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Overview on planning

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ABSTRACT

Abstract Planning is based on a model that tends to reduce performance to a few basic conditions, as it governs training, which is a complex process of actions that act methodically and adaptively on the development of sport performance capacity. As a general rule, all planning in sport is based on the analysis of the requirements of the activity, which distinguish between conditional, cognitive and affective needs, which is insufficient, because in addition to the sports performance capacity, it is built on the foundation of the social and material environment in which the preparation takes place. This contribution on planning can help coaches to better understand the complexity of performance and planning in building success.

Keywords: performance, planning, goals, training.

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INTRODUCTION

This contribution on planning, which is based on the reality of practice in the case of Algerian football, must be understood as one of the answers to the problem of high-level sport in Algeria.

The acquisition of motor skills and the development of physical qualities require time. Knowing that the optimal state of fitness of the athlete is temporary, the duration of acquisitions and in that of the adaptation of the organism to training are the concerns that the training plan can solve. This is why the planning of training, especially of loads and rest, is one of the major methodological problems to be solved in order to achieve high performance.

This fundamental condition introduces another, namely, that relating to the rationality of the distribution of loads. It is important to know that the load is not an abstract notion, because its application and the duration of the related rest intervals are conditioned by the training objectives, whether they are intermediate or final. To do this, we used the results of a study on the management of the 9 Regional Leagues that are organised in Algerian football. The choice of the leagues is explained by the fact that we were sure to have concrete and objective answers to our questions, which would not have been the case with the Division One coaches (1).

In this context, in order to provide a basis for our reflection, we will limit ourselves to presenting some of the conclusions of the study devoted to the 9 leagues.

1. As far as the development and promotion of youth football is concerned, the technical managers of the leagues believe that they draw up their own programme. This tends to prove, that there is no national policy for the promotion of football.

2. With regard to the dominant work programme implemented by the Leagues, the only priority of the Regional Technical Directors is the prospecting and

selection of young footballers to constitute Regional Selections, the best of which are retained in the National Team. It is also necessary to question the methods of detection and selection used. Apart from this, it is worth noting that only 3 (Algiers, Batna and Blida) of the 9 Leagues have presented a technical activity report.

3. For the parameter "training of coaches", based on the answers obtained, only 7 training courses, concerning the 1st degree, have been organised (4 courses organised by Algiers, 1 by Annaba and 2 by Ouargla). It is legitimate to be concerned about the level of qualification of our coaches, because, normally, this level of competence does not give the right to exercise in the performance level.

4. To the question of the availability of financial and material resources for the realisation of the actions planned by the Technical Departments, they are unanimous in recognising their insufficiency. Except for the realisation of prospecting actions for the benefit of the National Technical Directorate.

5. Concerning the quantity and quality of equipment and sports material available to the Regional Technical Departments, the managers of these structures admit their clear insufficiencies in relation to the programme of the DTR and in view of the number of selection events to be organised.

6. In view of the permanent availability of training pitches, the Technical Directors, with the exception of the Batna and Annaba Leagues, state that they can only have them at the discretion of the clubs.

In addition to these considerations, which give a true picture of the practice and spirit of performance building, we have retained some statements by coaches and managers, which have been repeated many times, to support our conclusions and assessments on the subject. Before doing so, we believe it is useful to highlight the complexity of the phenomenon of sports performance, reflected in the multiplicity of its components and their interrelationships, which, moreover, are the subject of constant interest in scientific research, as dictated by the constant evolution of the level of performance.

We believe it is necessary to identify these components, because if reference is made to the conclusions of the study and selected statements, such as :

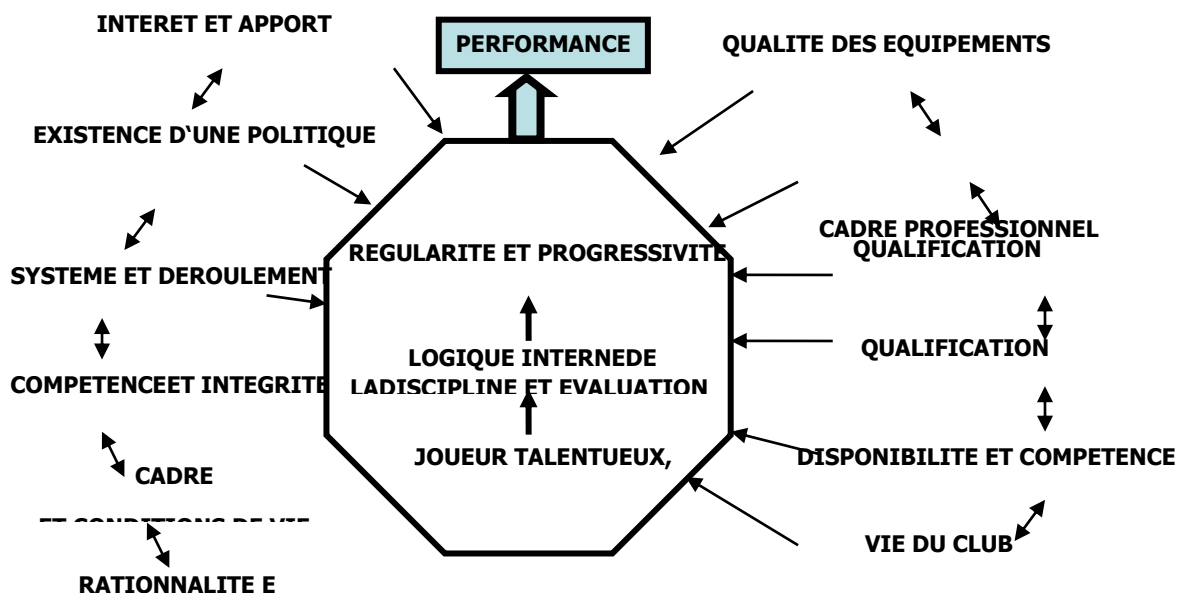
- We will manage match by match,
- We have no plans for the club, as our future is uncertain,
- We have not found a training ground, so we have programmed a session in the forest,
- We are waiting for the end of the first phase to set our goal,
- The lack of financial means explains our poor results.

We remain doubtful, and we wonder if the Algerian football officials really master the knowledge related to high level sport. It should be remembered that the concern raised does not take into account the real condition of youth football in clubs. For at this level, the situation is alarming, not to say catastrophic.

1. THE CONDITIONS FOR SPORTING PERFORMANCE

We believe that performance cannot be achieved and sustained if all the conditions are not met. In this way, we believe that performance is not an isolated fact, depending only on training, but we understand it as a multifactorial system whose determinants ensure the satisfaction of the needs it expresses in order to aspire to success.

Fig.1: Factors affecting performance achievement and player development.



Among the factors presented, all of which are equally important training, which is at the centre of the field of tension and one of the major concerns of scientists, is defined as a complex process of actions, the aim of which is to act in a methodical and adapted way on the development of sports performance capacity.

2. IMPORTANCE OF PLANNING

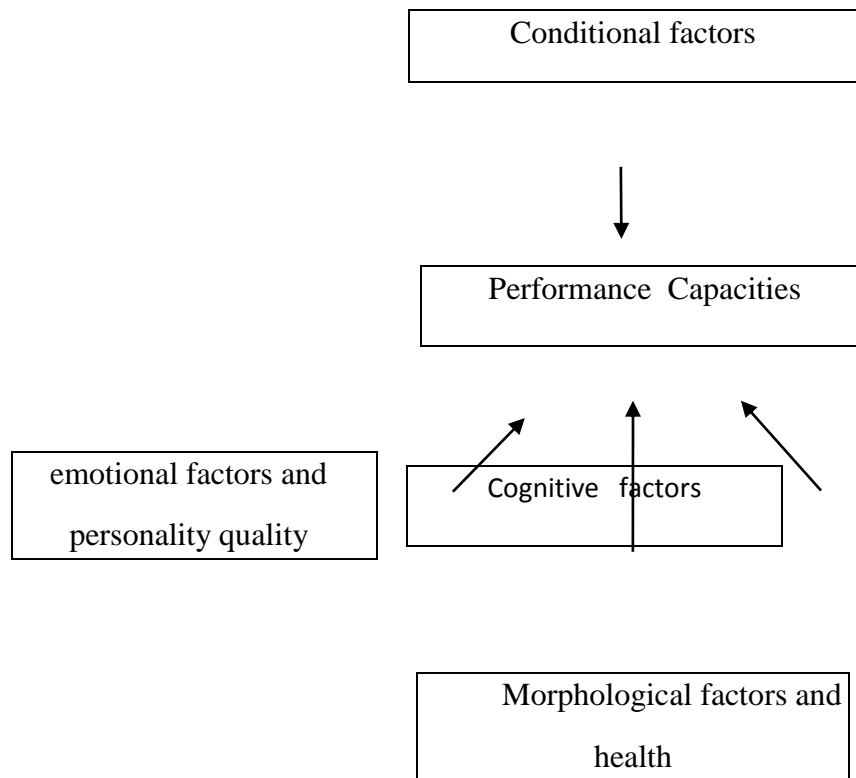
Whether in theory or in practice, researchers and technicians unanimously recognise the role of planning as an instrument for regulating the achievement of performance. Indeed, this means offers, besides the possibility of an integral representation of the preparation to be implemented, to optimise the results (intermediate and final), considering the effects of the training cycles, to progress according to the requirements of the age and level of the athlete, and to alternate the periods of effort and overcompensation to avoid the risks of under- and over-training.

This shows the importance of planning, because if you want to achieve a specific objective in the right form and time. It is important to list the actions to be carried out and then to organise them in time according to the priorities defined.

As a general rule, training planning is based on a model which tends to consider only a few basic conditions resulting from the analysis of the requirements of the activity and on which all planning in sport is based; these are the factors :

- conditional: energy, strength, speed, flexibility,
- cognitive: coordination, technique and tactics specific to the activity,
- psychological : the management of which is both a consequence of training and a goal.

Fig.2 : Factors of Performance Capacities



The acquisition of motor skills and the development of physical qualities require time, and knowing that the athlete's optimal state of fitness is transient, the duration in the field of acquisition and in that of the organism's adaptation to training are concerns that the training plan can address by setting temporary priorities chosen to develop the axes of work tending towards performance.

It is this transitional quality of priorities which ensures that the training plan has openings for ongoing work on its design and readjustment (see example of content planning below).

Table 1: Example of content planning for youth football training.

Stages and Objectives of Youth Training	2 ^{ème} Etape		Training for performance
	1 ^{ère} Etape	Improvement and further development	
	Initiation		
EXERCISES	BASIC TECHNICAL EXERCISES	ADVANCED EXERCISES IN TECHNICAL AND TACTICAL BEHAVIOUR	EXERCISES IN TECHNICAL AND TACTICAL BEHAVIOUR IN COMPETITION
METHODS & DESIGNS	ANALYTICAL METHOD GLOBAL METHOD PROGRESSIVE METHOD	COMPLEX METHOD by "playing" (Technical, Tactical, Moral and Physical)	COMPLEX METHOD IN A COMPETITIVE CONTEXT
FORMS OF ORGANISATION	in "PELE-MELE" (in groups of 2 to 5 players, depending on the number of balls available) GROUP COMPOSITION, according to the level of assimilation or technical skills (motor skills - coordination)	In "Waves", in "ROTATION", by "WORKSHOPS" or on a "REDUCED" field with a "REDUCED" number of players GROUP COMPOSITION, according to : The position, the performance or the	On ½ field or the whole field, on one or more goals GROUP COMPOSITION, Defenders, Midfielders, Attackers, Context : Attack vs Defence

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		compartment (lengthwise or crosswise)	
IMPLEMENTATION INTENSITY	Low to moderate	Moderate to submaximal	Sub-maximal
PULSE PER MINUTE	110-140/min.	130-160/min.	150-180/min.
METABOLISM REQUIRED DURING EXERCISE	Aerobic	Aérobic- Anaérobic mixed	Aérobic- Anaérobic mixed

By referring to this example, it becomes easier to understand why planning, which is an anticipation of results, must be built on the basis of the internal and external environment in which the preparation takes place (objectives to be reached, motivation, competition calendar, physical level, material conditions, etc.).

However, it should be noted that training planning cannot be assimilated to a common recipe applicable to all sports disciplines ; because the planning of physical and specific preparation is either centred on a progression leading the athlete to the optimal state of fitness for the competition period, as in athletics, or carried out in such a way as to favour adaptation to the strongest and weakest moments of a season, as in football.

2.1. GOAL SETTING

This is the starting point of all planning, the outcome of which is the achievement of the set objective with maximum efficiency within a given time period. Depending on the sport practised, the period during which the specific

qualities are at their maximum level will be more or less long, and the repetition of these periods more or less numerous.

Therefore, defining a goal means identifying exactly what you want to achieve in a given period of time, for example, to be at your best during the football World Cup. Here, the coach must not make a mistake, because being fit too early or too late changes all the data for the player as well as for the team.

In addition, the objectives can be classified by levels of importance, with a main objective and secondary objectives. These could be end-of-development cycle reviews or secondary competitions, and help to assess progress or redirect preparation.

2.2. TRAINING PLANS

Training planning is based on theoretical knowledge, practical experience and the individual and collective level of performance acquired, and structures training according to defined objectives and concretised in the form of periods corresponding to guidelines specified by plans:

- long-term

This is a career or multi-year project, spread over several years, either for the training of a young athlete who will require several years to reach the age of maturity and performance with a potential at its peak, or in relation to an objective to be achieved over several years, for example participation in the final phase of the World Cup or the Olympic Games.

In the first case, the training must be adapted to the age of the young footballer, without using the training methods used by senior players. If this is the case (training not adapted to the age of the player), and if an immediate result gives

the impression of being right, a follow-up of the performances can highlight the risks that the young person may be running.

In the second case, the aim is to progressively increase the training load each year, to reach its extremum at the time of the event or when all the determinants of performance, maturity, experience in the discipline and level of practice are at their maximum.

- medium-term plan

The medium-term plan refers to the annual plan, which encompasses the periods of orientation towards the achievement of a competitive goal. In this plan, the annual objectives set outline the configuration to be given to the different periods. Thus, depending on the circumstances, there is a single, double or multiple periodisation, single for an activity comprising only one competition period with a major event at the end of the period, double for two distinct major competition periods (case of football), and finally, multiple for an activity where a high level of performance is to be repeated several times during the sporting season.

- Short-term

In terms of short-term plans, these are the elements contained in the periods relating to the :

Macrocycle: which is a cycle corresponding to a sports orientation in the different areas of training that are physical preparation and specific preparation (technical, tactical and psychological). Its duration is generally 3 to 6 months. By referring to this example, it becomes easier to understand why planning, which is an anticipation of results, must be built on the basis of the internal and external environment in which the preparation takes place (objectives to be reached, motivation, competition calendar, physical level, material conditions, etc.).

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Mesocycle: which is the means of planning that allows for the effective and stable development of a targeted ability such as, for example, the development of strength-speed or technical-tactical improvement (finishing the attack and defensive replacement).

Its duration can vary between 2 and 5 weeks, depending on the macrocycle in which it is inserted, and whose objective is the progressive increase of fundamental capacities, the development of the qualities influencing the sporting form or the transfer of these qualities to those required in competition. Generally, mesocycles are longer in the preparatory period (4 to 5 weeks) than in the competitive period (2 to 3 weeks).

Microcycle: which is a homogeneous set of training sessions. The microcycle allows for the variation of the levels of solicitation (fatigue / recovery) within the mesocycle, which is essential to favour the athlete's progression.

Lasting one week, there are various types of microcycles such as those to increase the ability to bear increasingly heavy loads, so-called shock microcycles which help the effective development of the individual's capacities, pre-competitive microcycles intended to prepare the athlete for competition conditions, microcycles including competitions which favour specific work and recovery, and recovery microcycles which are essential for the assimilation of the previous work and the regeneration of capacities by reducing the state of fatigue.

Session: this is identified with the training of one (single objective) or several (multiple objective) performance factors. During the development phases, a

footballer's training is organised with a high number of sessions per microcycle, based on his high level of practice, whereas for players of a lower level, multiple objective sessions help to achieve a high volume of work.

In this context, it is worth noting the importance of the variety of exercises to be proposed during a univocal high-intensity session, because the repetition of uniform means leads the athlete to an adaptation to the effort undergone and to a weariness that does not allow the surpassing of oneself, whereas a series of exercises varied in form, but centred on the same goal, allow the maintenance of a strong psychological aptitude for the effort and increases the effectiveness of the session.

2.3. ORGANISATION OF TRAINING

As not all qualities can be developed at the same time, the trainer must deal with the succession, overlap and organisation of the different training periods in order to progress all sporting qualities. As a general rule, these periods distinguish between :

- The preparatory period incorporates two phases which can be described as the introductory phase and the development phase;
- The competition period is considered to be the stabilisation phase of the acquired form;
- The transition period is considered a regression or regeneration phase.

- The preparatory period

The introductory phase corresponds to the learning of new skills; the idea of developing potential and performance level is not present here. However, it will later serve as the basis for the rest of the training and preparation process.

The second phase concerns the acquisition, development and harmonisation of general and then activity-specific qualities. It takes shape from the initial observation to a precise objective.

- The competition period

This is the period when the abilities developed during the acquisition phase are consolidated to reach their highest level. This phase, which coincides with the competition period, has the objective of maintaining the expression of the abilities at their highest level for as long as possible, if possible for the entire period. Otherwise, this phase can be identified with the culmination of a targeted capacity development phase, from which a new cycle of progression can be established.

- The transition period

This is the period when physical abilities that are no longer specifically developed regress. The duration of this phase must be sufficient to ensure effective regeneration, without a total loss of skills.

3. OVERVIEW OF THE CONCEPT OF TRAINING LOAD

Raising the functional level of the organism and stabilising it over a period of time is one of the priorities at each stage of the preparation process. It is clear that this can only be achieved through rational training that generates physiological and biological changes in the body. However, in some cases, the failure to control the demands of physical loading can lead to the opposite desired effect, i.e. an increase in functional possibilities. Generally, this happens when load and rest are alternated without taking into account the characteristics of the educational tasks and the possibilities of the footballers.

In this respect, we understand that the planning of load and rest is one of the major methodological problems in the preparation of footballers and a fundamental condition for the rationality of training. In this respect, it is important to know that the load is not an abstract notion, its application and the duration of the rest intervals are conditioned by the objectives of the training. It is therefore important to plan the loads and determine the rest intervals between repetitions, sets and training sessions, with reference to the methodology.

The training load, which is characterised by volume and intensity, represents the amount of work per unit of time or volume (the unit can be the day, week, cycle or year) in addition to the intensity with which this work is performed. The

measurement of intensity is more complex than that of quantity, because it must always take into account the maximum capacity of the player, and despite this, remains very difficult to assess. So, if the external load is measurable, on the other hand, the organism undergoes the internal load which must be evaluated, because having the same internal load for a beginner footballer and a "high level" footballer means having two different external loads.

3.1. QUANTIFYING THE LOAD

The training load depends on the duration of the exercises, their intensity as well as the recovery times between them (complexity and specificity do not strictly speaking enter into the calculation, it is rather the form of the exercises that reflects these factors). For example, a long training session does not necessarily result in a high load value if the intensity is low, whereas an intense training session can achieve a high load value even over a short period.

In addition, a training session which involves intensive but partial and local muscular training (e.g. bodybuilding) will not necessarily result in a high load value as a training session which involves the whole of the general muscular mass.

The calculation of loads is a thorny issue for both trainers and researchers. Several methods of quantifying training have been proposed, some of which have been used successfully, but to date there is no method of effectively quantifying the training load for complex activities such as football. This is because it is difficult to correctly assess the load associated with training or competitive activities performed at supra-maximal intensities where heart rate cannot be used (plyometrics, confrontation, etc.).

CONCLUSION

This contribution on planning, which is an approach based on the study and statements of football managers, has also been influenced by the methodology of coaching through the analysis of numerous models of sports performance development.

Within this framework, some of the ideas may seem too vague from a scientific point of view, and we are aware of this, but nevertheless, we hope that this

article, written especially for coaches, will enable them to better understand the multiple demands of performance. The performance is made up of different factors that interact to achieve high level results. However, it is important to know that the coach is the only real vector of intervention on the athlete, because only he can "remodel" the planning and propose a training load according to the physical and psychological state of the player.

Finally, we would like to mention that the art of coaching and/or training is a difficult exercise, which requires the coach to have a solid theoretical knowledge of the different factors of performance, the methodology of training and the characteristics of modern football. However, this theoretical knowledge is not sufficient without experience in coaching, without the ability to question oneself and without the desire to progress, because this is what allows the coach to progress continuously in his job.

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