milliliters per minute and per kg of body weight (ml / min / kg).

BOSCO platform is a platform equipped with receivers connected to a clock / time on which player to jump (air) is measured and converted to cm. So get a jump measured in inches.

Squat Jump: is series of steps as tall, with hands on hips held, starting with knees bent at 90 degrees. This leap so as to start starting from the stand quality.

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