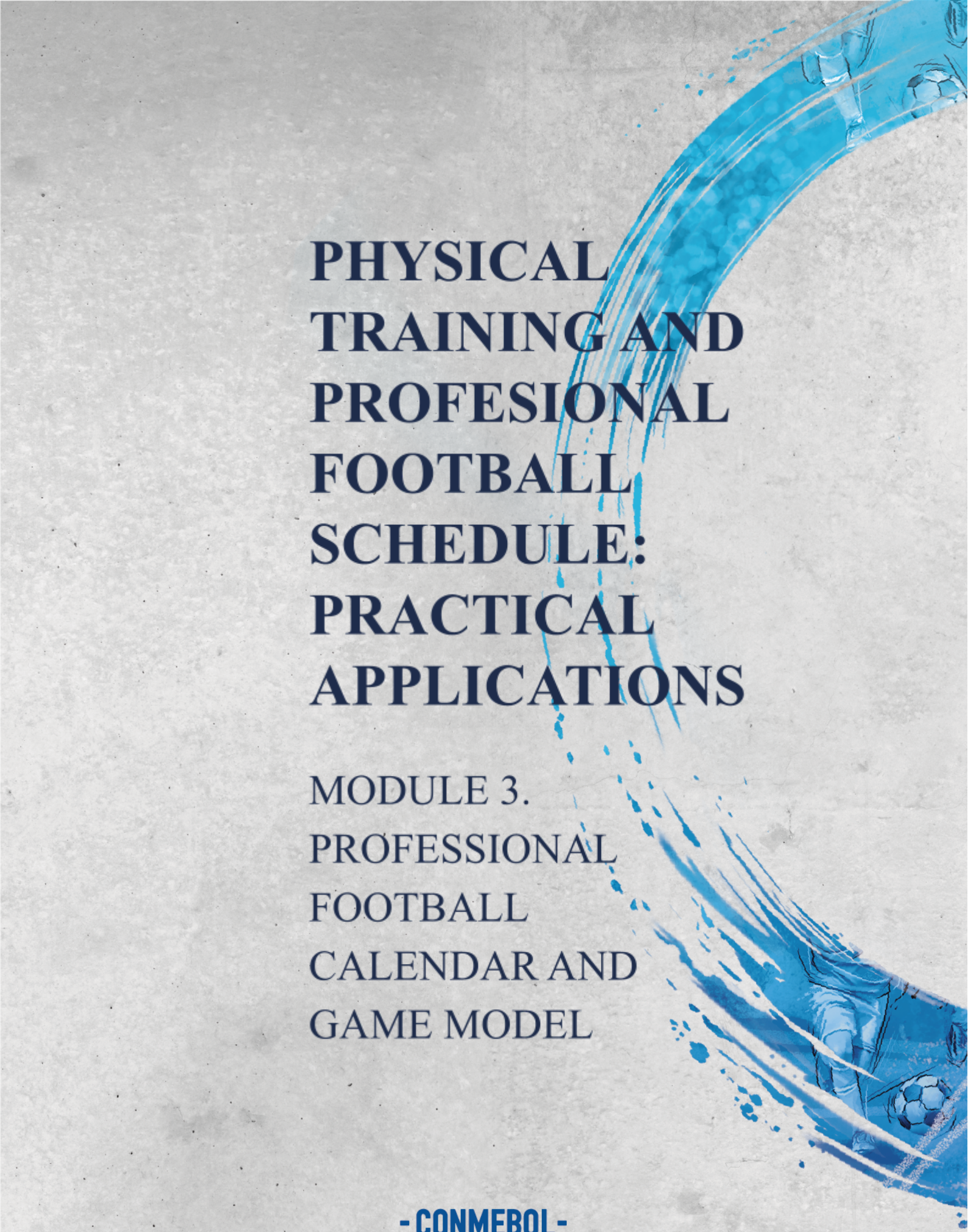
PHYSICAL TRAINING AND PROFESIONAL FOOTBALL SCHEDULE: PRACTICAL APPLICATIONS

MODULE 3. PROFESSIONAL FOOTBALL CALENDAR AND GAME MODEL



-CONMEBOL-
EVOLUCIÓN

Presentation

In Module 3 we come to the moment of analyzing, in practice, the professional football calendar, addressing its particularities and challenges throughout the season.

The routine of a professional football club is exhausting and complex to manage, given the demands and high standards for success on the field. Unlike many places in the world, football in South America has its peculiarities, ranging from the number of competitions and matches to traveling within countries with continental proportions.

In this module we will highlight the professional football calendar in South American countries, the characteristics of preseason and examples of microcycles in the reality of professional football.

It is important to note that any and all comparisons must be made respecting the reality of the club and the circumstances of each country's football calendar. That said, let's move on!

Unit 3.1 Professional football calendar: particularities and challenges

Unlike individual sports or even other **team sports**, the professional football schedule presents very unique characteristics and enormous challenges to the demands of the season. Before talking about football, it is necessary to mention how the individual sports season works, as they are modalities that have influenced and influence the planning of team sports.

Regarding the **duration of the season**, **individual sports** such as swimming, athletics, tennis and wrestling have annual calendars, divided into **preparatory, competitive and transitory periods**. In other words, each competition has a specific preparation period, which involves all the elements of the sport: physical, technical, tactical and mental. Curiously, in tennis, the preparatory period (or commonly called pre-season, as in football) takes place in December and after this period, practically the entire following year is made up of trips and tournaments.

Individual sports, for the most part, use periodization models created in the 1950s and 1960s, with a **planning and training structure** that targets ***performance*** **peaks**. These *performance* peaks consist of the **key moments of the season**, that **peak of sport**

performance that can culminate with the victory and the gold medal of that target competition.

Each mesocycle (term used to characterize the period of 1 month or months of activity) has a well-defined structure of **general, specific, pre-competitive, competitive and transitional preparation**. These mesocycles are repeated throughout the several years of the athlete's career, organized in macrocycles such as, for example, the 4-year Olympic cycle.

Now reflect for a moment:

Given the characteristics of football, do these traditional periodization models fit the reality of the calendar?

Should reaching several *performance* peaks be a goal in football? Should the expected *performance* peaks be physical or technical/tactical?

Unlike individual sports, **football does not have preparation periods throughout the year focused on specific competitions.** There is no room for a transitional period (apart from the post-season vacations) in which the athlete's *performance* can be fully restored, allowing for another training cycle to be initiated at a later date.

Specifically in **team sports such as football**, the season **lasts about a year**, with **long championships (months)** and at times, happening **simultaneously**. Normally, the calendar is divided into **pre-season (this will be discussed later), competitive and transitional period**.

When creating the season plan, the professional football club must **consider essential aspects such as calendar, number of competitions, infrastructure, travel logistics, size of the squad, etc.** However, when we refer to the sports planning of the athlete/team, how the contents, training units, workloads and other important elements will be distributed, many other details must be considered and analyzed.

Long-term periodization, advocated by macro-, meso- and micro-cycle models from Eastern European countries, does not seem to fit the **reality of the professional football calendar**. Guided by the new concepts of athlete load monitoring, it is **very difficult to create an annual periodization** and expect the athlete/football team *performance* to occur exactly as planned, at the expected time.

The various skills and abilities that need to be developed throughout the season, **occur in parallel** and **often under concurrent effect**, making it difficult to organize training in

the preseason and during competitions. This is one of the main reasons **why traditional periodization models do not fit the reality of professional football.**

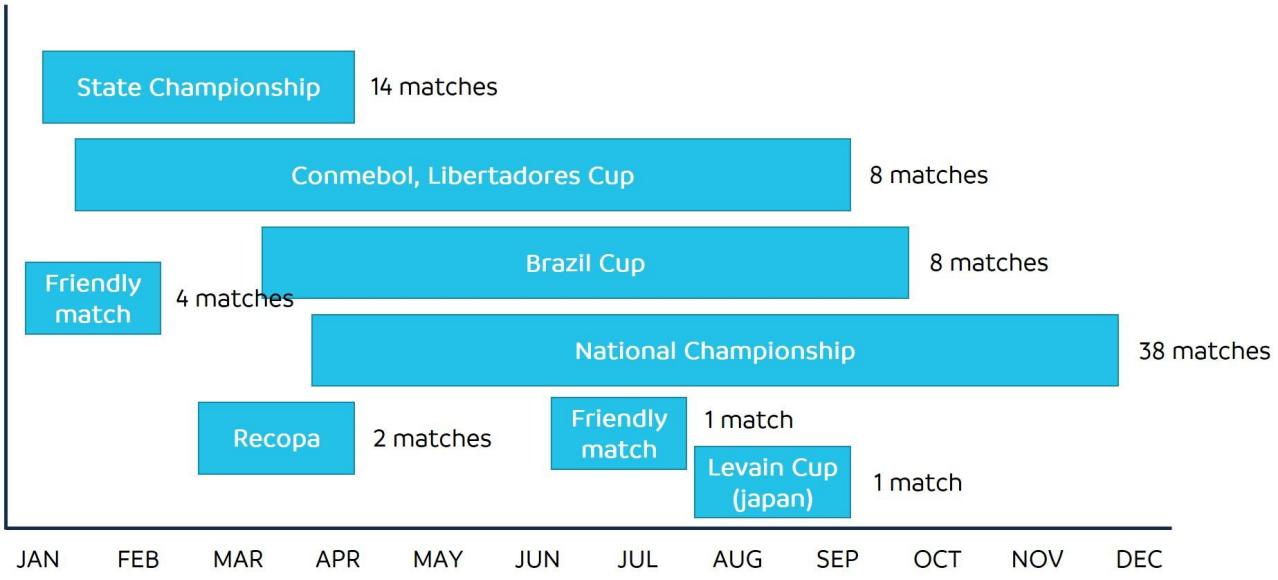
For example, in Brazil the season starts in January and ends in December of the same year, and in Argentina the season starts in July and ends in March of the following year. Depending on the country and region, the number and format of competitions are different, which guides the planning and preparation of a professional football team.

In Argentina, a professional 1st division team plays at **least 42 matches during the season**, including the Professional League, Copa Argentina, Superliga Cup and CONMEBOL Libertadores Cup (group stage). **In Chile**, on the other hand, **at least 34 matches** are played during the season, including the Chilean Championship, Chilean Cup and CONMEBOL Sudamericana Cup.

In Brazil, a 1st division professional team plays at **least 50 matches per year**, considering state championships (January to April), national championship (May to December) and qualifying competitions (Copa do Brasil, Copa CONMEBOL Libertadores and Copa CONMEBOL Sudamericana).

See below the schedule of a 1st division Brazilian football team in the 2019 season and reflect on the number of matches and the challenges it represents.

Figure 1: Calendar of a Brazilian 1st division football team



Source: own elaboration.

Some Brazilian teams use strategies to minimize the accumulation of matches of the main team throughout the season, such as, for example, **using the youth category (U-23)** to play the **state championship** at the beginning of the year. This is a peculiarity of Brazilian football, considering that, in other South American countries, there are no state championships.

A factor to highlight for reflection on the competition calendar is: the interval of days between matches. For the same Brazilian team in the example above, **86.5% of the matches played in 2019 were with 4 days or less** interval, that is, **a match every 4.31 days**. This is what we call **tight or congested calendar**.

For the sake of reference and clarity, let's compare it with the reality of Chilean and Argentinean football. A Chilean 1st division team played only **26.5% of the matches with 4 days or less of interval** in the 2019/20 season. In the 2019/20 season in Argentina, a 1st division team played **42.9% of the matches with 4 days or less interval**.

In addition, imagine the challenge of competing in **several championships** (national and international) at the same time, considering **travel logistics, geographical differences, time zones, weather changes and other obstacles** (we will see case studies later). How prepared will the athletes be to perform at a high level throughout the season and provide the spectacle that the fans expect?

Periodization or planning?

The **periodization** of the sports training process consists, first of all, in creating a **system of plans** for different periods that pursue a set of **mutually linked objectives** (Gomez and Zakharov cited in Guarabyra, 2009, p. 7).

The structure of preparation of the athlete is understood by the forms of **systematization of the content**, in which the set of connections between the elements of the training system must ensure its integrity and special orientation towards the **sports result.**

The periodization of training is not an isolated part of the whole, that is, the planning of training, but a phase of the process of elaboration of the plan, which seeks to unite all the variables involved in the preparation of the athlete.

From the perspective that planning is different from periodizing, in the sense of not creating long and rigid training cycles under a cause-effect approach, we can conclude that the term planning is suitable for football. And I will explain why.

The planning necessary for the **reality of football** is to create a **base schedule** that will be the **driver for decision making**. Above all, it must be a document. **open and flexible**

enough for adjustments as complications and unforeseen events occur. And they will occur!

Given all that can appear during training and matches, **the planning is built weekly** to be **sensitive to changes**. There are several factors that modify the weekly planning such as: **tactical choice of the coach, rotation of athletes, wear and tear throughout the matches, injuries, national team call-ups, etc.**

The preseason

As we have highlighted previously, the characteristic of the professional football calendar does not allow for several blocks of preparation in the year under the traditional molds of training theory. Therefore, a period highly prioritized by the coaching staff is the **preseason**. This period consists of the moment of **preparation for the start of the competitions, after the transition phase (vacation) of the previous season.**

The period of **detraining during the vacations**, due to inactivity or low activity of athletes, can have consequences for the start of the preseason. Some professional football clubs already use **remote training strategies to monitor the physical condition of their athletes.** It is a fact that keeping the body active during the vacations can **minimize difficulties when returning to training in the preseason**.

However, here it is worth emphasizing that **vacations** should be a **time of rest**, to **get out of the routine**, and **refresh the body and mind**. The reduction of *performance* in this transitory phase **is part of the lasting cycle of the sports career**.

Well, with the evolution of physical preparation and training methods (as discussed in Module 1), **pre-season planning has changed in football.** Before, rooted in traditional models of classical periodization, the preseason routine was subdivided into: medical and physiotherapeutic evaluations, *performance* evaluations and then isolated physical training alone with the physical trainer. The athletes were then "handed over" into the hands of the trainer.

Let us reflect a little.

Considering the 30 days of vacation to which the athlete is entitled and the start date of the first competition of the year, how many days of preparation are ideal? Or, rather, how many days are normally available in the reality of football?

In general, **this preparation period can last from 15 to 30 days (there are places that have up to 1 month)**, depending on the **country's calendar and the competitions** ahead. Three fundamental points stand out here:

First, 15 days is too short to minimally develop the athlete/team in all skills. Given all the physical/physiological, technical and tactical content that the coaching staff needs to apply, there is not enough time to spread it out over two weeks, without having to speed up the process and overload the athletes.

Secondly, **the objective of the preseason**, previously influenced by the priority focus on physical development, is moving **towards a systemic vision**. Time is now short for adequate preparation, so it no longer makes sense to use the first few weeks only to physically stimulate athletes, decontextualized from the game of football, as was done decades ago.

And finally, a short preseason may be insufficient to reach the optimal state of *performance* at the start of the first competition. For this reason, within the planning of the coaching staff, it should be clear that often during the initial rounds, the athlete/team will still be in the stage of improving their sporting form. This is an important point to consider in terms of the relationship between expectations and the reality of club football performance.

And if so, does the club have 30 days or more to prepare? Does this effect on sporting *performance* last the entire season?

It is difficult to state this categorically, as many events will occur throughout the season, which will influence the athlete/team's responses to the obstacles that will present themselves.

However, one thing is certain: thinking about physical preparation, **building the base (chronic load)** from a **controlled progression of training and matches**, creating **a "protective effect"** and being **constantly stimulated in adequate doses throughout the** season, increase the chances of the athlete / team to withstand the competitions.

Otherwise, a preseason without a "built wall" can generate a domino effect of imbalances in athletic form and problems down the road.

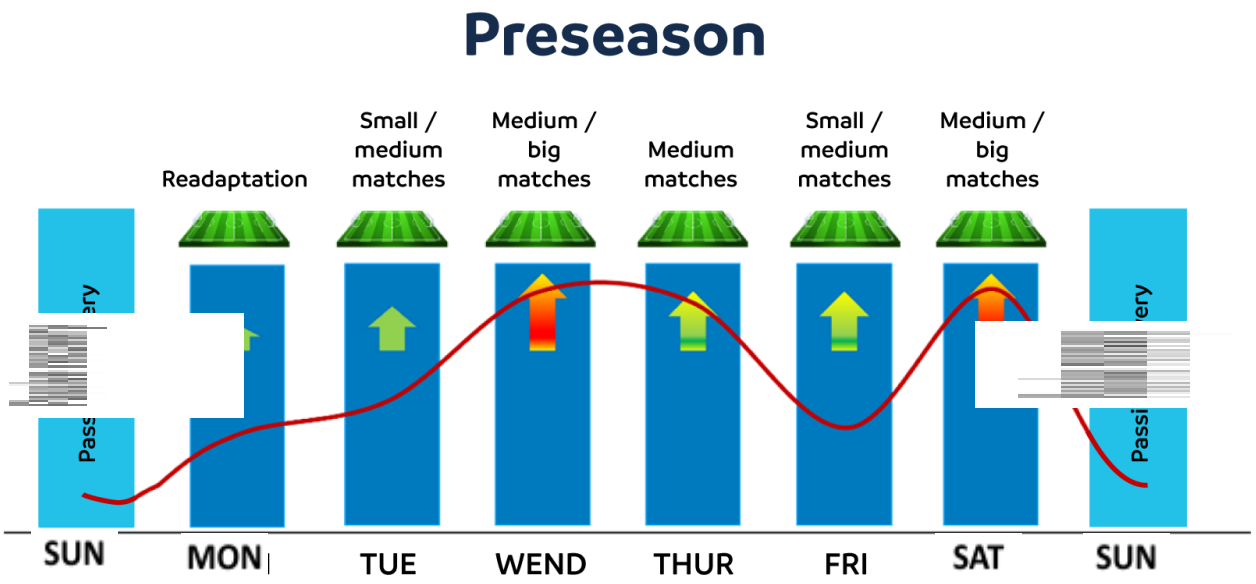
We then move on to practical applications in real-life scenarios in South American football clubs.

Unit 3.2 Models of microcycles in the professional football calendar

In order to have more clarity on the reality of the professional football calendar, we will present below models of microcycles in different circumstances of the season.

Preseason

Figure 2: Different moments in a preseason



Source: own elaboration.

At many **points in the preseason**, the microcycle exemplified above is part of the professional football coaching staff's planning. Normally composed of 6 training days per week, the preseason microcycle aims at the following objectives:

- **Readaptation of the athlete** to club activities;
- **Physical/physiological preparation** of the athlete/team;
- Application of the **technical/tactical content** indicated by the trainer;
- **Construction of the chronic load ("wall")** of the athlete/team to support the start of competitions.

During the preseason, it is very common for athletes to deal with late muscle pain, generalized fatigue and low tolerance to the mental load, due to the poor preparation generated by the previous holiday period.

Thus, the development of training contents and loads from the first microcycle must respect the **principles and guidelines of sports training**. There must be an adequate **progression of the load and complexity of the content throughout** the days and weeks, to the point of allowing the training stimuli to **create changes in the athlete's organism** and the recovery intervals to **generate the necessary adaptations**.

The red line represents the athlete's level of preparation and the arrows represent the magnitude of the training load. Note that, in order to respect the relationship between stimulus and recovery, it is not possible to train with high loads every day. It is essential to create **an interconnection of loads throughout the week**, with stimulus variation and low monotony (for more information, return to Module 2).

For example, a **planning error in the loads and contents** of Monday's training (readaptation), with **loads incompatible with the level of preparation** of the athlete, can generate consequences for the next training sessions, making **the athlete "pay" for the accumulation of fatigue** already in the first days. Thus, the following workouts will have to be adjusted so as not to impair the sequence of the week, interfering with the quality of the work.

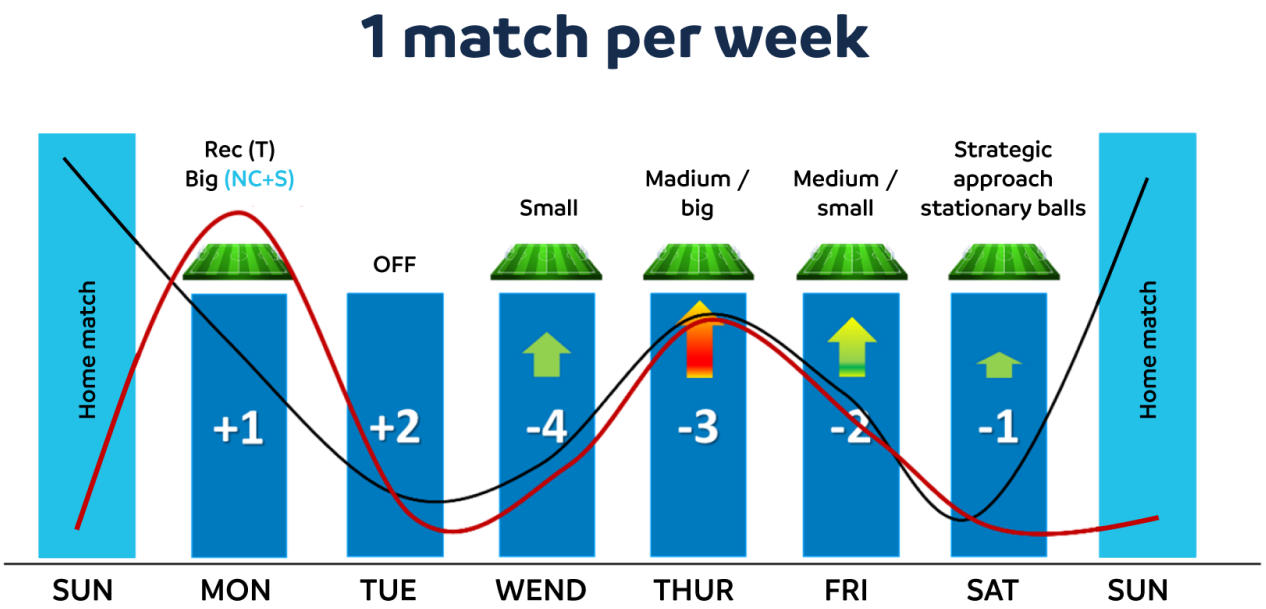
As the preseason weeks go by, **friendly matches** are often planned by the coaching staff to test what has been applied in training. In these situations, the configuration of the microcycle is modified with the necessary adaptations so that the athlete/team is **minimally ready for the demands of the formal match**.

We emphasize that, as with training loads, friendly matches should be **controlled in terms of load (minutes played)**, according to the **time of the preseason**, **individualities** and **sequence** of the microcycles.

For example, it is not prudent, in the first friendly match, to expose athletes to 90 minutes of performance. It is suggested to plan two 35-minute halves, using different athletes in each of them. In the next friendly match the following week, perform two 45-minute halves, with some athletes (as needed) participating for a maximum of 60 minutes. Until the athletes can withstand the demands of a formal 90-minute match.

1 game per week

Figure 3: Microcycle of training with one match per week



Source: own elaboration.

Microcycles with 1 match per week, characteristic of most professional football calendars in South America, normally present this configuration, which may vary according **to the particularities of each country** and the **reality of the** football **club.**

Here begin the first challenges in the management of the athlete/team throughout the season. Before moving on to analyze this microcycle, let's explain each element of the figure:

In general, **the days of the week are usually related to the previous and next match** (commonly called ***match day***). The numbers (+) and (-) represent the distance from the

previous match, positive, and the next match, negative. That is, **day +1** refers **to the first day after the match**. **Day +2** represents **the second day after the match**. **Day 4** means **4 days until the next match**. And so on.

The black line represents the level of preparation of the athlete that integrates the group of starters (T). The red line corresponds to the level of preparation of the group of substitutes and not cited (NC + S).

The arrows represent the magnitude of the training load, as explained in the example of the preseason microcycle.

The structure above shows what we **call "full week"**, with **matches on weekends**. In this particular practical case, there is the possibility of planning rest day(s) according to the evaluation and option of the coaching staff, with the "*Off*" day being either Monday (+1) or Tuesday (+2).

First, what are the criteria for choosing the **day of rest**? There are **advantages** and **disadvantages** for each situation. Let's get to know them.

Rest day +1

Advantage: allow the athlete to rest mentally and emotionally, leaving the work environment immediately after the game; allow them to sleep longer and more frequently on day +1, by not having to attend the club; be with family and friends (socio-affective effect).

Disadvantage: not having an accurate control of the athlete's rest and nutrition on an important recovery day 24 hours after the game; if any player has post-game discomfort, the start of treatment is delayed.

Rest day +2

Advantage: use strategies to accelerate the *recovery* process as early as 24 hours after the match; provide rest on a day that is typical of late onset muscle soreness and generalized fatigue (48 hours after the activity), which could interfere with the quality of training scheduled for day +2; allow the athlete with post-match discomfort to start treatment as soon as possible.

Disadvantage: day that precedes the beginning of the preparation cycle for the next match (day -4) and that may interfere in the athlete's level of preparation for training; day that could already be used by the coach to work on corrections, based on the team's behavior in the previous match.

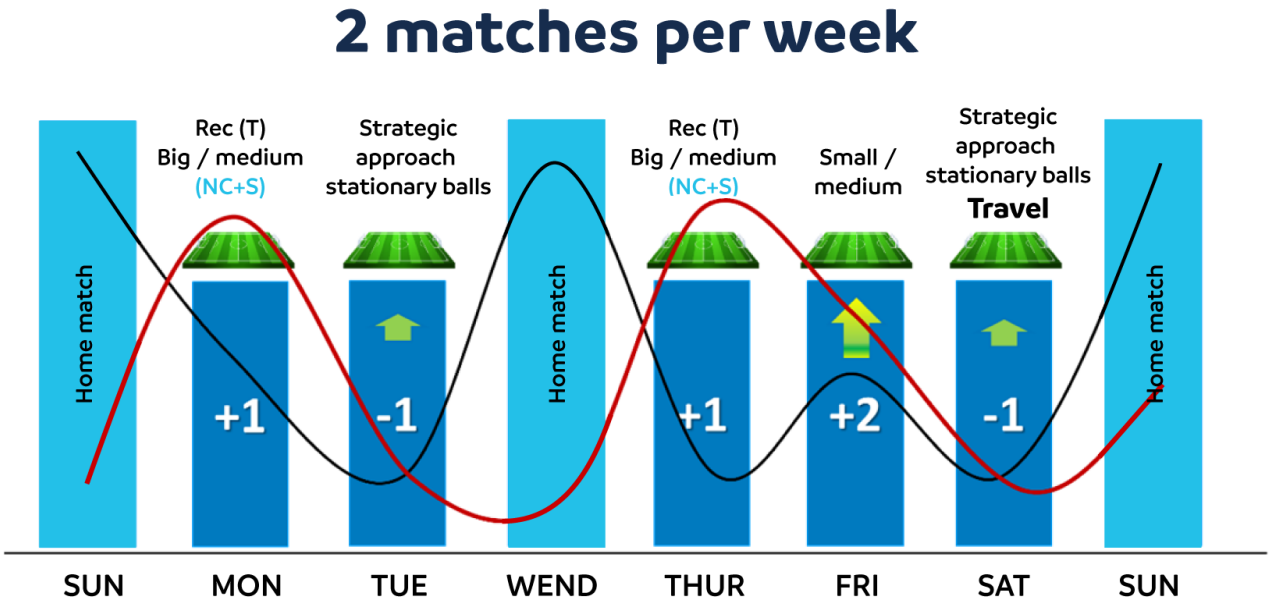
Following ... as we can see, the week for **the group of athletes is different from the groups (NC + S)**. The red and black lines, which represent the level of preparation of the athletes, present a different behavior throughout the week. And this is one of the biggest challenges of **managing training load and content within team sport** in competitive situations.

For the match day and the +1 day, note that the level of preparation for the three groups is different. While the starting group participated in Sunday's match and received a competitive load (physical and emotional), the substitutes group did not receive a load (e.g., no replacements during the match). The non-called-up group, which was not on the roster for the match, only trained on Sunday morning.

For the latter two groups, in an attempt to "equalize" workloads with the starting group, day +1 is planned for exercises with the characteristics of a formal match (high principles, high volume and high intensity). This can be through training matches with the club's U20 category or even with professional teams in the area. The main objective of this training strategy is to expose the athletes of the group (NC + S) to the demands they may face, if the coach needs to use them in the next competition match.

<u>2 games per week</u>

Figure 4: training microcycle with 2 matches per week



Source: own elaboration.

Microcycles with 2 games per week are a reality, especially in the calendar with several simultaneous professional football competitions, known as a **tight schedule**. To be considered tight or congested, the **intervals between matches** must be **4 days or less** (Julian; Page; Harper, 2020). So, for the example above, we have two days of interval between home games and three days of interval between the 2nd home game and away game.

This scenario requires some care in terms of equipment preparation and weekly planning:

More complex than a microcycle with 1 match per week, in this example the **preparation level curves of the groups are inversely proportional**, i.e. when the black line is high, the red line is low.

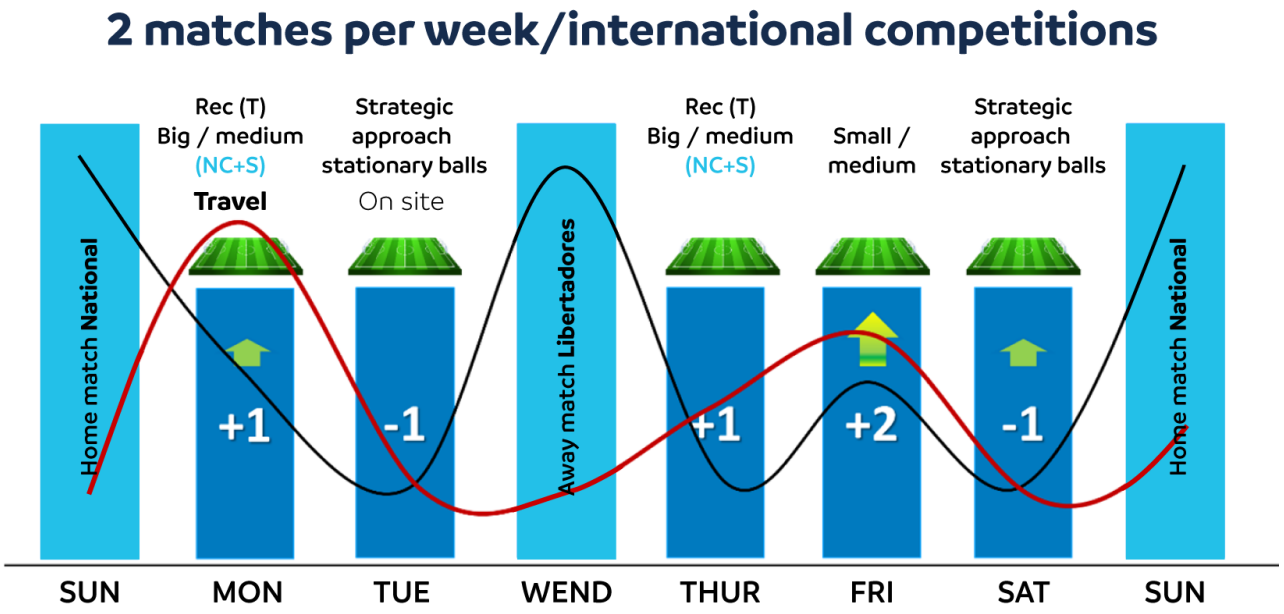
This condition generates a great **difficulty to have athletes at the same level of *performance* in the matches**. If there is a need to include in the starting team athletes who were on the substitutes' bench or even not called up, there is a risk that they will be at sporting levels (conditioned to competitive play) below what is expected.

In the worst case scenario, imagine those athletes who have been part of the group (NC + S) for several weeks and suddenly, they are included in the starting line-up for the game by the coach? What can you expect from the performance of these athletes who are "ill-prepared for the game"?

And to make the situation even more difficult, **the last game of the week is away**, which adds **travel and logistics as more obstacles in the team's preparation**. Definitely, the coaching staff must study many details to handle these congested schedule circumstances.

2 matches with international competitions

Figure 5: microcycles with 2 matches per week in international competitions



Source: own elaboration.

Microcycles with 2 matches per week with international competitions are common for clubs accredited to participate in the CONMEBOL Libertadores Cup and the CONMEBOL South American Cup, for example. These are clubs that **achieve a certain classification in their national championships** or **win titles that give access to a place** in these South American competitions.

In this example, let's assume that the away game of the CONMEBOL Libertadores Cup is in Quito, Peru, a city at 2,850 meters above sea level. Just because of this geographic characteristic, **travel logistics directly interfere with the** coaching staff's **weekly planning.**

There are some strategies for coping with the acute effects of altitude **exposure**, but that will not be the focus of the analysis at this time. For this example, the club opted to travel two days before the CONMEBOL Libertadores Cup match. Therefore, day -1 of training will be held *at the same location*, i.e., in the city of Quito. Generally, this is a training session for field recognition.

Let's consider that the CONMEBOL Libertadores Cup is the main objective of this club and thus, the players that make up the best team (represented by the black line) are included as starters for the match. The (S) athletes will travel together to Peru, but will be prepared

during the week, together with the (NC) athletes, for the national championship match the following weekend.

There are a few reasons for these options:

The wear and tear of the trip, the match and the acute effects of the high altitude in Quito will likely take its toll on the starting players. If the team returns home the morning after the match, it reduces the exposure to altitude to one less day.

In addition, it allows the substitutes to train together with the unquoted group at the same training center on the way home, giving quality to the training session.

Group Preservation (NC + S) throughout the week, with respect to workload and level of preparation, aims to include these athletes as starters for the national championship game the following weekend.

This team and competition management is a challenging reality of the South American professional football calendar that requires a lot of **club experience, communication between the different areas**, **knowledge of the team** and **well-established processes**.

Note: the microcycles presented in this section are only a few examples of case studies from the professional football calendar. **The structure of the microcycle, the content of the training sessions and the nomenclatures used may vary between methodologies, clubs and countries.**

Unit 3.3 Physical preparation and game model

> The game model is something that guides coaches and leads them through the **process of operationalization and tactical modeling** of the team (José Scaglia *et al*., 2013; Garganta and Gréhaigne, 1999). Thus, for the development of ideas in a concrete form of play, it is necessary to understand that the influence of aspects such as **the culture of the club, the country or region, the context of the competitive level, the characteristics of the athletes and the ideas of the coach**, will be preponderant to promote a **tactical culture based on game principles** (Padilha, 2018, https://bit.ly/2VQZ9sk).

Consequently, understanding the relationship of these factors can contribute to the operationalization of a training process that stimulates **technical-tactical behaviors** that correspond to the modeling of the game itself (Tamarit, 2013). The specific way of playing the **game model** should follow the concept of training based on different areas of knowledge, by considering the game as a **complex system** (Garganta and Gréhaigne, 1999; Morin, 1990).

Based on methodological concepts that guide a specific training process, considering the interaction of the phases and moments of the game and of the organization of the principles and subprinciples that guide the game, will allow ideas to emerge and be expressed by the players (Teoldo, Garganta, William, 2015).

We cannot fail to highlight the tactical periodization, a methodology created in Portugal by Professor Vitor Frade, which provides good reflections on training and game model.

Tactical periodization is a training methodology that aims to enhance the transfer between training and competition, based on the team's game model. In this **systemic methodology**, it is considered that the game should be simplified in training tasks that allow enhancing **specific behaviors related to the game model** proposed by the coach. Therefore, the tasks of each training session should be designed and integrated into the weekly/monthly plan, based on the physical, technical, tactical and behavioral requirements (Rodrigues; Nakamura; Rabelo, 2019).

According to this methodology, the athlete increases the **transfer of behaviors between the game and the competition,** since he will be used to understand and reproduce the competition situations throughout the week, through the **game principles** (offensive and defensive organization, transitions, etc.) that guide the construction of a collective game process and, consequently, of the training tasks, since the pre-competitive warm-up (Rodrigues; Nakamura; Rabelo, 2019).

It is worth noting that Tactical Periodization is only one of the visions and ideas of football training that exist in the world. We encourage the reader to reflect, under a critical eye, how much it can be adapted to the reality of one's own environment.

What is the relationship between physical preparation and the game model?

Today's football requires a **holistic approach to** the preparation of the athlete/team, that is, the development of all elements of *performance* in synchrony and synergy. We always

have to remember that in team sports **skills are related to collective organization, interaction between sectors and positions and understanding of the game**. Although physical preparation is a very important pillar for performance on the field, we must recognize that it plays a supporting role for the result.

In short, does the game model define the physical preparation or does the physical preparation determine the game model?

First, it is essential that the physical trainer **understands the** club**'s game model** so that he/she can interact with the coaching staff at all times. The physical trainer must be able to contribute to the planning and prescription of training sessions together with the technical area, always **connecting the physical/physiological aspects with the technical/tactical contents**.

At various times, including in technical meetings, physical preparation is requested to define the workloads in the field, together with the physiology area. To optimize the work between the physical trainer and the coach, they must ensure that the transfer of behaviors occurs in each training task.

Ultimately, these behaviors are part of the philosophy and culture of the club, as well as the ideas and beliefs of those who build the game model. It is from these behaviors that, as physical trainers, we create ways to train and enhance them within the demands of the game. In other words, physical preparation will only be effective if the athlete is trained for the specificity of the model.

For example, a club/coach's idea of play could be to "play standing back", with a low block defense, betting less on offensive construction and more on recoveries and transitions. For this type of game, specific physical demands such as acceleration/deceleration, speed and repeated *picks* are very characteristic. Therefore, these are the ones that should be contemplated in training as a form of preparation.

So, to answer the highlighted question: the game model defines the physical preparation!

Complementary training

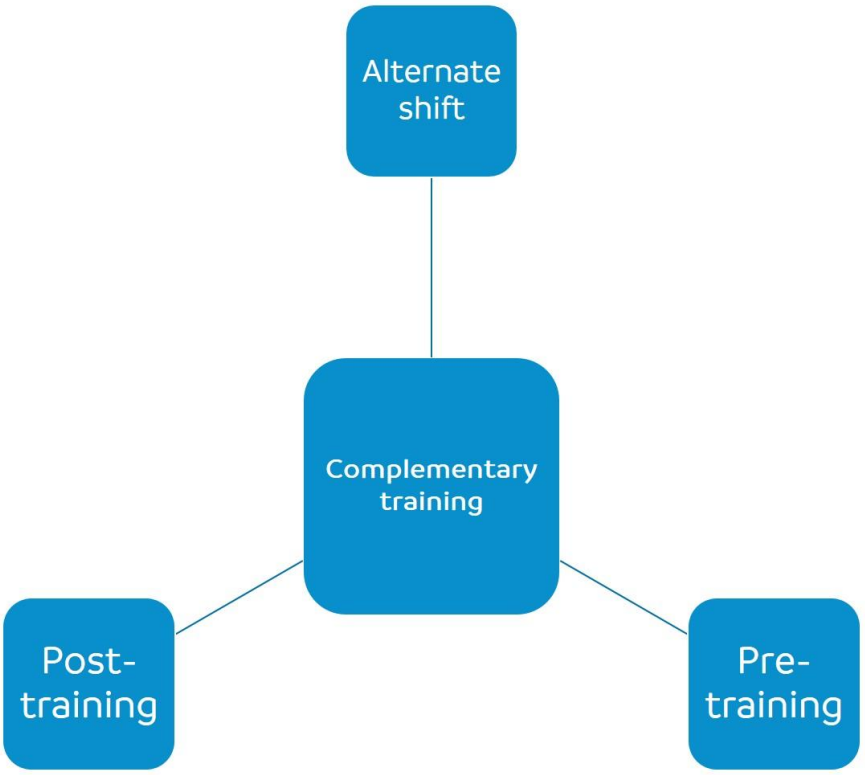
Complementary training has everything to do with the relationship of physical preparation and game model. Often, during the training week, it will be necessary to complement the main training for some reasons:

- Technical/tactical content to **reinforce individual and collective behaviors**;
- Technical content for **specific situations of the next match**. For example: penalty shootout;

- Physical/physiological content to **make up for what was not achieved in the** training **session.**

And complementary training can be performed before training, after **training** or even in the **counter-training**. The alternate shift means to perform the training in the opposite period of the main training session. For example, if the main training session was in the morning, the complementary training will be in the afternoon.

Figure 6: Times when complementary tasks can be performed



Source: own elaboration.

How to choose the day, the time (pre-training, post-training or counter-training) and the content to compose the supplementary training?

All of this will depend on what was applied as content by the trainer the previous day, the current day and what will be applied the next day. This is what we call the connection to the main training. Let's go to some practical examples.

Connection with the main training

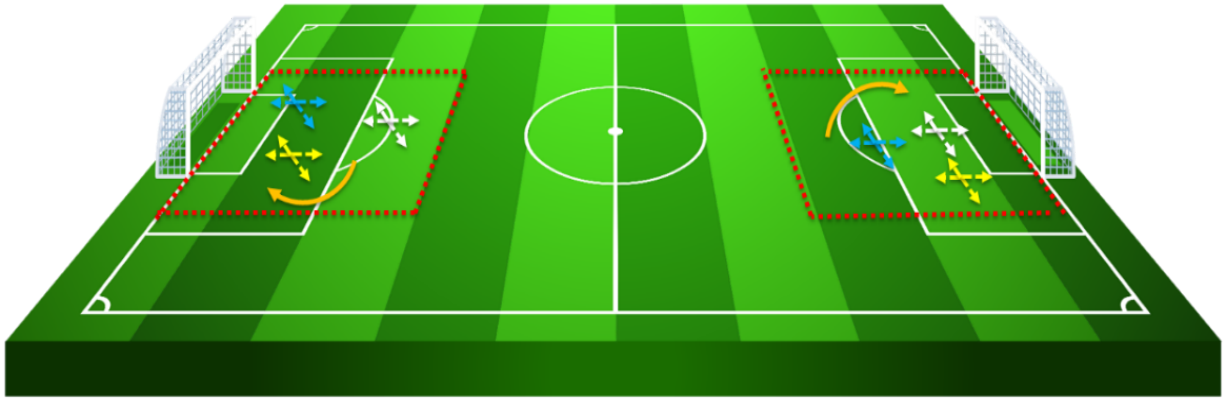
Imagine that the trainer planned a training with the following contents:

Figure 7: Training example

Source: own elaboration.

- Pressing after the loss of the ball;
- Defensive coverage;
- Overruns;
- Using two reduced sets of G + 3v3 + G simultaneously.

Figure 8: Example of a training task

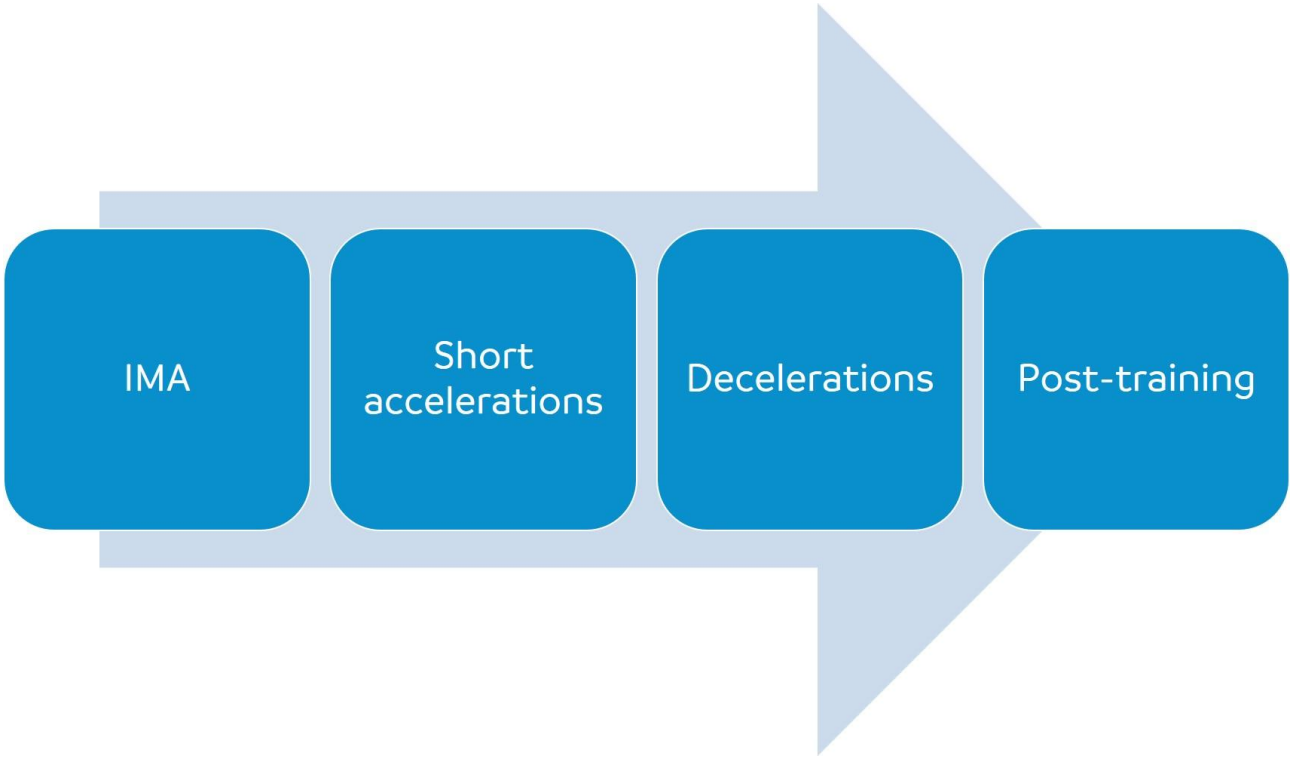


Source: own elaboration.

Knowing that, for these types of exercises and objectives, some responses will occur with more frequency and magnitude, such as IMA (*inertial motion analysis*). Remember the metrics presented in Module 2?

In exercises such as small-sided games of small principles and with this format of players, metrics such as **changes of direction, short accelerations and decelerations** prevail, present in **actions such as dribbles, definitions and overruns.**

Figure 9: Relationships between the task and the motor actions involved (A).



Source: own elaboration.

If there is a need to apply complementary trainings on that day, which strategy would be the most appropriate?

Let's think for a minute.

Perform a post-training supplementary training with the same characteristics as the main training, i.e. with short accelerations, decelerations and changes of direction?

What can cause to the athlete, the high demand of repetitive actions in sequence (main training + complementary training) in the same day? And the consequence for the next day? For the next match?

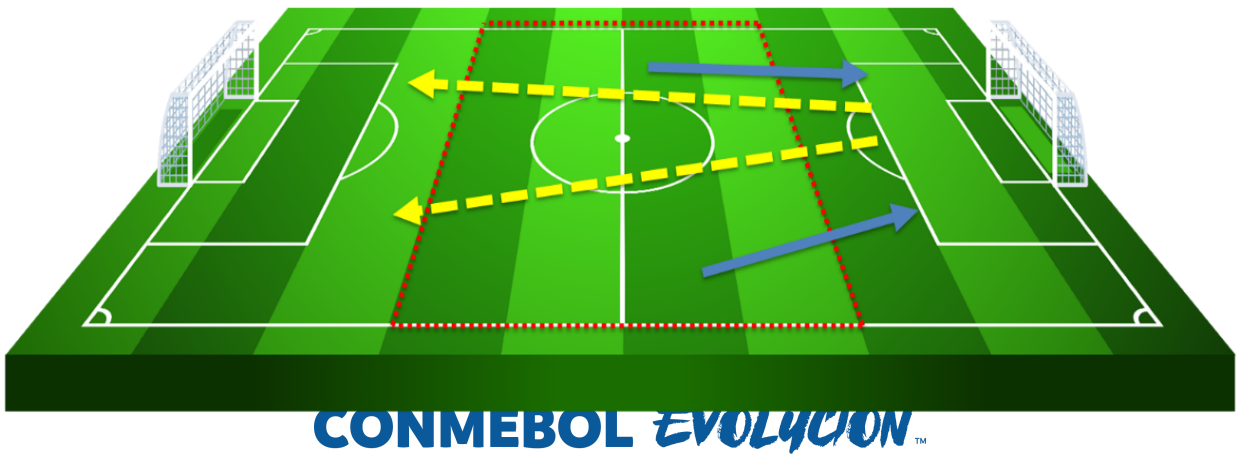
Figure 10: Example of training with reduced game

Source: own elaboration.

In this second practical example, imagine that the trainer intends to apply a training with the following objectives:

- 2nd phase of construction;
- Transition;
- Using a reduced set of G + 8v8 + G.

Figure 11: Example of a task with players in a confined space

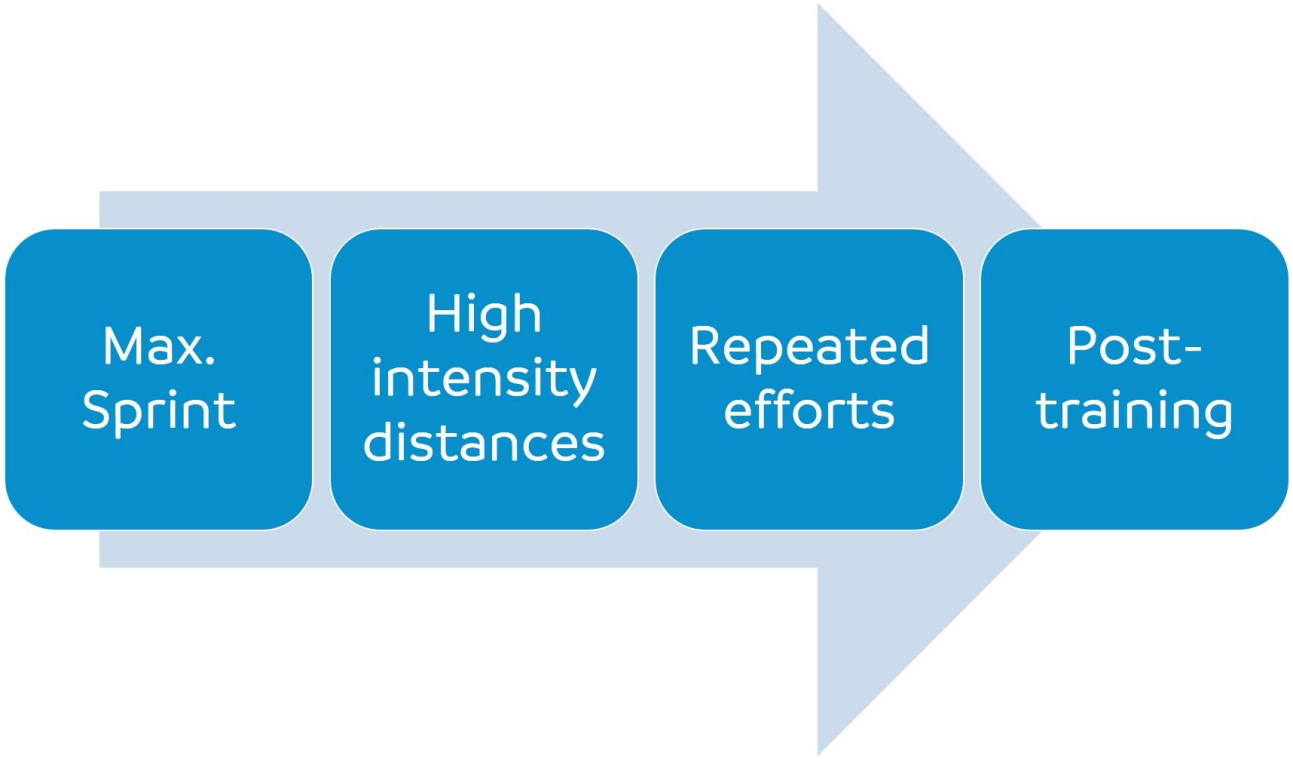


Source: own elaboration.

Reduced games with this characteristic usually generate actions of high energy demand such as **high intensity runs (> 20 km / h)**, ***pique* runs (> 25 km / h)**, often **maximum *pique*** and **repeated efforts**. These actions include moments of the game such as organization and offensive and defensive transition, represented by **long overtaking, balls into space and timing**, for example.

If it is necessary to complement the main training, what is the best way to organize this post-training session?

Figure 12: Relationships between the task and the motor actions involved (B).



Source: own elaboration.

Perform supplementary training with the same characteristics as the main training, i.e., with sprints, high intensity running, repeated efforts?

What is the risk of exposing the athlete to an accumulation of efforts with the same characteristic after training? Would it be the best time to supplement, considering the final part of the training under a **state of considerable fatigue**?

What if the option is to act before the training or in counter-training? What difference does this make in the strategy to be applied?

Learn about some **advantages and disadvantages**:

Before training

Advantage: rested athlete, e.g. to train with neural stimuli (speed, acceleration, deceleration);

Disadvantage: interference with core training; risk of injury ("body off" if proper warm-up/activation is not performed).

Alternate shift

Advantage: there is a time interval for recovery between main and supplementary training; high quality of training based on adequate recovery between sessions, with sleep and nutrition strategies;

Disadvantage: possible interference with the next day's training; accumulation of loads from the two training periods; decreased rest time between one day and the next.

We encourage your reflection, considering the reality and environment of your club.

Thus, we end here the penultimate module of the course. In this final section you will understand how injury prevention processes and recovery strategies are fundamental for the professional football player.

References

Garganta, J., Gréhaigne, J. F. Enfoque sistémico del fútbol: ¿moda o necesidad? Movimiento. 1999; 5(10).

Julian, R., Page, R. M. & Harper, L. D. The Effect of Fixture Congestion on *Performance* During Professional Male Soccer Match-Play: A Systematic Critical Review with Meta-Analysis. Sports Med. 2020.

Morin, E. Introducción al pensamiento complejo. Sulina Porto Alegre, 1990. 177.

Padilha, M. B. Modelo de juego: de las ideas al juego. Fútbol Interactivo, 2018. Disponible en: https://www.futebolinterativo.com/blog/modelo-de-jogo-das-ideias-ao-jogar. Consultado: 19/01/2021.

Rodrigues, H. F. M.; Nakamura, F. Y.; Rabelo, F. N. Futsal: la ciencia de la preparación física. Porto Alegre: Secco Editora, 2019. 232p.

Scaglia, A. J. et al. La enseñanza de los deportes de equipo: las habilidades esenciales y la lógica del juego en medio del proceso organizativo sistémico. Movimiento. 2013; 19 (4): 227-249.]

Tamarit, X. Periodización táctica vs Periodización táctica. Valência: MB football, 2013.

Teoldo, I.; Garganta, J.; Guilherme, J. Por un fútbol jugado con ideas: Concepción, entrenamiento y evaluación del desempeño táctico de jugadores y equipos. Curitiba: Editora Appris, 2015.