

Module 2. Structured Microcycle in Optimising Training

Unit 2.1 Structured Microcycle

As Seirul-lo defined it, planning

is the set of theoretical assumptions that the coach makes and that consists of description, forecast, organisation and design of all and each of the training tasks that should be carried out at a specific moment of the sporting life of the player, as well as the corresponding analyses and control tools that allow for the modifications of these events with the aim of obtaining a more accurate training process which reaches the player's optimisation. (Seirul-lo 2005, quoted in Arjol, 2012).

Team sports have a relevant peculiarity: they are "games". In games there's a super complex practice where the players interact with opponents a central mobile element in the transcendence of the game, within a highly variable and uncertain environment, somewhat random in nature, elements that shape the paradigm of complexity.

As Paco Seirul-lo (1994) showed us, we approach the planning process with omnipresent complexity as a reference, understanding that planning is about anticipating and sequencing training events, allowing for the ever-changing interactions between systems and promoting complex relationships between space and time.

Under Seirul-lo's model, there are several characteristics that planning must have, meaning that planning must be:

- **UNIQUE:** With the group of coaches participating in the planning process, we must achieve the unification of all paradigms belonging to each coach. In other words, the combination of knowledge from each specialist will contribute richness, and the unification of perspectives will lead us to optimise the proposed planning.
- **SPECIFIC:** The regulations of each sport and the way they are interpreted are the premises that guide specificity. One of the interpretations will come from the player, providing initial indications of structure optimisation.
- **PERSONALISED:** Sporting talent manifests in inter-systemic processes through countless interactions and feedback loops within different structures. Throughout a player's life, these structures have shaped her. This talent, along with her past and



entire sporting life, plus differentiated integration, the ability to adapt and integrate her potential in the game and its environment, as well as within the team and its environment, are the three aspects that make planning personalised.

Previously, there was a paradigm derived from individual sports in which the bioenergetic structure was the basis of training: an athlete was built first, and then a player. Women's football had a much later history, always parallel to men's football, or rather, until recent years, being a faithful mirror of men's football. Therefore, this much shorter, and later history has meant that at FC Barcelona, where the training model is deeply ingrained in the club's DNA, there has already been a synergistic approach to working with all the player's structures. The period of "building athletes" before they become footballers has been applied for much less time.

Football and team sports require different planning and periodisation compared to individual sports. Competition in team sports is prolonged over time, with competitive loads occurring at least once a week consistently and periodically throughout the season. This leads us to plan the loads in a way that allows for a process between load impacts, recovery from these impacts, and the generation of another load impact. That's why in team sports, it is crucial to discuss "physical fitness," in the sense that we seek load dynamics that maintain a high physical fitness for as long as possible.

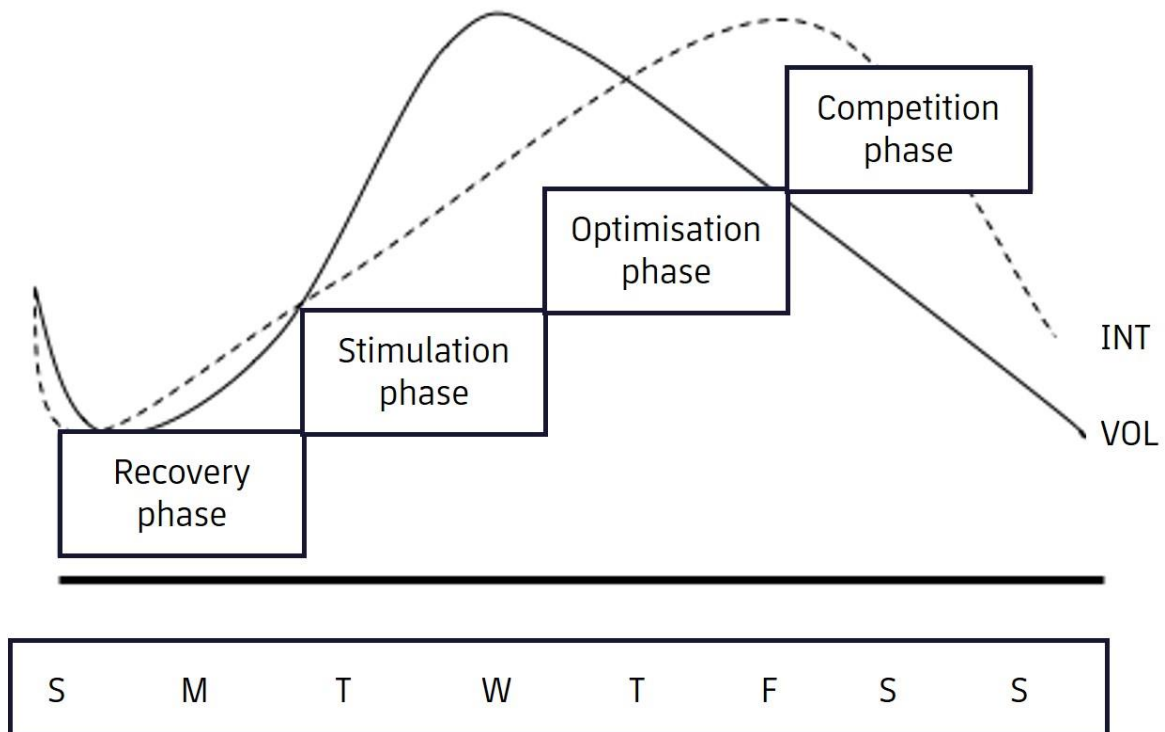
Within each microcycle structure, we will organise the impacts we are going to generate in different steps with the aim of reaching competition in the optimal way possible. To do this, we will differentiate the following phases, which will always occur in the same order:

- **RESTORATION:** This phase will be carried out with the players who have had greater participation and physical fatigue in competition at a conditional level. It will consist of situations that can help us, to the greatest extent possible, recover all aspects of the player and, above all, restore energy to all systems.
- **IMPLEMENTATION:** In this phase, new stimuli or new workloads appear, which we are not yet familiar with and help us generate greater adaptability to them. The main structure of SSSs is the conditional-cognitive structure. It is oriented towards strength, which means that the types of efforts we will have are neuromuscular in nature.
- **OPTIMISATION:** In this phase, we "make what has been implemented our own," meaning that we have already acquired the new efforts, and here, there is greater specificity in training them to be as similar to a match as possible. The preferred structures are the conditional-cognitive and the coordinative-cognitive. There will be a greater orientation towards endurance, and the PSSs will have a special-competitive nature.
- **ACTIVATION:** This is the pre-match phase, where we seek overcompensation. There is a higher tactical profile and a more moderate conditional one. Tasks or PSSs with a preference for the cognitive-socio-affective structure will predominate.



- **COMPETITION:** competition match as such.

Image 1: Phases within the Microcycle



Source: adapted from Solé Fortó, 2006, p.181.

Fase competición	Competition phase
Fase optimización	Optimisation phase
Fase estimulación	Stimulation phase
Fase recuperación	Recovery phase
Intensidad	Intensity
Volumen	Volume

Unit 2.2 Types of Microcycles

The microcycle is the key unit of the planning structure, as the player needs to adapt their optimisation processes in order to perform at a sufficient level (Seirul-lo, 2001). When planning a season with regular competition, the first step is to have an overall view of the season with its competitive calendar. We will analyse the different moments of the season and fit in the mesocycles. We will aim to have these microcycles in blocks of 3 weeks, composed of 3 or more microcycles, depending on the competitions (Tarragó et al., 2019). This way, we will identify the mesocycles. Seasons are made up of three main phases: the preparatory phase or preseason, the competition phase or regular season, and the

transitional period. According to our model and application, the preseason usually consists of 5 or 6 microcycles that make up a single mesocycle; the regular season consists of 40 to 45 weeks grouped into mesocycles of 3 based on the demands of the competitions; finally, the transitional period consists of 3 to 6 weeks.

2.2.1 Preseason Microcycles

Preseason microcycles are mainly general and directed and follow the specificity progression, starting with general microcycles, going through the directed ones, and ending with the special ones. The emphasis is placed on the general, directed, or special phase, depending on the duration of the transitional period, the profile and sporting life of the players, and the context of the calendar. In other words, we can maintain and extend the general microcycles if the players come from extensive transitional periods or have a short sporting life. Conversely, we will move more quickly to directed and special microcycles if they have had a short transitional period or have accumulated many years of training (professional training).

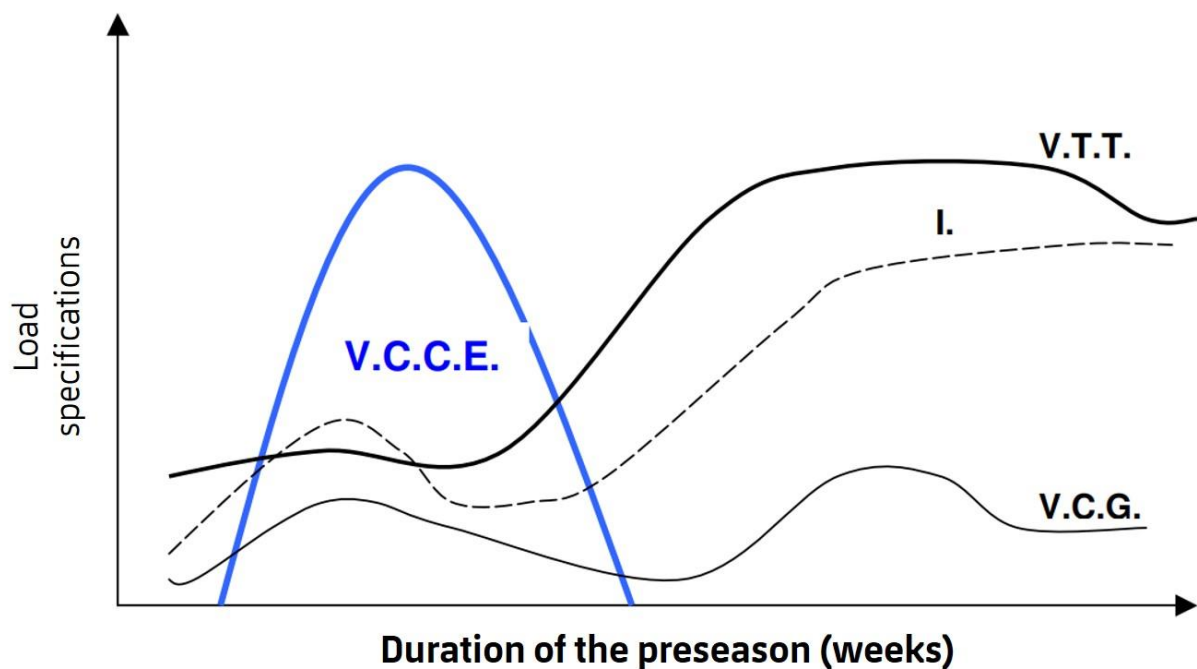
When we talk about general microcycles, it does not mean that directed tasks do not appear, we are referring to a predominance in content. We are talking about a progression in specificity.

At the beginning of the preseason, sooner or later, we will start with highly concentrated volume microcycles. We aim to propose a high load impact to the player, which, being more general in nature, although it involves a high accumulation of muscle load, will be less harmful or carry less risk of injury because the movements and exercises are away from the specificity of football and more controlled. We will work on resistance from the perspective of aerobic capacity, which does not provide power. Furthermore, the presence of synergy between structures will also be progressive. In other words, when we work on a structure preferentially, there will be fewer elements in the game, less complexity, and therefore, the activity will be simpler. That is why our idea is to progress in intensity, decrease volume, increase complexity and synergy of real game structures, and increase technical-tactical content.



Next, in Image 2, we see the graph that Paco Seirul-lo presents to us, showing the progression of different volumes during the preseason.

Image 2: Progression of Volumes during the Preseason



V.C.C.E. = Volumen concentrado de condición específica.

V.T.T. = Volume of Technical-Technical.

V.C.G. = Volume of generic condition.

I. = Intensity.

Source: adapted from Seirul-lo, 2017, p. 296.

Especificaciones de la carga	Load specifications
Tiempo de duración de la pretemporada (semanas)	Duration of the preseason (weeks)
VCCE = Volumen concentrado de condición específica	VCCE = Concentrated volume of specific condition
VTT = Volumen de Técnica-técnica	VTT = Volume of Technical-Technical
VCG = Volumen de condición genérica	VCG = Volume of generic condition
I = Intensidad	I = Intensity

We can see that the intensity curve initially increases until the VCCE reaches its peak value. From that point, it decreases until the end of the VCCE block. This allows us to approach the increase in VTT with sufficient guarantees to achieve the required level of technical execution

at this stage of the season. The rest of the design of this curve follows the theory of concentrated load, which supports this proposal.

The design of the VCG curve acts as protection or damping against the traumatic effects of functional or specific load impacts, both at the peak of VCCE (where VCG also increases) and when implementing VTT load. This generic condition appears when biological and motor systems primarily undergo sudden load modifications. That's why we maintain continuity in VCG throughout the entire preseason.

Friendly matches usually start from the second week. We also seek progression in terms of volume in these matches. Ideally, we begin with a less demanding match, with controlled minutes and an emphasis on general work to increase volume. This approach allows us to emphasise progression in specificity, avoiding excessive functional demands and thus reducing the risk of injuries. For the remaining matches, we aim for a higher level of demand to promote significant adaptations in the players and the team across all the structures that make them up.

2.2.2 Season Microcycle

When it comes to planning microcycles, that is, organising days OFF and training sessions throughout the competition season, we must consider the mesocycles mentioned before. We aim to group the weeks in sets of 3, progressing in specificity from one set to another. We organise these periods based on the competition calendar, considering factors such as competition density, high demand matches, breaks for national teams, and so on.

To design the microcycle or week itself, the most important aspect is to identify the days when there are competitions. As we can see in Figure 3, there are numerous possibilities to consider.



Image 3: Possibilities to Consider in Designing the Week according to the MD

MD	+1 / >-5	OFF	-5	-4	-3	-2	-1	MD
MD	OFF	OFF	-5	-4	-3	-2	-1	MD
MD	+1 / >-5	OFF	OFF	-4	-3	-2	-1	MD
MD	+1 / >-5	OFF	-4	-3	-2	-1	MD	
MD	OFF	OFF	-4	-3	-2	-1	MD	
MD	+1 / >-5	OFF	OFF	-3	-2	-1	MD	
MD	OFF	+2 / -5	-4	-3	-2	-1	MD	
MD	+1 / -5	OFF	-3	-2	-1	MD		
MD	OFF	+2 / -4	-3	-2	-1	MD		
MD	OFF	OFF	-3	-2	-1	MD		
MD	+1 / -4	OFF	-2	-1	MD	+1 / -2	-1	MD
MD	OFF	+2 / -3	-2	-1	MD	+1 / -2	-1	MD
MD	+1 / -3	+2 / -2	-1	MD	OFF	+1 / -2	-1	MD
MD	OFF	+2 / -2	-1	MD	+1 / -3	+1 / -2	-1	MD
MD	OFF	+2 / -2	-1	MD	OFF	+1 / -2	-1	MD
MD	+1 / -2	-1	MD	+1 / -4	+2 / -3	-2	-1	MD
MD	+1 / -2	-1	MD	+1 / -4	OFF	-2	-1	MD
MD	+1 / -2	-1	MD	OFF	+2 / -3	-2	-1	MD
MD	+1 / -3	+2 / -2	-1	MD	+1 / -2	-1	MD	
MD	OFF	+2 / -2	-1	MD	+1 / -2	-1	MD	
MD	+1 / -2	-1	MD	OFF	+2 / -2	-1	MD	
MD	+1 / -2	-1	MD	+1 / -3	OFF	-1	MD	
MD	+1 / -2	-1	MD	+1 / -2	-1	MD		
MD	+1 / -2	-1	MD	OFF	-1	MD		

Source: own elaboration.

In the wide range of microcycles that we can encounter, we can distinguish between long microcycles and short microcycles. Long microcycles encompass an entire week, while short microcycles cover half a week, this is two competition matches. Here are the different options:

- Long microcycles

These are the ones that allow us to go through all phases of the microcycle: implementation or stimulation, optimisation, and activation.

- Short microcycles

These are the ones that cover two competition days and cannot follow the progression of the phases. Instead, we will use the competitions as load stimuli, which we need to handle well during the recovery phase to be in the best possible condition for activation and the next competition. In this phase, it is crucial to consider the players with greater or lesser



participation in one or both matches to provide them with the best adaptation to their process. We will aim to get as close as possible to the planned phases to achieve an optimal condition for the next match with players who have had less participation. Within these short microcycles, we can have shorter or longer cycles, as we have seen in Image 3, so that between two competitions, we have two or three days.

When planning microcycles, we should consider additional ideas. Firstly, generating similar habits or routines with similar microcycle formats in terms of session organisation and rest days can help us improve the assimilation of different types of load peaks. For example, repeating a high-load impact session the day after a rest day will make the player more predisposed in this type of context to this type of increased effort demand. Similarly, sessions with high cognitive load or with a preference for cognitive-oriented PSS on day -2 can help the player better tolerate this type of input in the long run.

However, on the other hand, and although it may seem contradictory, under the fundamental idea of variability that we have been explaining with the Structured Training Model (ST), it will be important not to confine ourselves to the same or very similar structure, but rather to modify the organisation of microcycles to generate new physiological and mental information for the players, triggering continuous adaptations.

Therefore, considering the two options we have discussed, the key to resolving the issue lies in having good criteria for making informed decisions. This decision-making process will be the option we propose to the coach and/or the rest of the coaching staff (according to the assigned roles within the staff) to always achieve the best possible management. The following criteria for decision-making are outlined:

CHRONOLOGICAL POSITION IN THE SEASON: Consider the timing of the season calendar, such as whether it is immediately after the preseason, before or after the Christmas break (where there may be accumulated months of load or a generic load impact after a period of rest), or at the end of the season with the cumulative load of months of competition, etc.

COMPETITIVE DENSITY: There are moments in the season, especially if we have more than one or two different competitions, where a series of matches are concentrated within more than two weeks. Sometimes they can even be concentrated within 6 to 8 weeks. There are other moments where there may be only one match in two weeks due to national team breaks (for players who are not called up to their national teams).

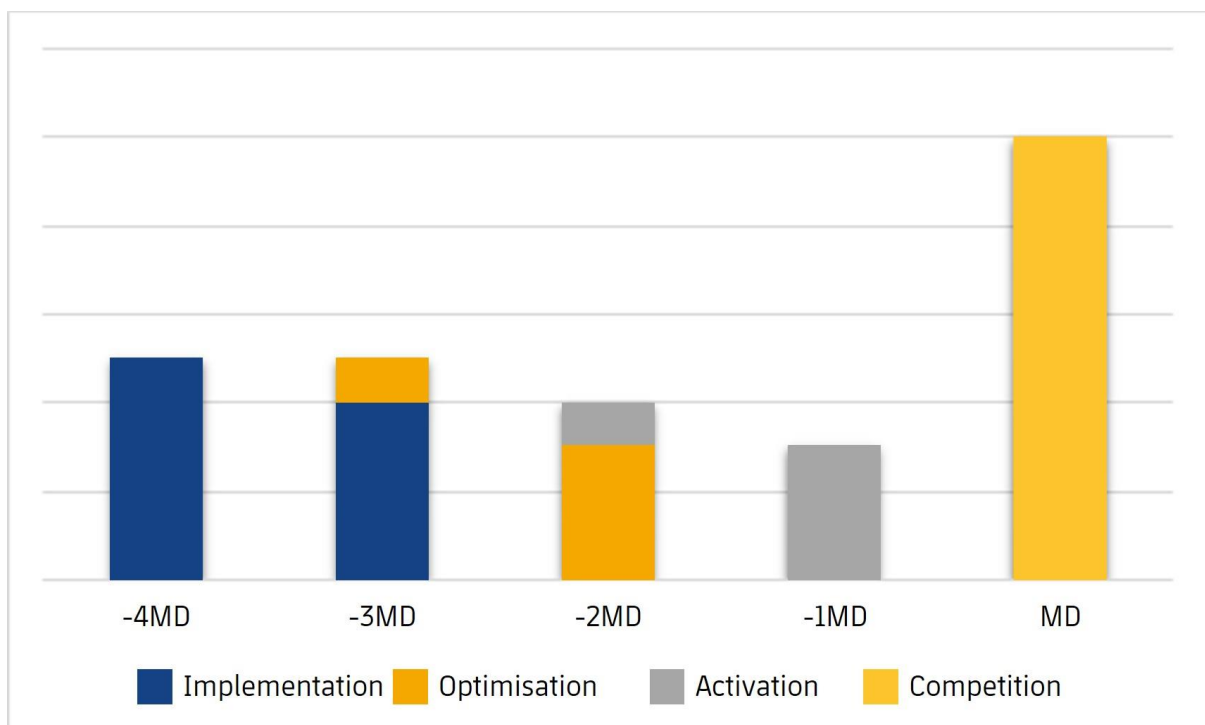
COMPETITIVE RELEVANCE: Consider moments when there are matches of greater or lesser competitive relevance. Based on the competitive criteria, we can anticipate which matches are more important in the regular competition. We may have playoff moments in certain competitions, as well as elimination matches. We should also consider that, towards the end of the season, many competitions conclude, and matches become more competitive, emotionally, and cognitively demanding.



Once we have analysed these moments according to the aspects mentioned earlier, we need to identify the preparatory periods leading up to highly competitive load moments. These are the periods where we will seek workloads that create adaptations in the players to prepare them.

Another distinctive characteristic of this model is the sequencing of the SM. We typically plan in blocks of three WEEKS/MICROCYCLES, where the dynamics of the load are integrated. We do not plan in detail over three microcycles because all the implicit dynamics and their relationships should be present within them. There should be a horizontal and vertical relationship among the PSSs of the three planned microcycles based on the calendar, opponent, and moment of the season. We group the microcycles in sets of three, but not in isolation, rather successively. Ideally, we should avoid repeating structures among them, even if they show an identical or very similar structure. On the one hand, we aim to emphasise different phases in each microcycle. In the first microcycle, we will give more extension and importance to the implementation phase (Image 4); in the second microcycle, we will emphasise the optimisation phase (Image 5); and finally, in the third microcycle, we will give more value to the activation phase (Image 6). This way, we can modify the orientation of each day within the microcycle to avoid repeating the same dimension of the adaptation processes of the team.

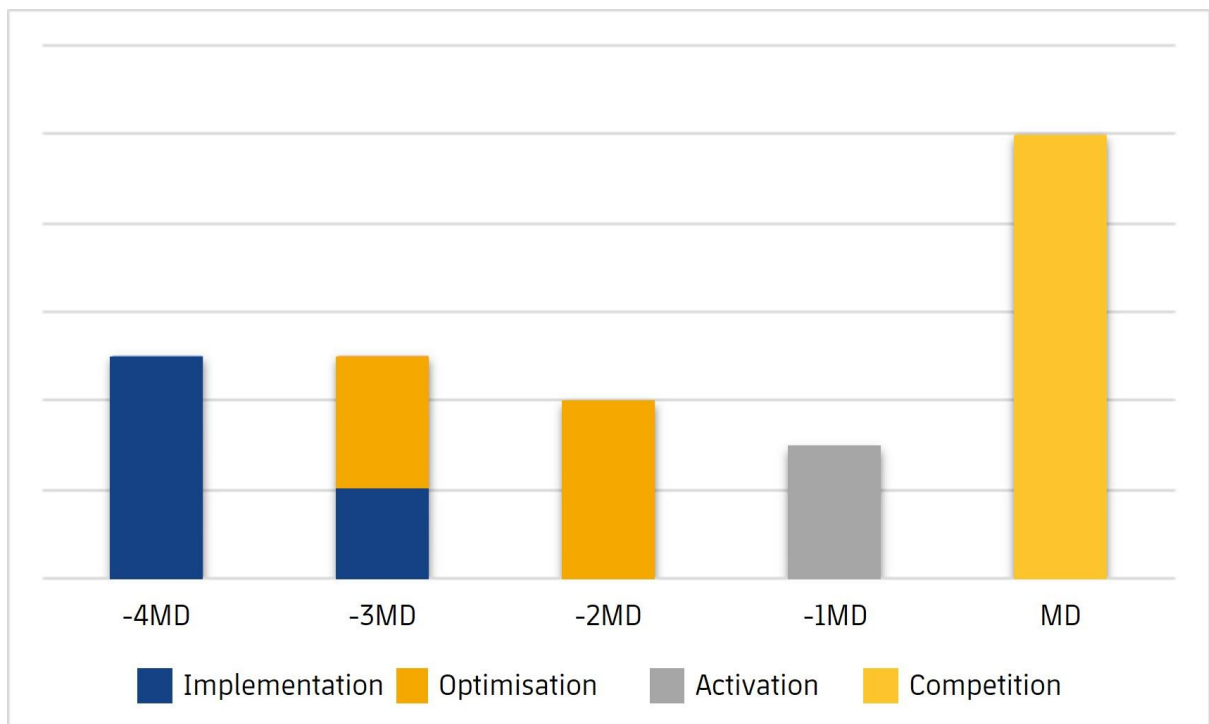
Image 4: Microcycles with Emphasis on the Implementation Phase



Source: own elaboration.

Implantación	Implementation
Optimización	Optimisation
Activación	Activation
Competición	Competition

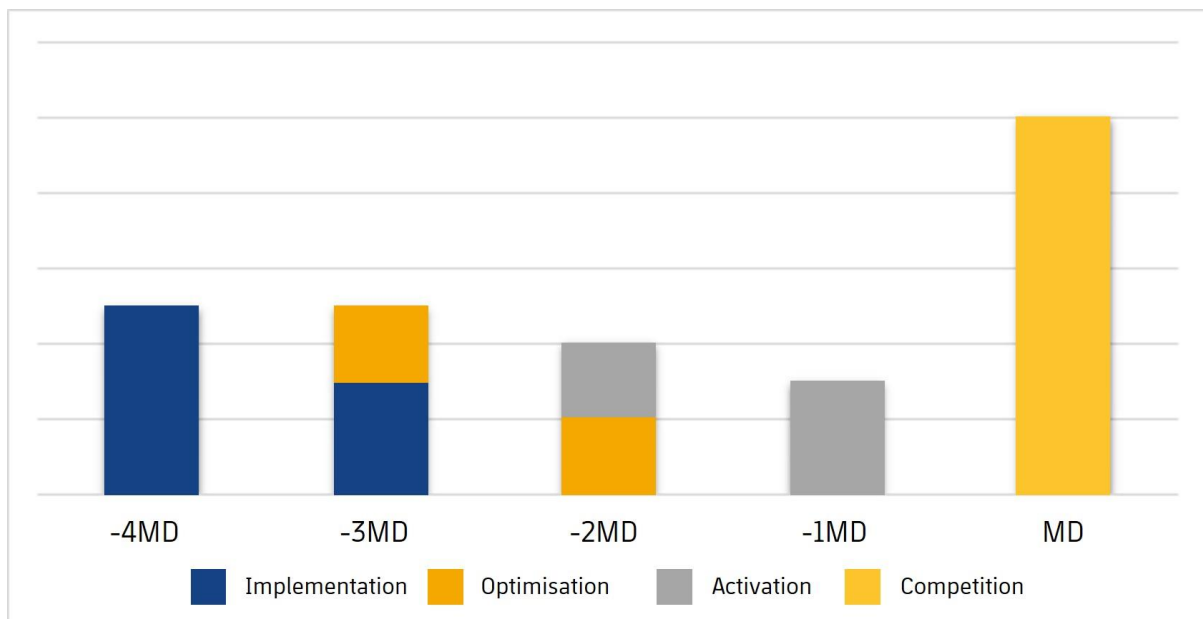
Image 5: Microcycles with Emphasis on the Optimisation Phase



Source: own elaboration.

Image 6: Microcycles with Emphasis on the Activation Phase





Source: own elaboration.

The placement of the day OFF in the week also helps us vary this structure, generating adaptations in all athlete's structures. However, it is ensured that the rest day is separated from the upcoming match and close to the previous one. The options are narrowed down to having the day OFF on day +1, day +2, or both. If we have the day OFF on day +1, we know that we will not use recovery strategies, assuming that moderate activity helps with faster restoration and regeneration. There won't be other recovery strategies such as physiotherapy treatment or cryotherapy techniques, among others. Players who had less participation and lower workload in the last competition would not have the option to compensate for this lack of load, so we should ensure that they perform it to the extent possible on the match day, once the match is over. The advantage of having the day OFF on this session is that it achieves an immediate disconnection in the player as a whole, especially in the cognitive and emotional aspects.

On the other hand, if we have the day OFF on session +2, we ensure everything mentioned before, although we are getting closer to the next match, and depending on when it is, we will have less time to practice and implement cognitive, coordinative, and even conditioning stimuli.

We will have days OFF on both days in the case of having a very tight competition schedule that, at a certain point, allows us this more extended rest for all structures.

Unit 2.3 Types of Sessions

2.3.1 Monitoring External Load

We can work on load control in a thorough and detailed manner using technology. The main monitoring system we use is the Global Positioning System (GPS) through WIMU by Realtrack.



LOCOMOTOR VARIABLES

- Total distance: Metres covered.
- Metres/min: Metres covered per minute.
- High Speed Running (>18km/h): Metres covered over 18 km/h.
- Individual High Speed Running: Metres covered over 75,5% of the individual speed of each player.
- Sprints (>18km/h): Number of times running (for a minimum of 1 second) over 18 km/h.
- Maximum speed.

MECHANICAL VARIABLES

- Accelerations +3m/s (ACC.): Number of times the player accelerates over 3 metres/seconds.
- Decelerations -3m/s (DEC.): Number of times the player decelerates under 3 metres/seconds.
- Maximum accelerations: Highest peak of metres/seconds.
- Maximum decelerations: Highest peak of metres/seconds (negative).
- Difference between ACC-DEC: Percentage of the difference between the number of accelerations and the number of decelerations.
- Impacts - Dynamic Stress Load: total weighted impacts that the player experiences in a session or match. It includes collisions and steps impacts during execution. Each player has different biomechanics, an injury and fatigue level records which play a role in the definition on how the player manages external load.
- Step Balance: Calculates the average maximum impact of each step, both on the left and right feet. It provides a strong indication of a player's running efficiency. It is presented as a total percentage for each foot. A uniform distribution of 50% across each foot indicates efficient running, but if this percentage deviates, the player may require excessive compensation and may need a more in-depth analysis to determine the reason for the imbalance.

METABOLIC VARIABLES

- Power Metabolic Average: Average of energy consumed by the player per kg/s. Unit expressed in W/Kg. It allows energy consumption at constant speeds and significant changes in speed (ACC and DEC).
- High Metabolic Load: Distance covered by the player whose metabolic power is over 25,5 W/Kg (standard threshold between aerobic and anaerobic sources).
- Player Load: Calculated by the accelerometer in 3 axes: frontal (X) + lateral (Y) + vertical (Z). It adds the amount of movement in the 3 axes.
- High Intensity Actions: Data that encompasses HSR EFFORTS >18km/h, SPRINTS >18km/h, JUMPS>3G, LANDS >3G, ACC +3m/s, DEC +3m/s, IMPACTS >8G.



This load control is done in all the training sessions, in all the team's players and in all the competition and friendly matches.

2.3.2 Sessions Nature

The sessions will be determined by the approximation or specificity level. These sessions will be different in nature depending on the moment within the microcycle or week.

General nature: low or no specificity, no decision-making process involved.

Directed nature: specific coordinative element with non-specific decision-making process.

Special nature: specific decision-making process.

Competitive nature: different modalities of training matches.

2.3.3 Sessions Organisation

Sessions are usually made up of 3 or 4 blocks depending on their total volume. There will be a progression in task specificity from more general to more specific. The initial part will focus on both conditional and cognitive activation. Nonetheless, the coadjuvant work will allow us to dedicate as much time as possible in the session to important content, as it will ensure that players individually reach the field with the minimum initial activation. In the following section, we will see the profile of each type of session. However, even though we talk about structuring the sessions, we should never forget the important aspect of variability, both in task design and in their organisation within the session.

We must control the total session time, managing the player's exposure time as well as useful and not useful time, which will determine the actual applied volume. Exceeding not useful time can always be detrimental in maintaining the state of attention, and it also harm the real involvement we seek from the player's structures and synergies. For this reason, it is important to design and prepare the session in a methodical and organised way to facilitate the transition among tasks.

2.3.4 Types of Sessions According to Competition Day

Sessions >-5 and -5

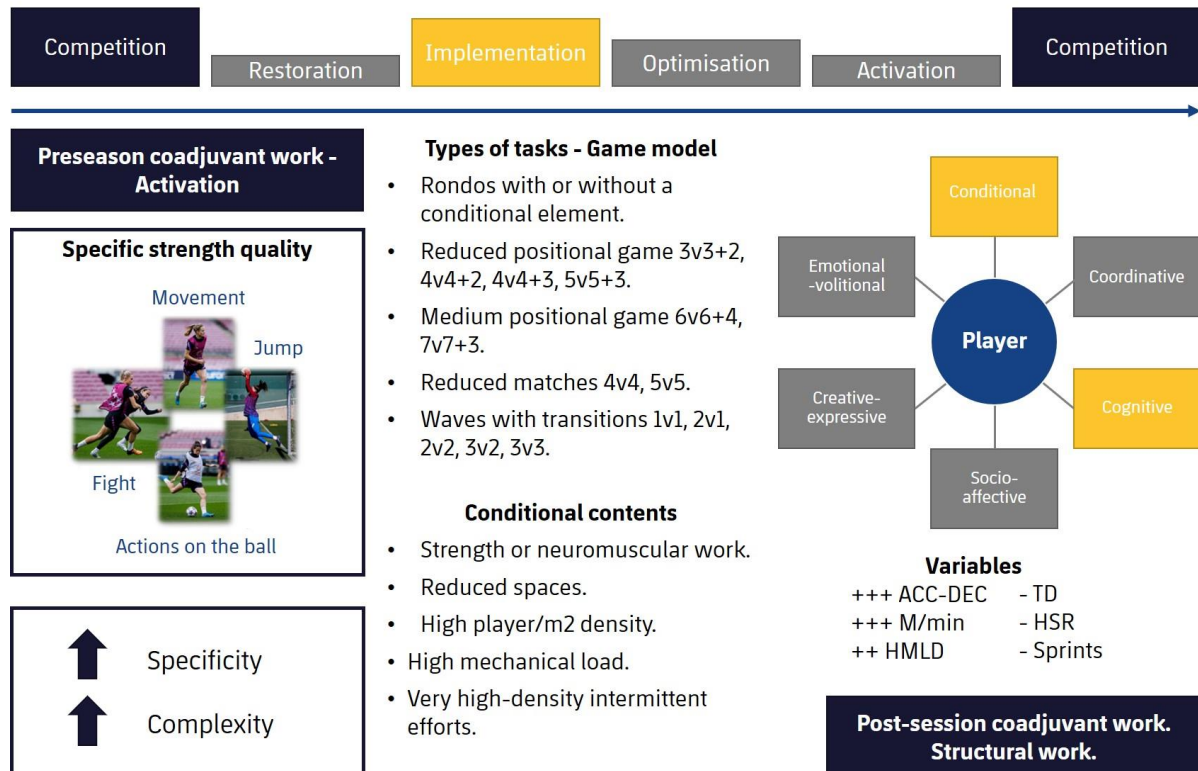
The sessions furthest from the match are those that belong to periods of low competitive density, which can occur during preseason, after the transitional period of the Christmas break, during national team breaks with players who stay at the club, or due to isolated circumstances in the competition such as COVID-19-related situations or other reasons for calling off a match. In the latter cases, the sessions will be less planned because they will not be set in the calendar



These sessions, in this case, do not have such a specific and defined profile since they will heavily depend on the period we are in as mentioned above. However, we can define that they will have reduced specificity: general and directed PSSs will be more prominent.

Image 7: Sessions -4

Session -4



Source: own elaboration.

Competición	Competition
Restauración	Restoration
Implementación	Implementation
Optimización	Optimisation
Activación	Activation
Trabajo coadyuvante pre-sesión – Activación	Preseason coadjuvant work - Activation
Cualidad específica de fuerza	Specific strength quality
Desplazamiento	Movement
Salto	Jump
Lucha	Fight
Act, sobre el móvil	Actions on the ball
Especificidad	Specificity
Complejidad	Complexity

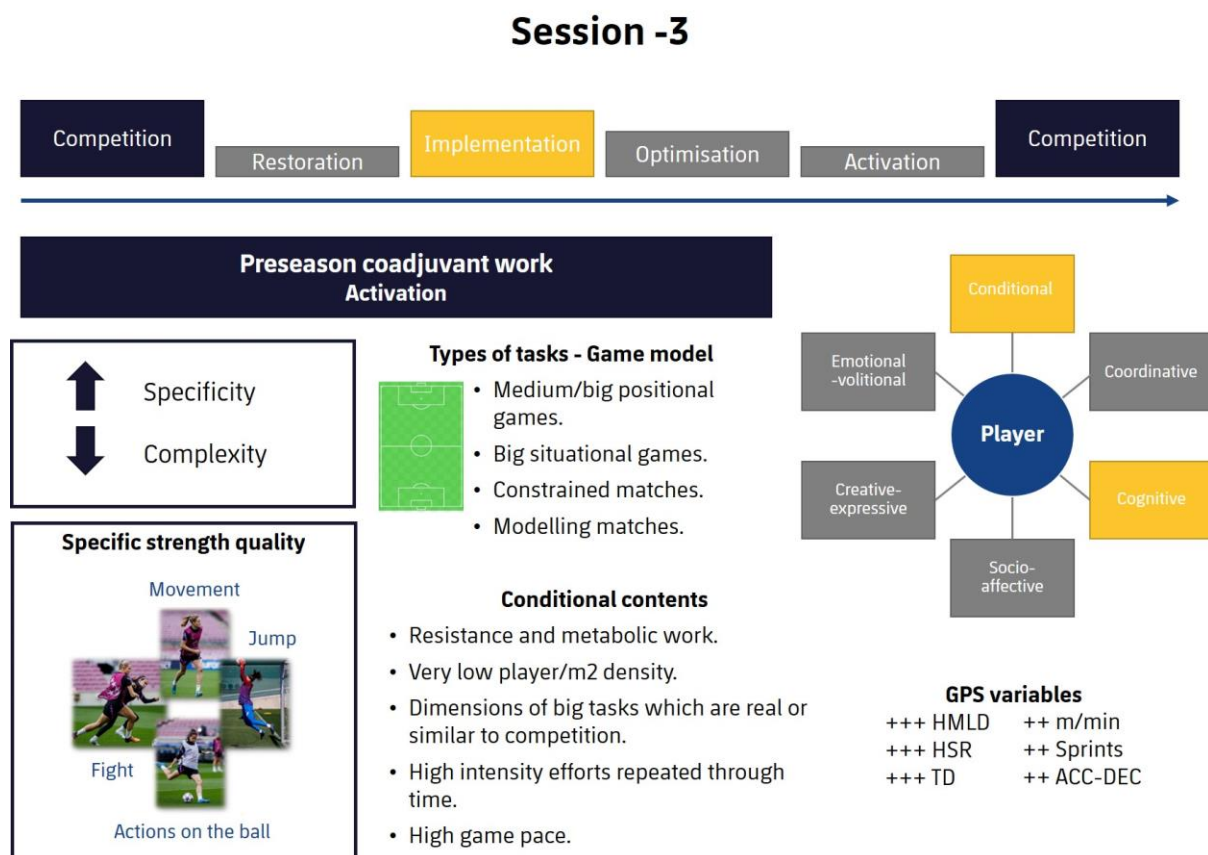
Tipos de tarea-modelo de juego	Types of tasks - Game model
Rondos con o sin componente condicional	Rondos with or without a conditional element
Juego posición reducido	Reduced positional game
Juego posición medio	Medium positional game
Partidos reducidos	Reduced matches
Oleadas con transiciones	Waves with transitions
Contenidos condicionales	Conditional contents
Trabajo de fuerza o neuromuscular	Strength or neuromuscular work
Espacios reducidos	Reduced spaces
Elevada densidad jugadoras/m2	High player/m2 density
Elevada carga mecánica	High mechanical load
Esfuerzos de muy alta intensidad intermitentes	Very high-density intermittent efforts
Condicional	Conditional
Emotivo-volitiva	Emotional-volitional
Coordinativa	Coordinative
Creativo-expresiva	Creative-expressive
Cognitiva	Cognitive
Socio-afectiva	Socio-affective
Jugadora	Player
Variables	Variables
ACC-DEC	ACC-DEC
M/min	M/min
HMLD	HMLD
TD	TD
HSR	HSR
Sprints	Sprints
Trabajo coadyuvante post-sesión. Trabajo estructural.	Post-session coadjuvant work. Structural work.

The session -4 is the one where we implement neuromuscular strength elements to allow enough time for tissue assimilation, recovery, and adaptation to this type of stimulus, which generates greater muscle damage. Therefore, the main efforts we will focus on are strength exercises for movements, mainly changes of direction, accelerations, and decelerations. We may also incorporate speed changes, but in a more intensive manner, meaning high-intensity efforts with limited recovery. With a higher player density per square metre there will be constant duels and disputes during the game, involving grappling, pushing, and balance disruptions, which will require strength. Jumping exercises may also be included depending on the selected content. This session will involve a high number of passes within the game, again due to the density and higher participation with the ball. From a cognitive or tactical perspective, this session involves a greater number of inputs, with lower specificity, meaning more isolated and complex contents to create the game situations we aim at resolving. Tasks will be less specific to positions and roles in the game.



On this -4MD we can have a double session. This will be decided based on the criteria discussed earlier regarding microcycle session organisation. This would entail an increased volume of strength work, with strong support from coadjutant training. We can have a field session in the morning and a coadjutant session in the afternoon, or we can include optimisation elements in both sessions (increasing the overall workload). If we have field sessions in both, we can characterise the afternoon session with position-specific exercises, incorporating the specific efforts required for each position and combining them with the coordinative or cognitive structure, depending on whether we want more micro or analytical work or more macro or cognitive work. We can also increase the volume with the afternoon session and propose PSS in reduced spaces. It's important to consider that when we have double sessions, the cumulative fatigue will be greater the next day, and muscle damage will not be repaired until, at least, two days later. Therefore, the -3 session should take into account the leg fatigue from the previous day.

Image 8: Sessions -3



Source: own elaboration.

Juegos de posición medio/grandes	Medium/big positional games
Juegos de situación grandes	Big situational games
Partidos condicionados	Constrained matches
Partidos modelados	Modelling matches
Trabajo de resistencia y/o metabólico	Resistance and metabolic work



Densidad muy baja de jugadoras/m2	Very low player/m2 density
Dimensiones de las tareas grandes, reales o similares a la competición	Dimensions of big tasks which are real or similar to competition
Esfuerzo de alta intensidad repetidos en el tiempo	High intensity efforts repeated through time
Ritmo de juego elevado	High game pace
Variables GPS	GPS variables

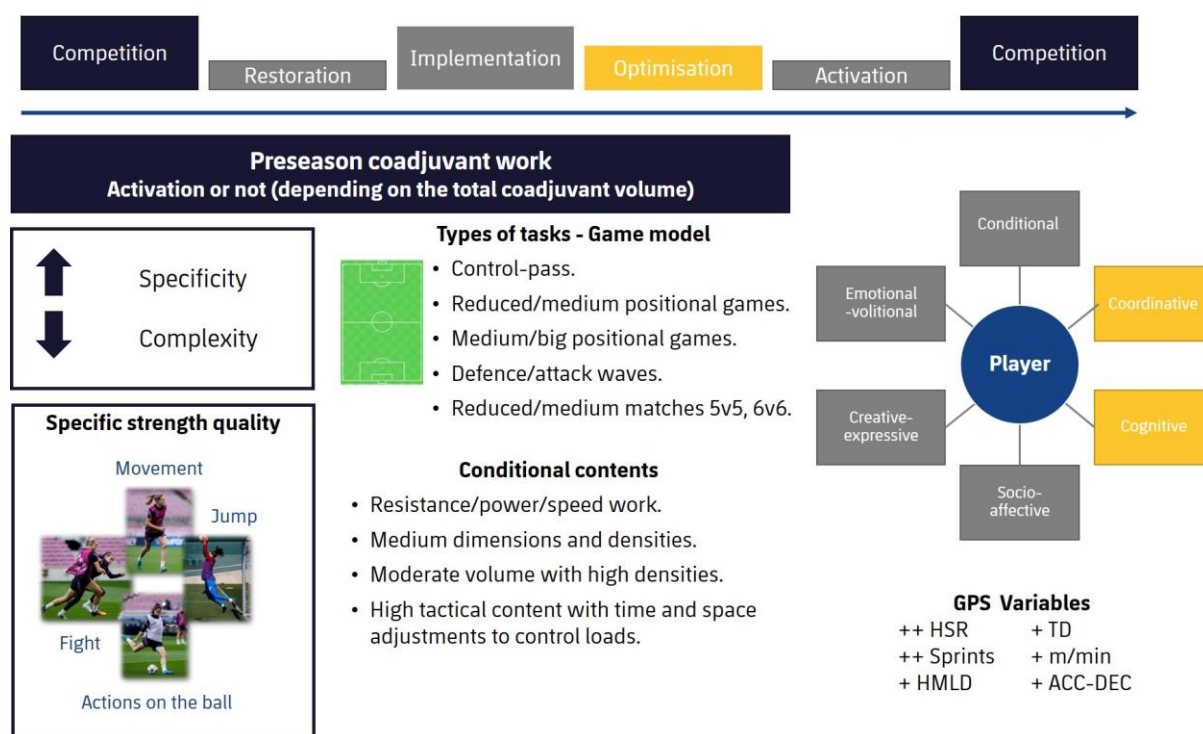
In the -3 session is when we implement efforts that closely resemble the demands of an actual match. To achieve this, we work with larger dimensions to create situations with similar running patterns to those seen in competition. The cognitive structure is also preferred in this session, and it is the moment to introduce tactical proposals with significant content to work on, focusing on situations that closely resemble real-game scenarios. While we prefer conditional and cognitive structures, multiple aspects will come together in synergy, resulting in a higher level of specificity. All four specific qualities of strength are implicitly present in the game situations. The characteristics of the movements involve covering extensive distances at high intensity, with players frequently reaching the high-intensity threshold and performing numerous sprints. The players will cover a considerable total distance and record high metres per minute of game. The duration of the session will also be extended, ensuring that most of the time is used effectively. The volume and duration of coadjuvant work will also increase.

If a double session is conducted here, a valid reason could be to generate a peak load three days before the match, simulating the preparatory stimulus of playing two competitions in one week. In other words, if we aim to generate adaptations for the players to be better prepared for playing midweek and weekend matches, subjecting them to a very high load, similar to that of a match, a double session can help accumulate this load, even if it is split into two parts. This approach facilitates better tolerance to the load by the players. These types of situations are common in the early part of the season when preparing for the double match schedule. In the mid of the season, these adaptations are already in place due to the dynamics of double match microcycles, and the targeted load would be around 50% of the match load, looking at it from a more global perspective



Image 9: Sessions -2

Session -2



Source: own elaboration.

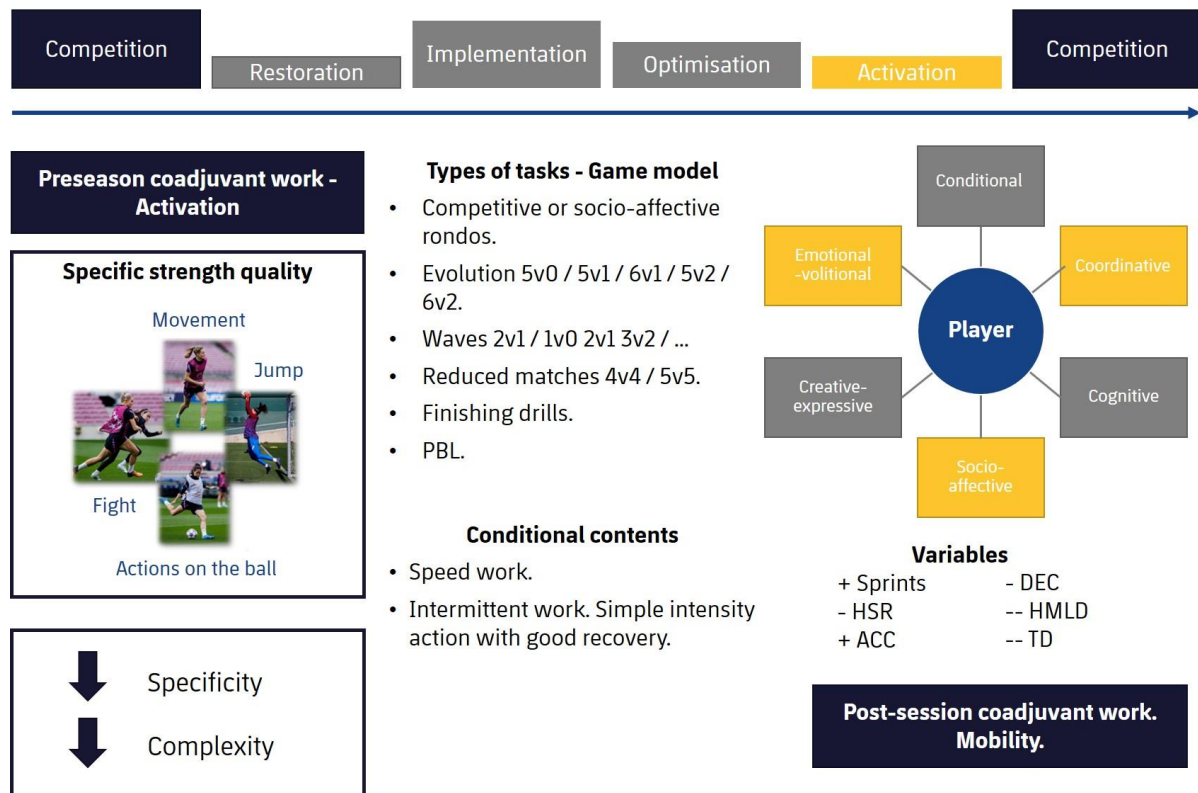
Control-pase	Control-pass
Juegos de posición medio/grandes	Medium/big positional games
Juegos de situación grandes	Big situational games
Oleadas de ataque/defensa	Defence/attack waves
Partidos reducidos/medios 5v5, 6v6	Reduced/medium matches 5v5, 6v6
Trabajo de resistencia/potencia/velocidad	Resistance/power/speed work
Dimensiones y densidades intermedias	Medium dimensions and densities
Volumen moderado, con intensidades elevadas	Moderate volume with high densities
Alto contenido táctico donde matizamos en tiempos y espacios para controlar cargas	High tactical content with time and space adjustments to control loads
Activación o no (según cantidad de volumen coadyuvante total)	Activation or not (depending on the total coadjutant volume)

In the -2 session we optimise the load from the previous sessions. It is the session where cognitive structure is emphasised, and we present situations with medium dimensions to make them closer to the game or more realistic but limiting the spaces to avoid excessive effort as we approach the competition. There is a decrease in cumulative volume, both in the

number of high-intensity actions and in duration and distance covered. The metres of high intensity will be proportional to the individual position or role, as well as the number of sprints. We can alternate between tasks with a higher pace of play and intermittent tasks in wave format. Greater importance is placed on longer recovery times, depending on the intensity of the repetitions or efforts. It is important to consider the session from the previous day: If the peak load was very high, it will be important to manage the efforts of this session carefully.

Image 10: Sessions -1

Session -1



Source: own elaboration.

Rondos competitivos o socio afectivos	Competitive or socio-affective rondos
Evoluciones	Evolution
Oleadas	Waves
Partidos reducidos	Reduced matches
Finalizaciones	Finishing drills
ABP	PBL
Trabajo de velocidad	Speed work
Trabajos intermitentes. Acciones de intensidad, simples, con buena recuperación	Intermittent work. Simple intensity action with good recovery

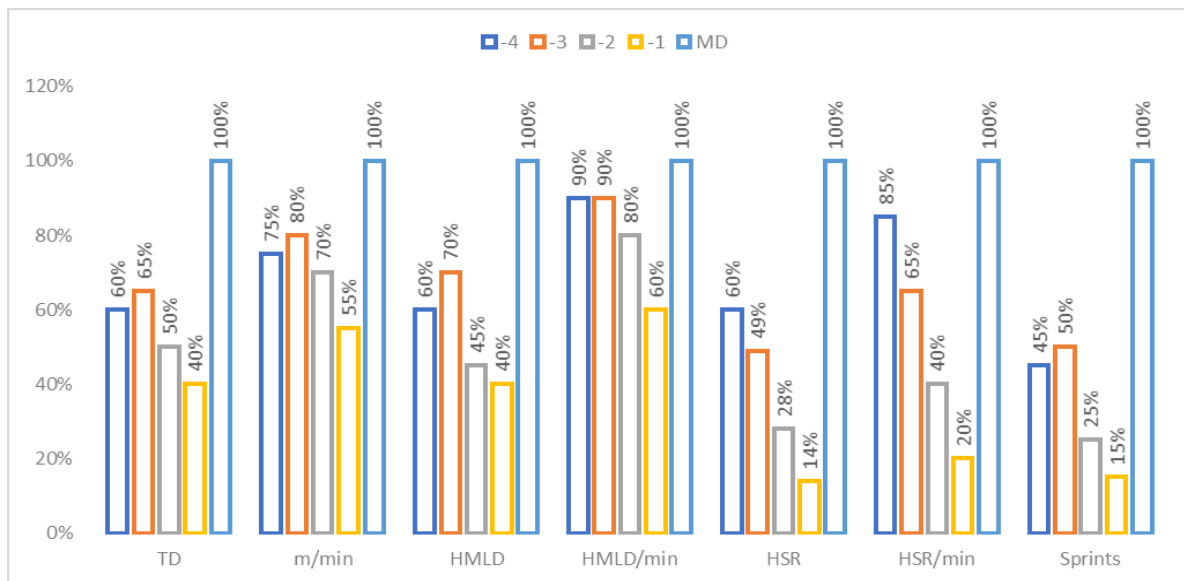
Activation session, highly preparatory for the game in terms of sensations. There is a significant decrease in cognitive and conditional load. We reduce the volume and duration of the session. Speed becomes the most important quality, ensuring that efforts are of short duration with high intensity and large post-effort recovery. However, this will depend on the model and style, primarily determined by the coach. In many cases, there is an increased preference for the emotional-volitional structure to create highly competitive situations, even if they have low specificity PSS. This aspect is highly specific to the team and the competitive moment. Sometimes, the aim may be to reduce the competitiveness generated in the sessions or prioritise coordinated executions.

In terms of conditioning, and depending on the load progression throughout the week, it is beneficial to include movement speed stimuli.

For this purpose, tasks such as speed circuits or the proposed evolutions will incorporate these stimuli with limited volume. Another important element of this session is increasing the ratio between accelerations and decelerations. Due to the eccentric component of decelerations and the slower recovery from these efforts, we aim to minimise their occurrence. However, accelerations become relevant in this session, as we refer to short-distance and duration sprints that involve the same effort as acceleration. In wave formats or within speed circuits, accelerations will appear with controlled decelerations. We can also incorporate PSS strategy or set-piece-oriented proposals, where there is an increased preference for the creative-expressive structure, depending on how it is planned.

In the following graph, we can observe the percentages of different variables for each type of session compared to the competition:

Image 11: Load of the Sessions Compared to the MD



Source: own elaboration.

Sessions +1/-?

The +1 sessions aim to establish all possible restoration systems through sessions with very low volume, short duration, and moderate intensity. Formats such as passing drills rondos, possession drills reducing defensive roles or with transitions, and so on, are used. On the other hand, the group with lower load on match day will carry out a session according to the session profile of the day we are in. For example, if it is a -3 day before the match, we will propose the same type of efforts, although it may be challenging to achieve them in comparison to the complex system of the player's structures.

Sessions +2/2

Finally, we will explain this last type of session, which is the +2 session that occurs simultaneously with the -2 session before the match. This situation arises during weeks with two matches when both competitions are approaching in time. What we do is treating it as a -2 session with a decrease in overall load. Another option is to split the team into two groups (just like in the -1) and provide different loads to each player.

MD Compensation Sessions

Players who have less participation in the match become unbalanced in terms of load as they do not experience the overcompensation peak. We always seek alternatives to address this issue. On the one hand, players who are not included in the match squad have a session on the same day as the match, before the game. This session can be comprehensive, including limited coadjuvant and optimisation work due to the number of players available. On the other hand, we have players who are on the bench and have limited participation. In this case, after the match has ended, we will have a short-duration general session on the same day as

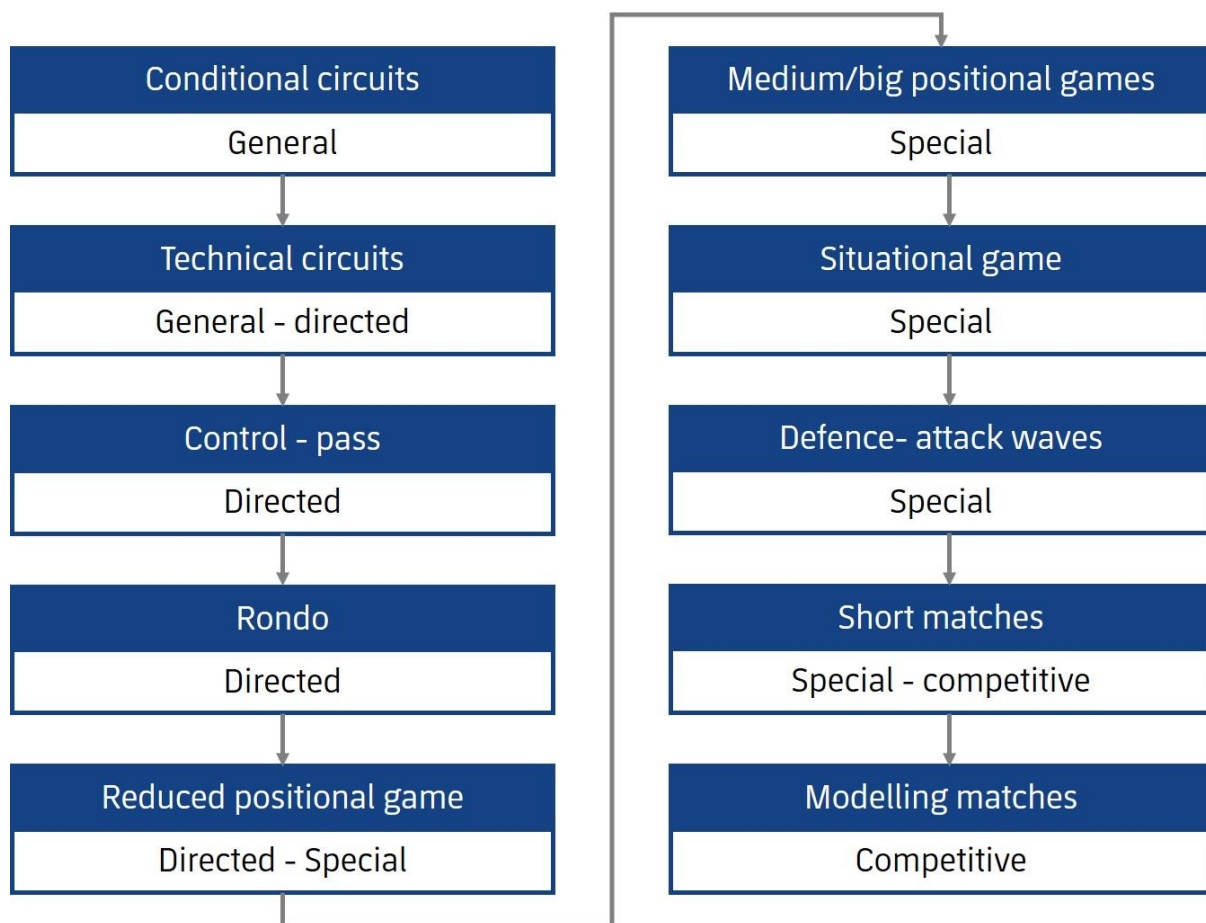


the match, aiming to accumulate a conditional load equivalent to at least 50% of the match. We will definitely carry out this session if the next day, +1, is a day OFF, to avoid 2 consecutive days of low or no load. If there is a session scheduled on the +1 day, we will assess the possibilities of having the training. This session may have some logistics handicaps. It can be emotionally challenging for the player who did not participate in the match. In the case of away matches, we must obtain permission from the opposing club, and there will be time and equipment constraints.

Unit 2.4 Types of Tasks

We will classify tasks on the following scale of progression according to the levels of specificity:

Image 12: Classification of Tasks According to the Levels of Specificity



Source: own elaboration.

Circuitos condicionales	Conditional circuits
General	General
Circuitos técnicos	Technical circuits
General-dirigido	General-directed
Control-pase	Control-pass

Dirigido	Directed
Rondo	Rondo
Juego de posición reducido	Reduced positional game
Dirigido-especial	Directed-special
Juego de posición medio/grande	Medium/big positional games
Especial	Special
Juego de situación	Situational game
Oleadas/ataque-defensa	Defence- attack waves
Partidos cortos	Short matches
Especial-competitivo	Special-competitive
Partido modelado	Modelling matches
Competitivo	Competitive

There are a series of contextual variables that we will modify to vary the preference of player's structures, and they will have a direct influence, particularly on the conditional structure:

- Time or duration of the task: We will vary the demand at the conditional structure, as well as at the other structures, based on the time indicated for each task set. If we aim for longer sets, it will be more challenging to maintain a high level of intensity, whereas shorter sets will require higher intensity. This will directly affect the recovery periods, depending on whether we want them to be insufficient to adapt the player to cumulative effort with fatigue, or if we prefer to provide sufficient recovery to achieve a high intensity threshold in the next set.
- Number of players and superiorities (neutral players): When there is numerical equality, there will be more intense duels, more actions of fight or ball disputes, less fluid ball circulation, and more accelerations and changes of direction due to increased ball movements and detachment. When neutral players are introduced, defensive work becomes more positional even though defensive actions may be of longer duration. In attack, ball circulation increases, and analytically speaking, intensity decreases.
- Dimensions and player/m² density: Reducing the dimensions of the playing field for the same task will make ball circulation more difficult, increase collisions or player disputes. Increasing the dimensions will automatically increase the distance covered, especially at high intensity.
- Positional: Maintaining the real playing position will make the task more specific and realistic at an individual level for each player who will participate in similar efforts on match day, while accounting for the inherent specificity of the task itself.
- Directionality and polarity: Building on the previous point, if in addition to maintaining positions on the field, we introduce directionality, meaning that one team is facing the other, it will increase the specificity of the task. By adding polarity, which means having a scoring zone/space/goal, we further enhance this specificity. This allows for



increased speed changes in attacking or defending the scoring zone and increased kicking intensity if it involves a large goal with a goalkeeper.

- Scoring systems: Assigning more or less points to certain collective challenges will increase the emotional-volitional structure and automatically raise the intensity to achieve victory or avoid losing.
- Conditional constraints: These are actions we add to impact the conditional structure and increase a specific type of load. For example, adding pre-sprints before defending in rondos or performing a sprint after completing a finishing action.
- Offensive positional instructions or deployment - Defensive positional instructions or retreat: All tactical instructions that can influence the efforts.
- Methodological regulations: There are various possibilities for regulations that need to be evaluated on a case-by-case basis. For example, limiting the number of touches will promote greater mobility, while restricting playing spaces will reduce it.
- Offside rule: Establishing the offside rule is crucial for the conditional structure. Firstly, it modifies or adapts the dimension of play as it reduces it. Secondly, to gain space in the final phase, there must be a detachment in long ball situations players must clear the ball which involve accelerations.
- Fixed interaction or fixed defence: Defending or attacking in a fixed manner reduces specificity, eliminates real transitions, reduces cognitive complexity, and, at the conditional level, leads to sustained similar efforts. We can control these phases of higher intensity (defensive ones), and the effort becomes more manageable.

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