

TACTICAL PERIODIZATION: MOURINHO'S BEST-KEPT SECRET?

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TACTICAL PERIODIZATION: A NEW SOCCER TRAINING APPROACH

“We can differentiate among traditional analytical training where the different factors are trained in isolation, the integrated training, which uses the ball but where the fundamental concerns are not very different from the traditional one; and there is my way of training, which is called Tactical Periodization. It has nothing to do with the previous two even though many people could think so.” (Mourinho, J. in Gaitero, 2006)

In recent years, we have seen a trend toward a change in soccer training concepts and methodologies. Perhaps the biggest rupture with the traditional training methods in soccer has taken place in Portugal and Spain. One of the most contemporary training approaches in soccer is the so-called “Tactical Periodization.” The Tactical Periodization method was developed by Vítor Frade, lecturer at the Sports University of Porto (Portugal), and it is being applied by Jose Mourinho and Andre Vilas Boas among other coaches. Explained simplistically, the main methodological and pedagogical principle behind Tactical Periodization is that the soccer game has to be “trained/learned” respecting its logical structure. For Tactical Periodization, the “logical structure” of the game revolves around the four moments of the game (see Figure 1). Accordingly, at least one of these four moments of the game is always present in every training exercise following the called principle of Specificity.



Figure 1. Moments of the soccer game.

Every game action, regardless of the four moments of the game in which it might happen, involves a decision (tactical dimension), an action or motor skill (technical dimension) that required a particular movement (physiological dimension) and is directed by volitional and emotional states (psychological dimension) (Oliveira, 2004).

A good performer (i.e., a good soccer player) is an individual able to select the most appropriate action to respond to different game scenarios, and these actions are always determined by a tactical context (Garganta & Pinto, 1998). Accordingly, the tactical dimension should be the dominant training component. For example, the concept of “speed” would change to relative speed. However, the tactical dimension does not exist by itself; it makes sense only when it occurs through the interaction of the other three dimensions (Oliveira, 2004).

This implies that the tactical, technical, physiological and psychological elements are never trained independently. Everything is included, with the main concern being that every exercise is organized around (at least) one of the four moments of the game and the tactical principles of play.

The tactical principles of play refer to a set of match-play patterns that a coach wants a team to adopt at any of the four moments of the game. It is how a coach wants the team to play soccer; a conception of the game. Given the high unpredictability that exists during a match, a coach tries to create predictability through preparation, planning and training. Accordingly, every training session is designed to fit the coach's game model. The systematic repetition of the tactical principles of play should enable the players to transform the match-play patterns that the coach wants into habits. Creating habits is possible only when the brain has experienced the same or similar situations and has “recorded” them.

The work of Haggard & Libet (2001) showed that the brain prepares movement responses long before a person is aware that a movement will occur. Actions and decisions that are taken daily, that seem to be conscious and instant, are in fact the result of subconscious processes in the brain. Thus, through these habits, decision and reaction times can be reduced substantially (McCrone, 2002). This way of training is intended to prepare a player to understand and react more quickly to every possible game situation.

GAME MODEL

“To me, the most important aspect in my teams is to have a defined game model, a set of principles that provides organization. Therefore, since the first day our attention is directed to achieve that.” (Mourinho, J. in Gaitero, 2006)

Modeling results from the need to make intelligible the complexity of the interactions between the different elements of a system. In the game of soccer, there are specific features such as players' decision-making. This decision-making cannot be coincidental, but has to be based on certain principles that follow an internal logic. While constructing the game model of the team, coaches should consider several factors that operate within a given specific context, where each factor is equally important (see Figure 2).



Figure 2. Factors that influence in designing and building up a game model. (Adapted from Oliveira, G. 2007)

A key aspect in building the game model relates to the idea of play that the coach wants to see. It is imperative that players know exactly what they have to do in every moment of the game. A coach will want certain tactical behaviors and patterns to be revealed during the game.

Thus, the model consists of principles, sub-principles, and sub-sub-principles of play that represent different moments of the game (Oliveira, 2003).

The compatibility of the different principles and moments of the game is particularly important, because behaviors sometimes can be incompatible. These behaviors and patterns will express a collective dynamic behavior, revealing a certain playing identity, which could be called a functional organization. The structural organization is how the team is placed on the field; it is usually called system of play, for example 1-5-3-2 or 1-4-3-3. Although the structure represents only a fixed spatial shape, it can have an important role in promoting or constraining the desired behaviors. For instance, to have good levels of ball possession and circulation, players create diagonals and “diamonds.” Some structural organizations can enhance these behaviors more than others (e.g., structures with a high number of lines, both transversal and longitudinal).

Regarding players, the game model has to highlight and enhance their best features and capabilities. It is essential that the coach develop a deep knowledge of the players, especially their level of game understanding. In this regard, Frade (2003) points out that the game “has to be born first in the players’ minds.” Therefore, it is crucial for the coach to use strategies to let the players recognize the importance of certain behaviors. Consequently, the construction of the game model arises through a process that operates among the coach, players and the team itself. The coach’s constant awareness about what should happen both in collective and individual terms and what is actually happening in the game should be the driver of the training process.

However, it is important to understand that the definition and creation of a clear game model should not be perceived as something that will require players to act as “robots” following a predefined plan. On the contrary, the main purpose of having a clear game model is to reduce players’ uncertainty, which should give players more time to use their creativity.

The structure and expectations of a club or federation are also an important aspect in creating a game model. Coaching a team that can train only two or three times a week is different from coaching one that can practiced five days. The scope for improvement both collectively and individually is also different. The culture of the countries and clubs has to be considered when creating a game model.

TACTICAL PERIODIZATION: METHODOLOGICAL PRINCIPLES

The Tactical Periodization has defined and developed unique methodological (pedagogical) principles.

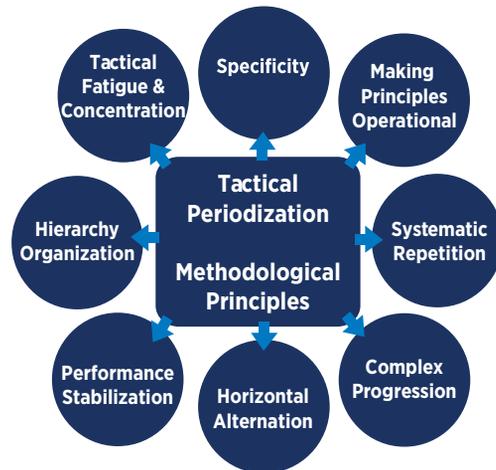


Figure 3. Methodological principles of the Tactical Periodization.

PRINCIPLE OF SPECIFICITY

“For me training means to train in specificity. That is, to create exercises that allow me to exacerbate my principles of play.”
(Mourinho, in Amieiro et al, 2006)

This may be the most important principle of Tactical Periodization. Specificity arises when there is a permanent relationship between all the dimensions of the game and the training exercises are specifically representative of the game model (style of play). Therefore, the concept of Specificity directs and leads the training process. In this regard, Vitor Frade (in Silva, 1998), affirms that regardless of the training exercises’ features (e.g., with more or fewer players, larger or smaller spaces), they should always be articulated in a way that enables our principles of play to be learned and used in competition. But every exercise is just “potentially specific.” The fulfillment of the Principle of Specificity will be achieved only if during training players understand the aims and objectives of the exercise, they maintain high levels of concentration, and the coach’s intervention is appropriated (Oliveira, 2008). Then, specificity is related to the capacity to make operational the principles of play, and their respective sub-principles.

PRINCIPLE OF MAKING TACTICAL PRINCIPLES OF PLAY OPERATIONAL

“One of the most difficult questions is to make operational our style of play that by creating exercises where we are able to embrace all aspects (dimensions), but never forgetting our first concern: to enhance a given principle of play of our game model.” (Mourinho, J. in Gaitero, 2006)

A team tends to be attracted to a dynamic behavior that represents its identity and describes a pattern of action. To transform these patterns into practice, every training exercise must relate to the style of play (game model) and the concept of specificity (see above). These references should be present in daily work, in order to provide specific adaptations and tactical knowledge. If the proposed exercise is designed without taking into consideration the style of play, the promoted adaptations can have adverse effects and interfere with acquisition of the desired knowledge. It is crucial that the exercises represent the way we want to play and the randomness and unpredictability that the game has. This implies that each of the proposed exercises has to lead to something that players do not control. If the game is nonlinear, the training exercises, even being less complex, should be nonlinear, excluding any direct cause-effect relationship. The coach’s intervention plays a key role in conducting the exercise, catalyzing in a positive or negative way its specificity.

It is also important to note that the structural and functional configuration of the exercises is crucial in order to comply with the specificity of the game. It means that some exercises, because of their structure, promote functionality (e.g., the acquisition of non-conscious behaviors).

PRINCIPLE OF DISASSEMBLY AND HIERARCHICAL ORGANIZATION OF PRINCIPLES OF PLAY

“I wrote a document that never is going to be published. It is my training dossier, where I keep all my training guidelines. That is, all my training goals and the way to achieve them through my methodological principles; ‘to improve these given principles, these exercises.’ If I should have to name this document, its title would be: ‘The evolution of my training concepts.’

(Mourinho, J. in Lourenço, L. & Ilharco, 2007)



Principles of play are complex concepts because they involve several variables that are related. This is why Tactical Periodization breaks them down to reduce their complexity. Thus, principles of play are subdivided into sub-principles, and these are further fragmented into sub-sub principles. The aim is to make them more understandable for the players. This process of disassembling the principles of play has to be done carefully, respecting the style of play (game model) and the wholeness of the game (systemic vision). Each specific principle of the game model is directly related to one of the four moments of the game (see Figure 4 for an example). Not an equal value is given to all the principles of play. Thus, there is a hierarchical organization. The importance of each principle during the training process is directly related to the intended game model. Some principles are more important and valued than others in terms of what is intended. A coach’s ability to articulate all the principles that conform to a game model will help determine the team’s DNA, the coach’s conception of the game (Tamarit, 2007).

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Figure 4. Example of the Disassemble of a Principle of Play.
(Adapted from Gomes, M. (2006)

PRINCIPLE OF HORIZONTAL ALTERNATION IN SPECIFICITY

“Our daily concerns are directed to make operational our game model. However, the structure of the training session and what to do each day is related not only to tactical objectives, but also with the physical fitness component to be privileged.”

(Mourinho, in Amieiro et al., 2006)

This principle relates to the necessity of maintaining a regular and fixed weekly pattern respecting the alternation in the training-recovery demands (Amieiro et al., 2006). The Principle of Horizontal Alternation in Specificity highlights the importance and relevance that Tactical Periodization gives to the physiological dimension, contrary to the unfounded misconception that this dimension is forgotten and not trained. In a simplistic manner, the three main training (acquisition) days (see Figure 5) in the week will alternate the physical fitness component (we are here assuming that the team is playing one game per week).

This is done by either prioritizing strength (first acquisition day), endurance (second acquisition day) and speed (third acquisition day) factors. Thus, no two days within a given week are demanding the same physical fitness component. The main goal is to avoid a large amount of the same physical fitness component stressed the day before, giving the body time to recover. Recovery would take place, at least partly, by switching the dominant physical fitness component throughout the week. This alternation in the physical fitness components to be prioritized is said to occur horizontally along the weekly pattern rather than

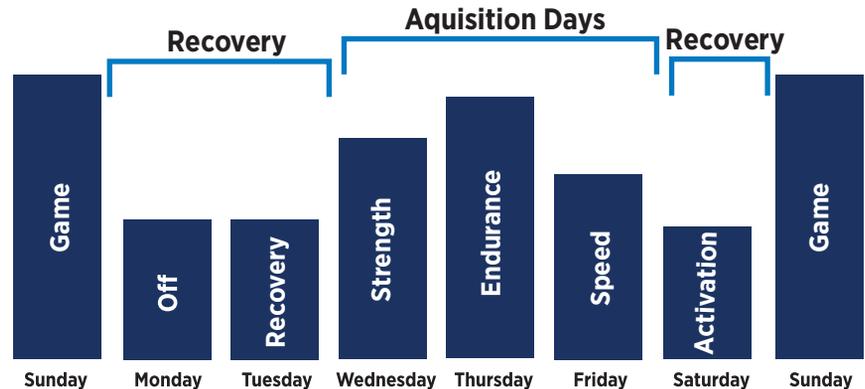


Figure 5. Standard weekly pattern. (Adapted from Oliveira, 2007)

between exercises within the same training session (vertically). The tactical goals of each training day may vary in accordance with the specific needs of the team, but the physical fitness component used on a given day of the week will remain the same. Thus, it can be said that for Tactical Periodization, the physiological dimension provides the biological framework where the soccer-specific training/recovery continuum lies.

PRINCIPLE OF CONDITIONED PRACTICES

“Training is worth it only when it lets you make your ideas and principles operational. Thus, the coach has to find exercises to guide his team to do what it is intended to do in the game.” (Mourinho, J. in Gaitero, 2006)

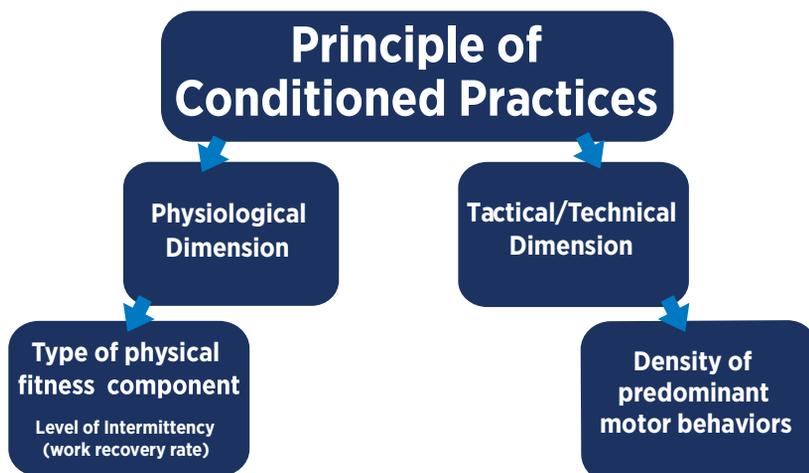


Figure 6. Principle of conditioned practices.

When the aim is to teach or improve a particular principle or sub-principle of a game model, the best way to do it is to create appropriate exercises. Then, if we are interested in certain behaviors related to a given principle of play, we should make them appear more often than others in the exercise. As such, the requested behavior has to appear more frequently than during the formal game, enabling players to create mental images about the desired target. Thus, the configuration of the exercise (e.g., playing space, number of players, rules, objectives) must promote the appearance of the required behaviors, what are called “conditioned practices” (see Figure 6). For example, setting up an exercise where a team’s defensive sector is under-loaded and is constantly defending will make behaviors related to its defensive organization emerge. Then, there will be many opportunities for coaches and players to “shape” these behaviors.

PRINCIPLE OF COMPLEX PROGRESSION

“Since the very beginning, the principles and sub-principles of our game model are privileged through a set of exercises. But the best way to convey our ideas is by lowering the complexity through reduced games.” (Mourinho, J. in Fernandes, 2003)

This principle relates to the hierarchical organization of the principles and sub-principles of play. It has nothing to do with a general to specific progression, from volume to intensity. For Tactical Periodization, the concept of progression is built around the acquisition of a certain way of playing. This progression appears at three different levels of complexity: during the season, throughout the week (taking into account the last game and the next one) and finally during each training session, thus becoming a complex progression where each level is related to the others.

According to Frade (2004), at the early stages of the training season we should introduce the general principles of play (related to four moments of the game—defensive organization, offensive organization, transition defense-attack and transition attack-defense). If players know and can explain when to apply the principles of play relative to each moment, it will be easier for them to assimilate the specific principles that each coach has in a game model. In a second phase, we will work on the specific principles of “our” model of game. At this stage we can distinguish two moments. The first: the defensive organization of the team, which we will begin to work with. According to Tactical Periodization, it is preferred to focus first on defensive organization, because by having a good defensive balance the team will gain confidence and consistency, enabling coaches to progress into other game situations (defending properly to attack even better). In addition, to defend is “easier” than to attack. Then, coaches will move to more complex behaviors, such as the offensive organization. The transitions are key in soccer, so coaches should try to train them from the beginning. They will obviously be linked to the team’s defensive and offensive organization.

To understand the entire logical structure, we should link the Principle of Complex Progression to the Principle of Horizontal Specificity Alternation. We refer to a “building up” and “disassembly” of the principles and sub-principles and their hierarchy inside the weekly plan and over weeks according to the evolution of the players and the team. This methodological principle has two levels of planning which interact with each other, the short-term (game to game) and medium- and long-term (style of play/game model).

PRINCIPLE OF PERFORMANCE STABILIZATION

“I do not want my team to have peaks in performance. I do not want my team to swing performance. Rather than that, I prefer to keep always high levels of performance. This is because to me there aren’t periods or games more important than others.”

(Mourinho, in Amieiro et al, 2006)

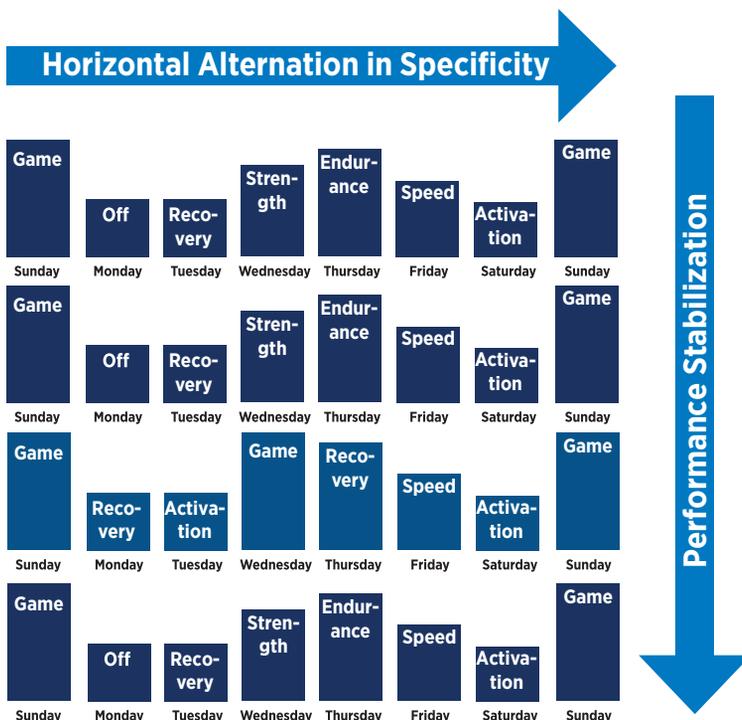


Figure 7. Interaction between horizontal alternation and performance stabilization principles. (Adapted from Oliveira, G. 2007)

The concept of performance from a conventional viewpoint is normally based on a set of quantitative- oriented criteria based essentially on the physiological dimension. Planning and periodization in soccer are vital to the concept of “performance stabilization,” derived from its long competitive period. From this perspective, “being fit” is to “play well.” And “play well” is to carry out the on-field duties in accordance with the game model that is intended. The basis of collective and individual performance is the organization of the team, which is the fundamental objective to be maintained. Thus, what really matters is that a team regularly demonstrates a quality of play (despite minor fluctuations) to guarantee regularity in the results.

The stabilization of the level of optimum performance is achieved through the establishment and maintenance of the standard weekly plan (see Figure 7). Thus, over the season, a weekly dynamic regarding training contents, recovery schemes and the number and length of training units remain almost invariable. Soccer performance and training cannot be separated from the competition and the game. It must be translated in terms of play, a quality instead of quantity approach, working always on offensive and defensive actions and the dynamics, which allow the connection of these two moments. By working such way, the methodological Principle of Stabilization is respected.

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PRINCIPLE OF TACTICAL FATIGUE & TACTICAL CONCENTRATION

“Concentration needs to be trained. It can be done by training according to a specific philosophy. I cannot dissociate training intensity with the concept of concentration. When I say that soccer is made by actions of high intensity, I also refer to the need of permanent concentration; it is implicit to the game.” (Mourinho, in Amieiro et al, 2006)

Soccer players' peak performance requires a constant tactical thinking, both in game and in training. Players must concentrate. The development of a tactical attitude presupposes the development of an attitude to think and decide quickly. The mastery of specific techniques and the capacity for tactical decision-making depends on their suitability to the situation of a game. That means high levels of concentration from the first to the last minute of the game are essential. Therefore, the intensity is not an intangible concept; it is directly related to the principles and sub-principles of play, which, when trained through well-designed exercises, will lead a player's future actions and thoughts. The more variables to be analyzed for the players during the execution of training exercises, the more demanding and intense will be the situation (Frade, 2003).

Intensity will be different from day to day, as the complexity of training sessions varies (see Figure 8). We can exemplify the concept of relative maximum intensity as follows: A team played on Sunday, so the player on Monday and Tuesday is not fully recovered physically, mentally or emotionally. To be able to overcome all the challenges that Tuesday training session can require, the player should be working at a maximum intensity of concentration.

That maximum intensity, however, will not be enough to overcome the increased complexity (and intensity) that the training tasks will demand on Wednesday and Thursday (a player's recovery level from the game is higher, too). Therefore, from Tactical Periodization, the intensity is always maximal in terms of concentration, but relative to players' recovery and readiness to train.

The higher levels of concentration during the training exercise, the less chance to make mistakes. A high concentration provides a higher degree of learning. Consequently, coaches should always seek the maximum concentration in training.



Figure 8. Factors to manage to manage exercises complexity.

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