

An aerial view of a large Gaelic football stadium, likely Croke Park in Dublin, Ireland. The stadium is filled with a large crowd of spectators. The green field is visible, with a goal at the bottom center. The sky is overcast with grey clouds. The text "A Tactical Periodisation Model for Gaelic Football" is overlaid in the center of the image in a large, bold, black font.

A Tactical Periodisation Model for Gaelic Football

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About me

- Undergraduate Degree in Sport Science & Health
- Lecturer in Technological University Dublin
- PhD in Performance Analysis and Coaching Science
- Research in technical and physical performance





Overview

- What is Tactical Periodisation
- How the evidence-based model was designed for Gaelic football
- Practical findings in club and inter-county Gaelic football

Tactical Periodisation



Developed by Professor Vitor Frade from the University of Porto in Portugal



Popularised by high-profile Portuguese soccer coaches such as José Mourinho, Carlos Queiroz, and André Villas-Boas



One of the key principles is that the tactical, technical, physical and physiological components are never trained in isolation but are always linked back to at least one of the **four game moments**.

Game Moments

Defensive
Organisation

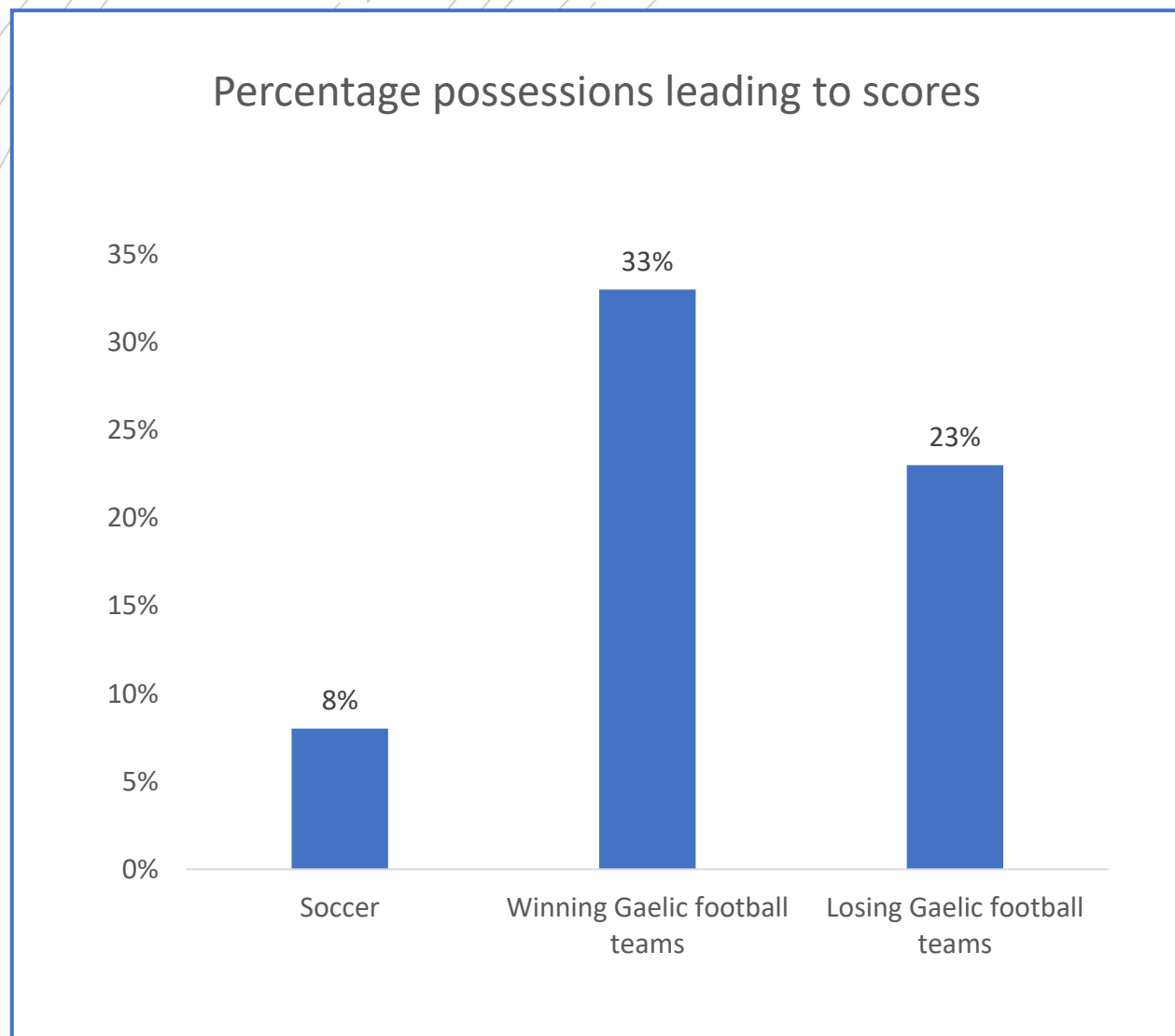
Defence to
Attack
Transition

Offensive
Organisation

Attack to
Defence
Transition

Contest for
Possession

Why the need for the 5th Game Moment in Gaelic football?



- In an average match, there are 44 kick-outs (Daly & Donnelly, 2018).
- Kick-outs are the origin of possession for 29-33% of all team possessions in a game (Gamble, Bradley, McCarren, & Moyna, 2019).
- Specifically, kick-outs to the wings result in a scoring opportunity for either team on 31% of occasions while kick-outs to the centre results in a scoring opportunity 21% of times (Daly & Donnelly, 2018).

(Tenga, Ronglan, & Bahr, 2010); (McGuigan et al., 2018)

The game model



The game model is how the coach wants the game to be played.



The coach must also consider the players that they have available when developing their approach.



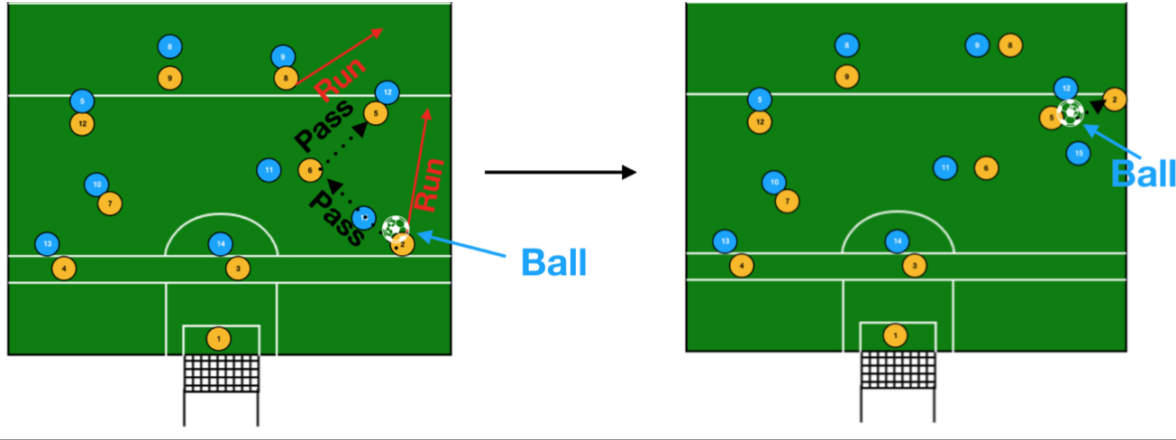
Players attributes influence the game model

Principles and sub- principles

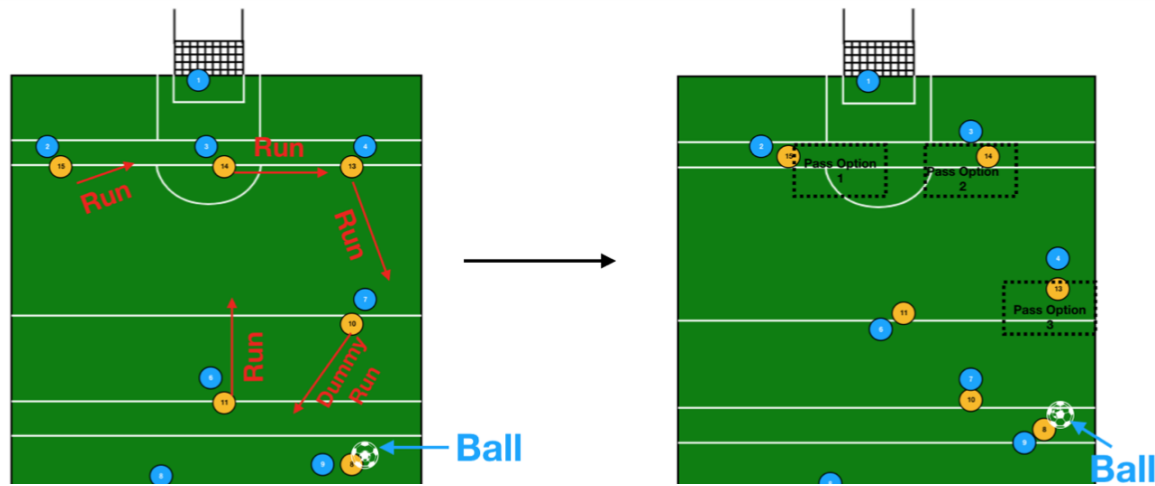
- The traditional Tactical Periodisation model simplifies the game model into principles of play and sub-principles of play for each of the game moments.
- Principles of play are general behaviours that the coach wants the players to perform (Tamarit, 2015).



**Sub-Principle
of Play -
Working the
ball out of
defence
through the
wing**

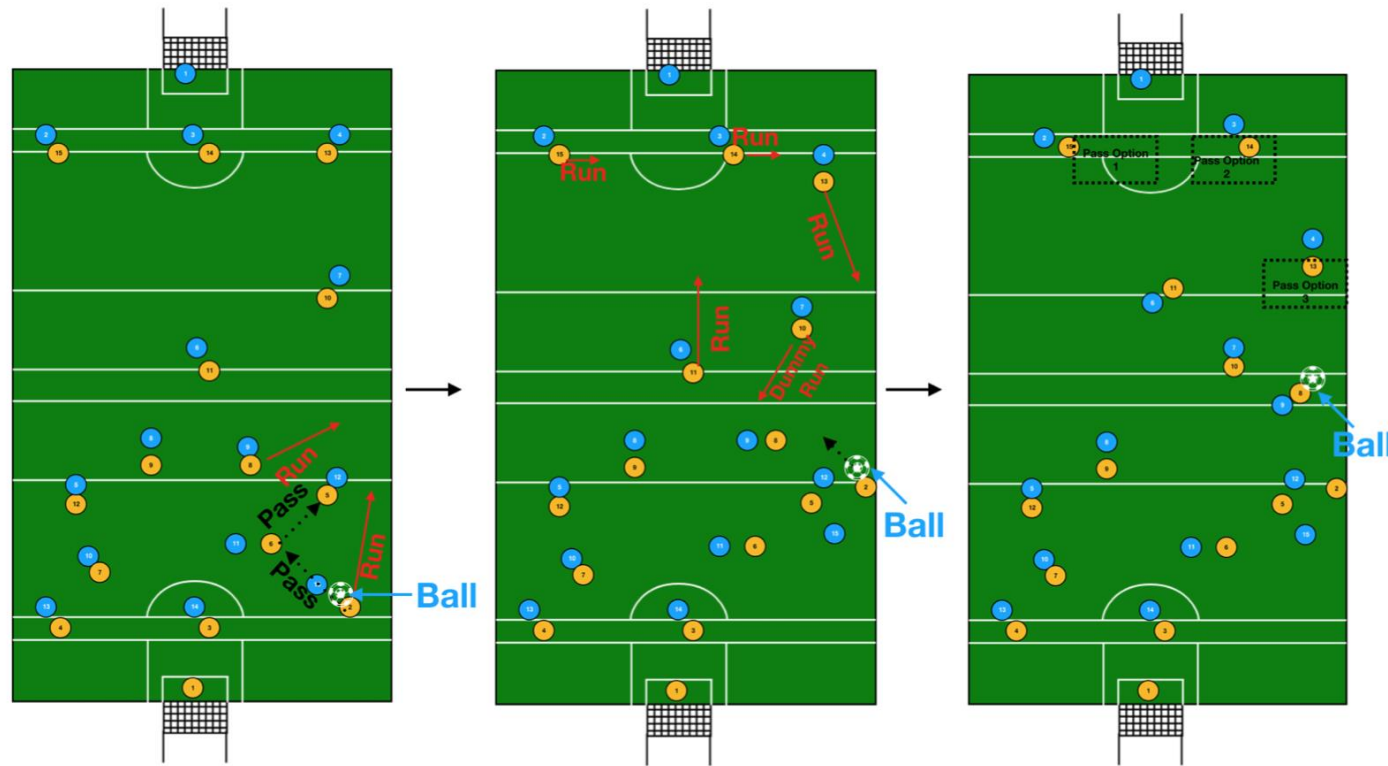


**Sub-Principle
of Play -
Making
space on the
wing for ball
delivery**



Defence to
Attack
Transition -
Attacking
Down the
Wings

Principle of Play - Attacking down the wing




Defence to
Attack
Transition -
Attacking
Down the
Wings



It's all about
the Tactical

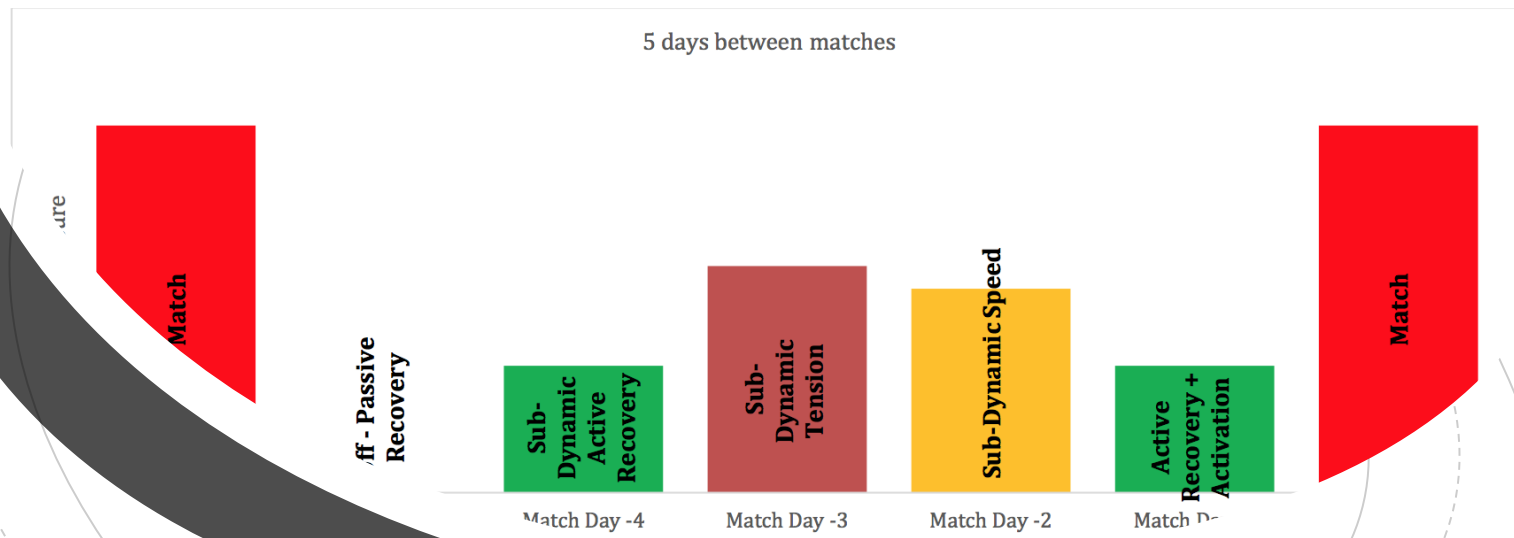
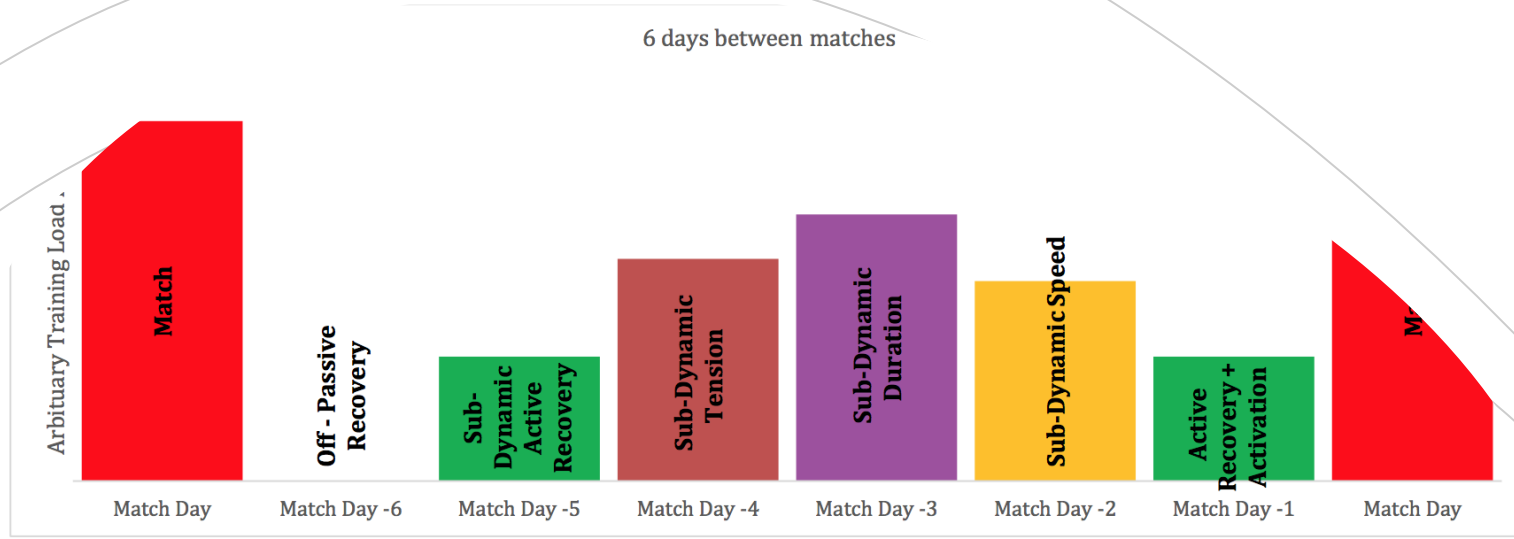
According to Vitor Frade, by structuring the game model into principles and sub-principles, you can turn the 'incalculable predictability' or unpredictability of game events into potential predictability.



It's all about the Tactical



The Morphocycle - Soccer



What is the Morphocycle?



The Morphocycle follows the same pattern each week throughout the season and will only be altered if the number of days between matches change (Tamarit, 2015).



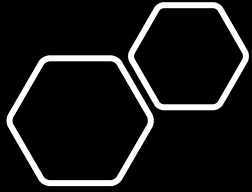
The Morphocycle is structured so that there is a 'horizontal alteration' throughout the week. Horizontal alteration relates altering the emphasis of the physical, physiological and tactical elements at specific stages during the training week (Tee et al., 2018).



The training emphasis is switched on a daily basis to ensure that training of the physical components is balanced, and to allow sufficient recovery of each physical component.

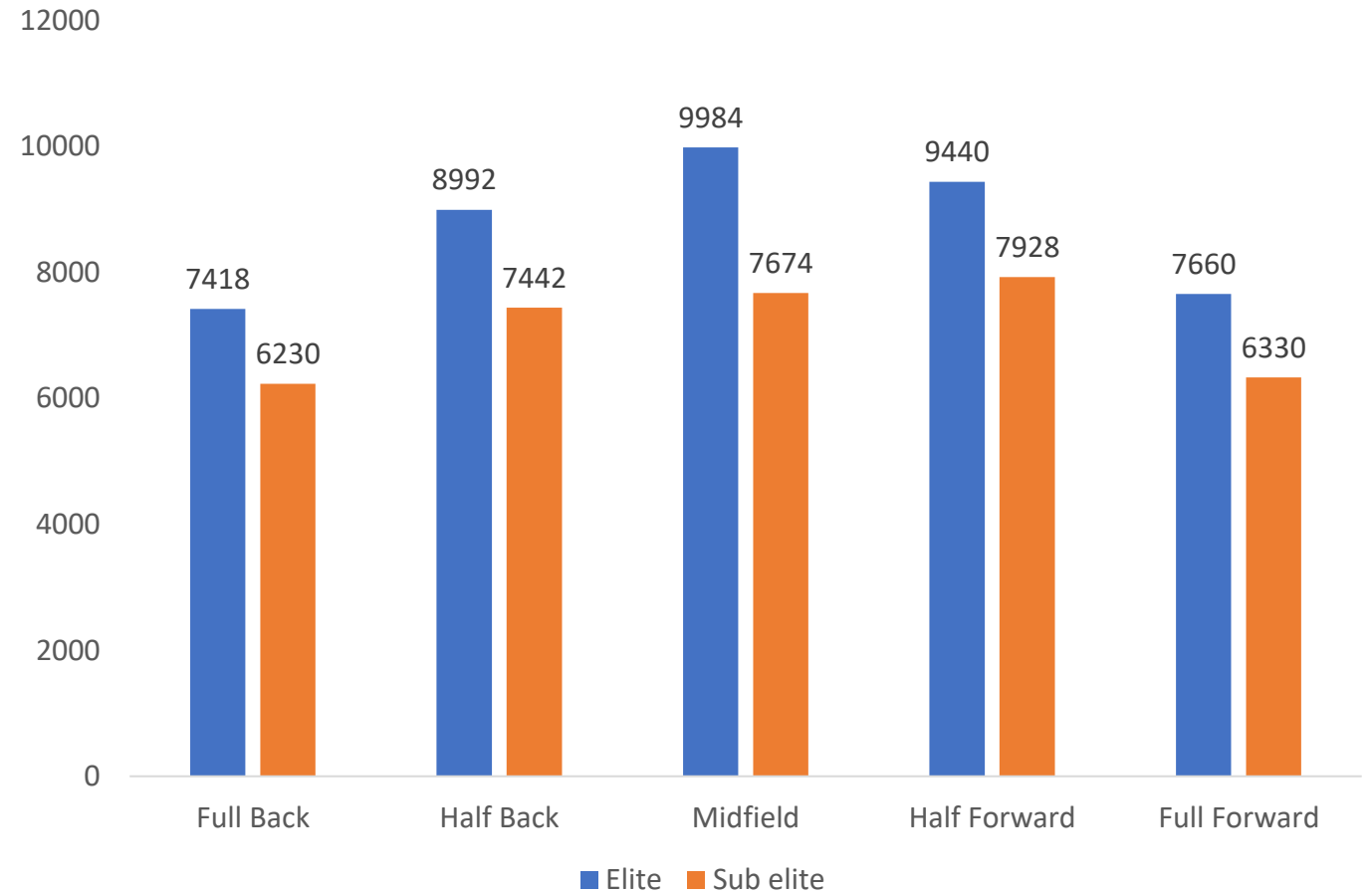
Considerations for Gaelic Football





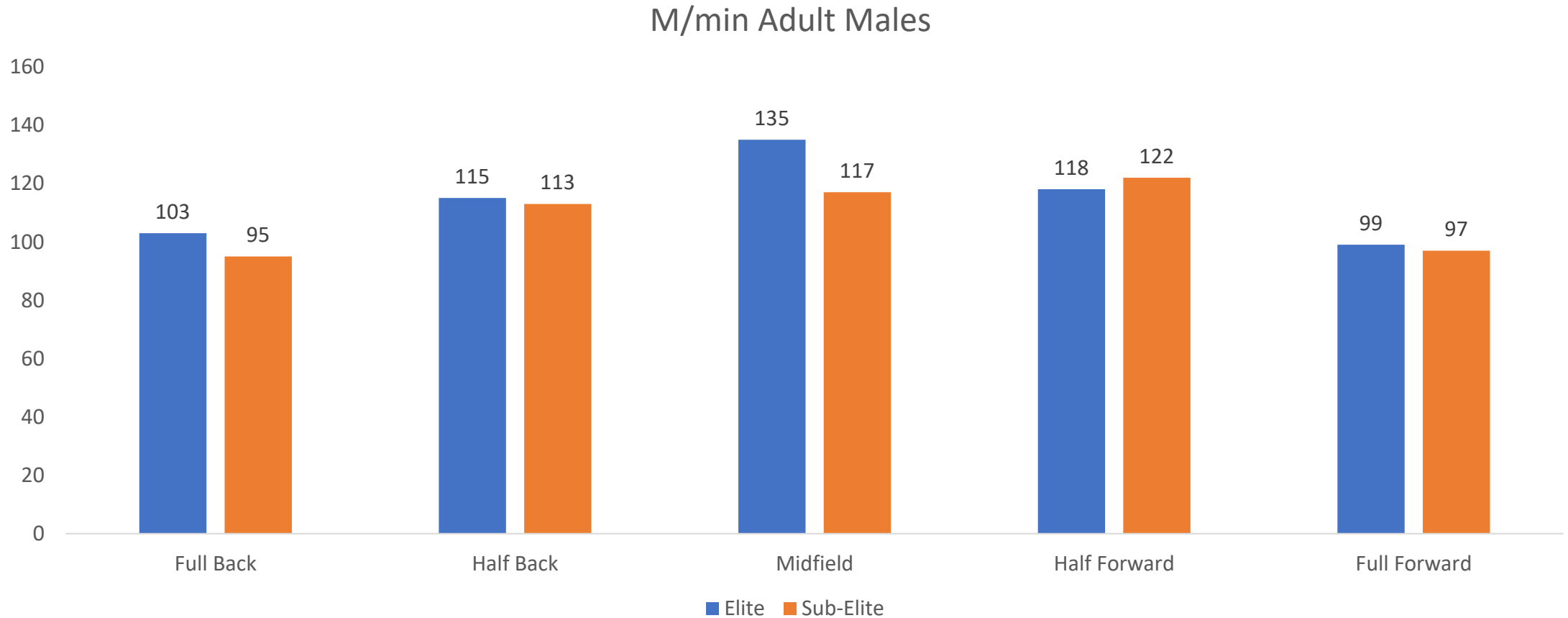
Running Demands of the Game

Adult Males



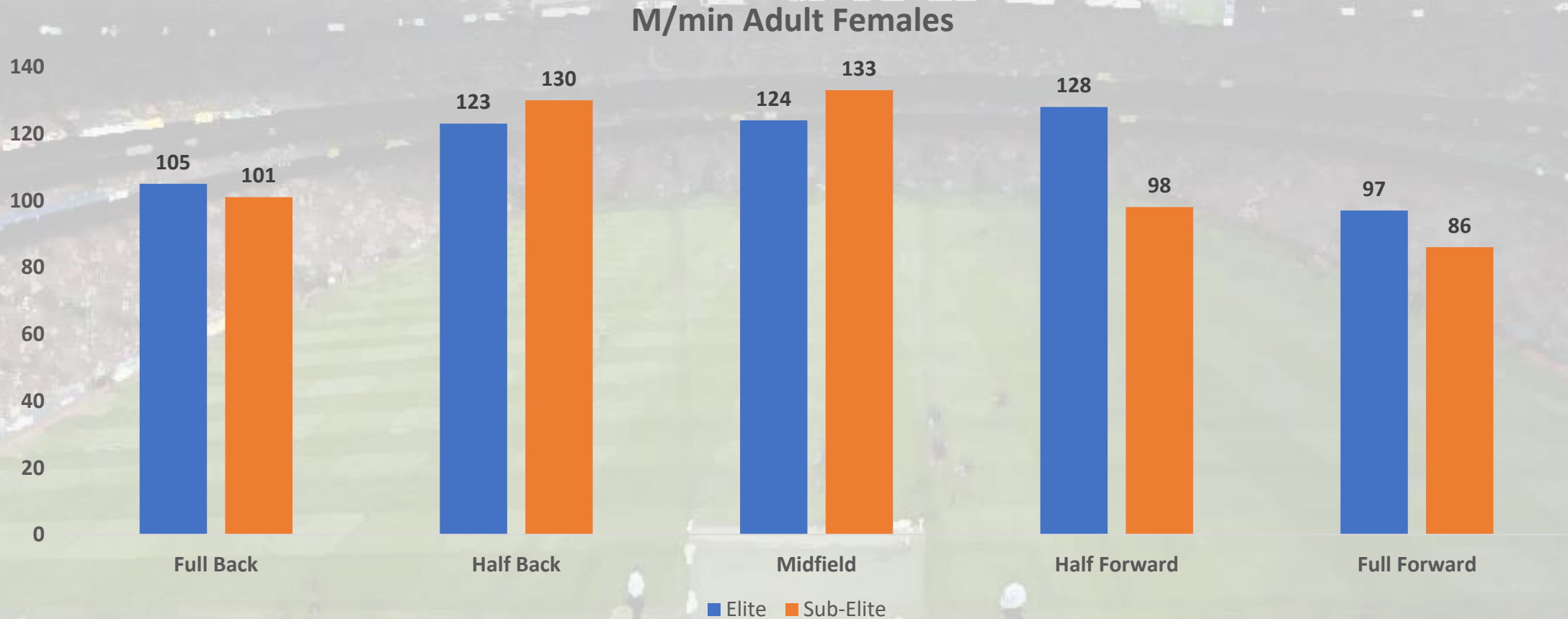
Mangan et al., 2017 & Mangan et al., 2019

Running Demands of the Game



Mangan unpublished observations

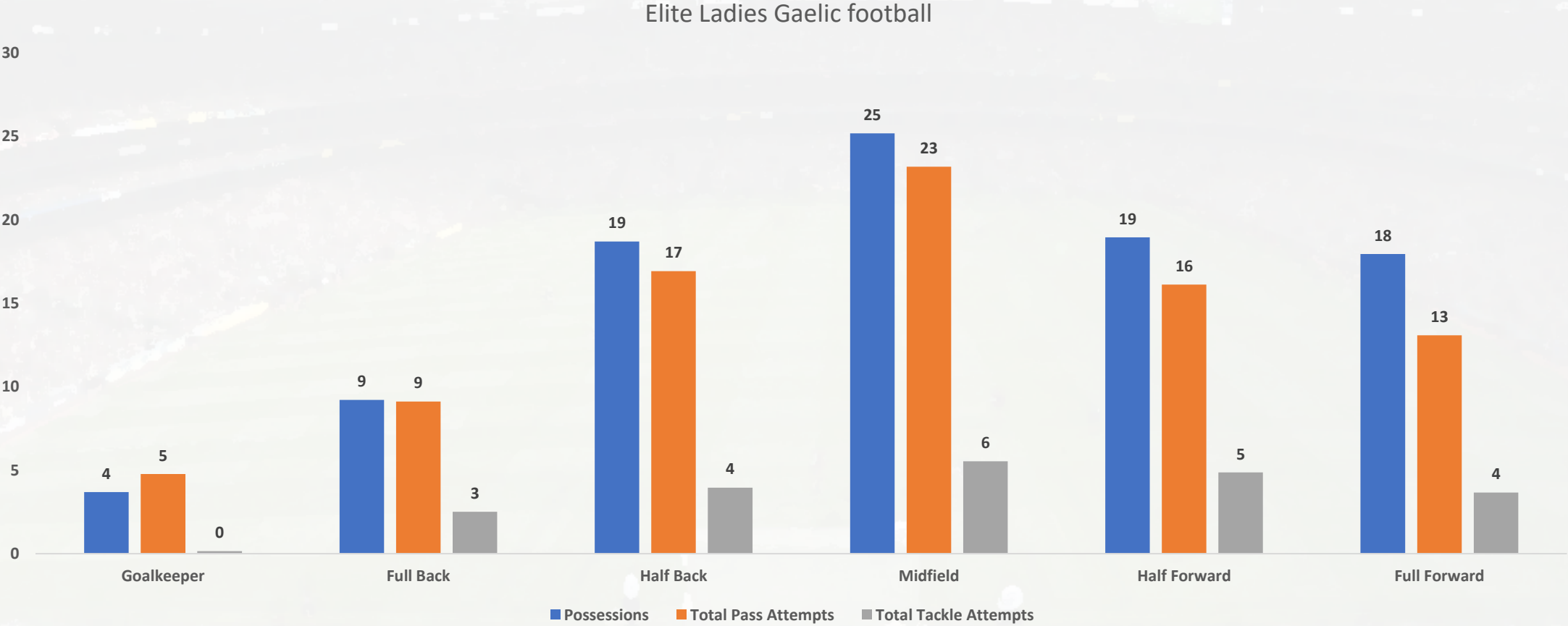
Running Demands of the Game



How is this running demands data useful?

Planning	Planning training load around matches
Creating	Creating training games to replicate match demands

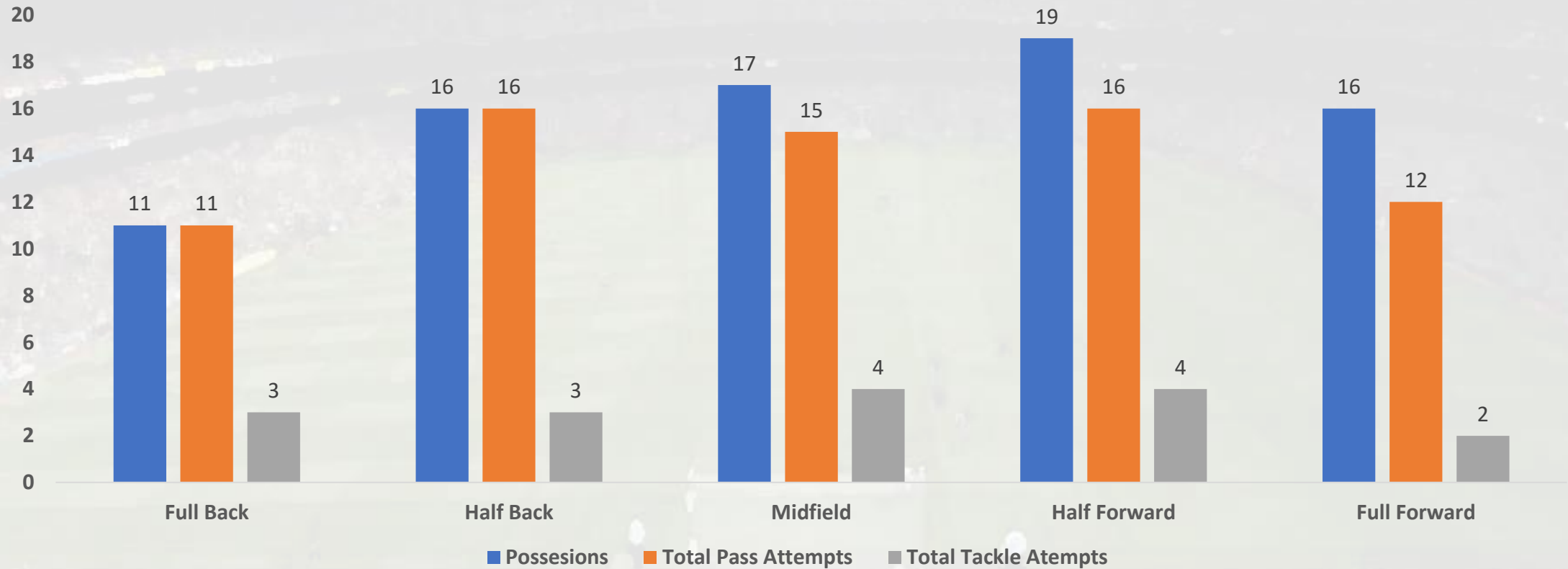
Technical Demands of the Game



Mangan unpublished observations

Technical Demands of the Game

Sub Elite Adult Males

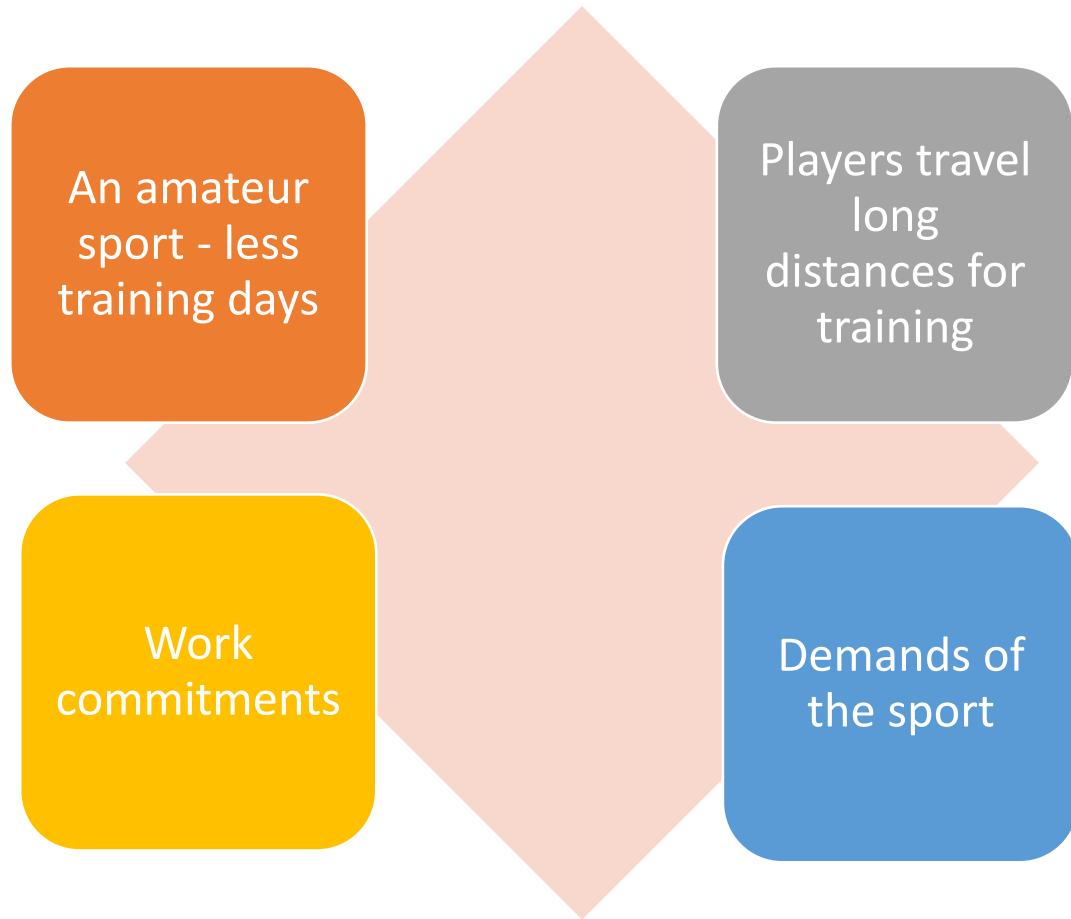


How is this technical demands data useful?

- Can we take playing position into account when designing training games?
- Create training games to overexpose players to these technical demands



Now we know



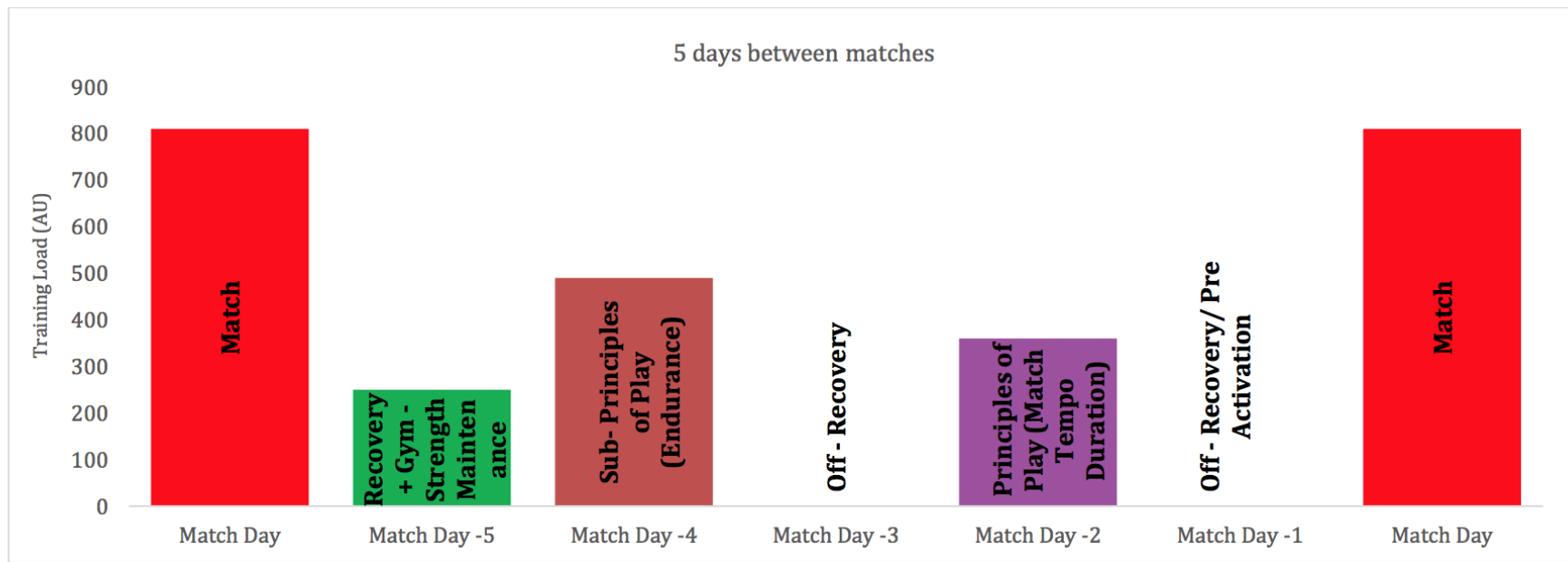
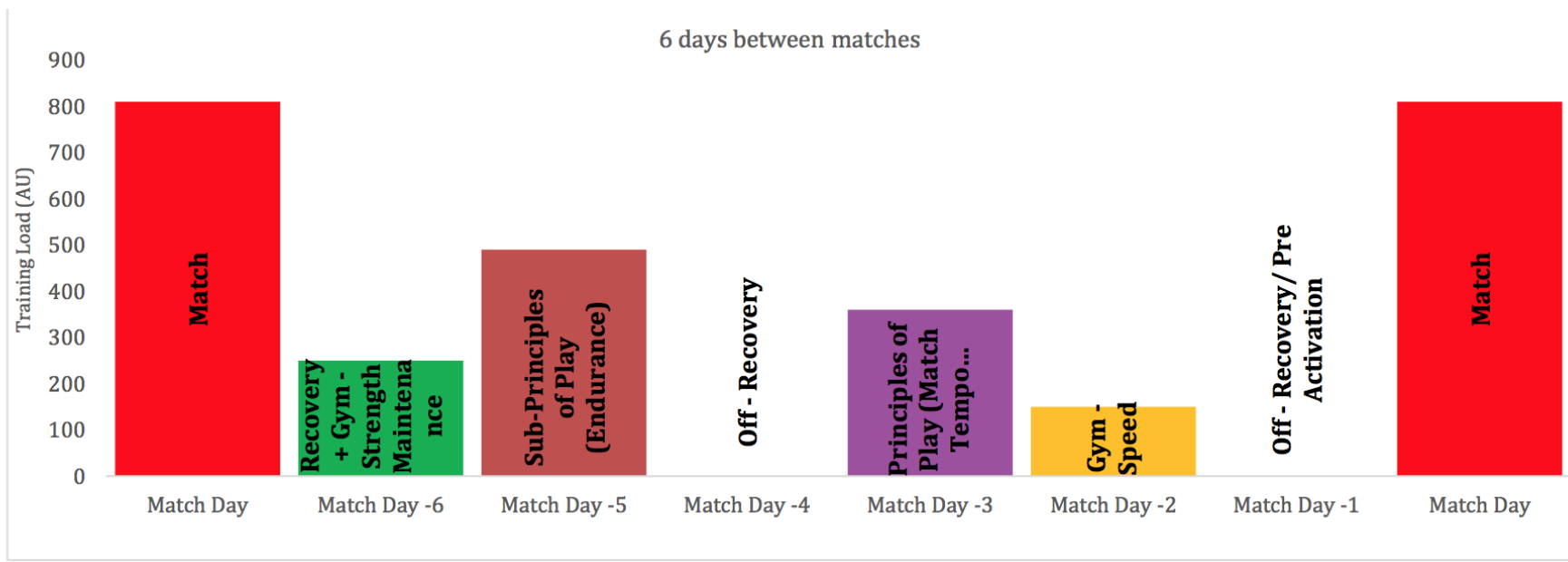
**So how can we
prepare effectively for
competition?**

How to measure training load without GPS

- Ask players how hard they found the session using the RPE scale.
- Multiply their score by the number of minutes the activity lasted.
- Example: Match+Warm up lasted 100mins. Player found it very hard
- $8 * 100 = 800$ Arbitrary Units

RPE SCALE	
1	Nothing
2	Very Easy
3	Easy
4	Comfortable
5	Somewhat Difficult
6	Difficult
7	Hard
8	Very Hard
9	Extremely Hard
10	Maximal/Exhaustion

Tactical Periodisation Model cycle for Gaelic football





MEATH SENIOR HURLING RECOVERY SYSTEM

<i>Accumulate at least 100 points in 24 - 36 hours post match</i>	
SLEEP	Points
Get 8+ hours sleep	40
Get 7-8 hours sleep	30
Get <7 hours sleep	20
Nap (20mins - 1.30 hr)	10
Meditation / Deep Breathing Time (10 mins)	10
NUTRITION / HYDRATION	
Consume your Daily Calories, Carbs, Protein	20
> 3 Litres of hydrating fluids (water, milk, juice etc.)	20
ACTIVE RECOVERY - (Approx. 20-30mins)	
Outdoor Walk / Cycle	15
Cryotherapy	15
Hot / Cold water therapy (Pool, Bath etc.)	15
Massage	15
An Activity you enjoy to unwind / relax	10
Mobility Exercise / Foam Rolling	10
DELAY RECOVERY	
> 1 Alcohol drink	-80

FOCUS - To Physically & Mentally recover from match demands as quickly as possible.

Recovery

Recovery & Strength Maintenance

Strength Maintenance

- Research in professional soccer has demonstrated that one strength session every week during the in-season is effective at maintaining strength and sprint performance (Rønnestad, Nymark, & Raastad, 2011).
- Rønnestad et al. (2011) recommend performing the strength maintenance session between 1-2 days after a match and at least 2-3 before the next match.

Sub-Principles of Play (Endurance)

- The proposed session workload would equate to approximately 60% of the load of a match, and while players would not be fully recovered from the previous match, this is the heaviest training day of the week, so is placed furthest away from the next match.
- Typical training activities on this day would consist of players working in small groups on sub-principles of play while being exposed to challenging anaerobic conditions above match demands.

Small Sided Games (SSGs)



Smaller pitch sizes



Smaller player numbers



Frequently used in soccer



Combination of physical, physiological and technical

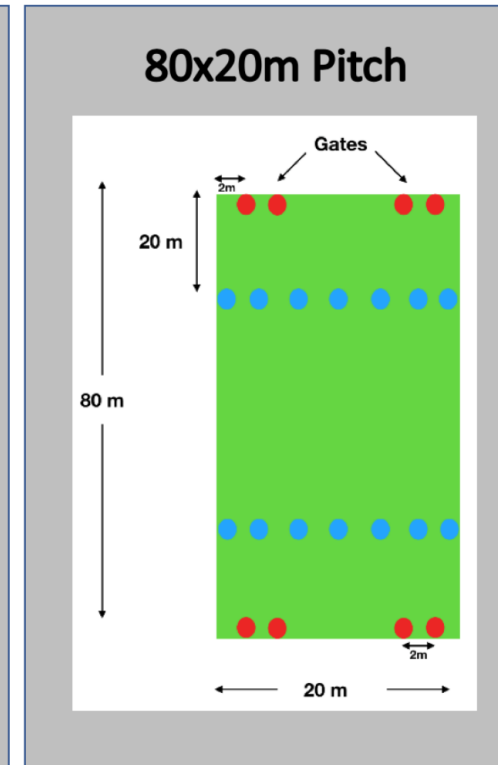
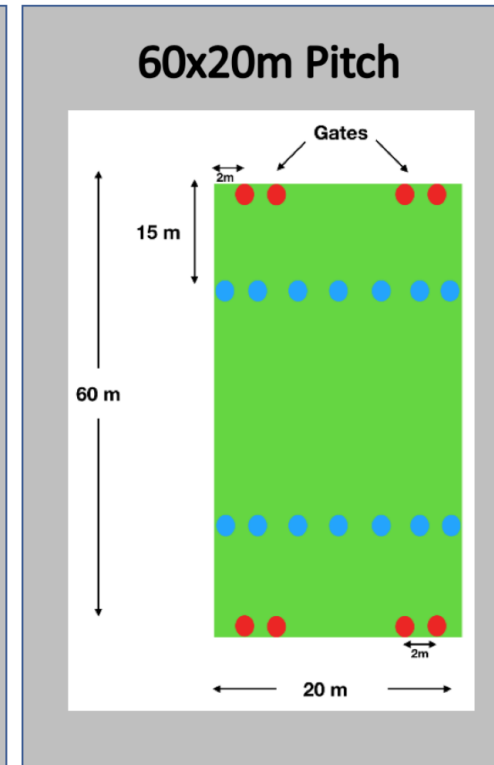
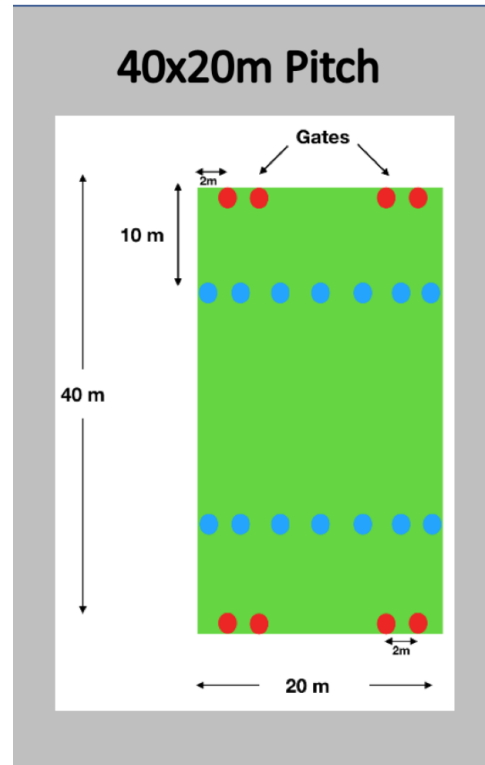
SSGs in Gaelic football

How does changing pitch size effect the outputs of the games?

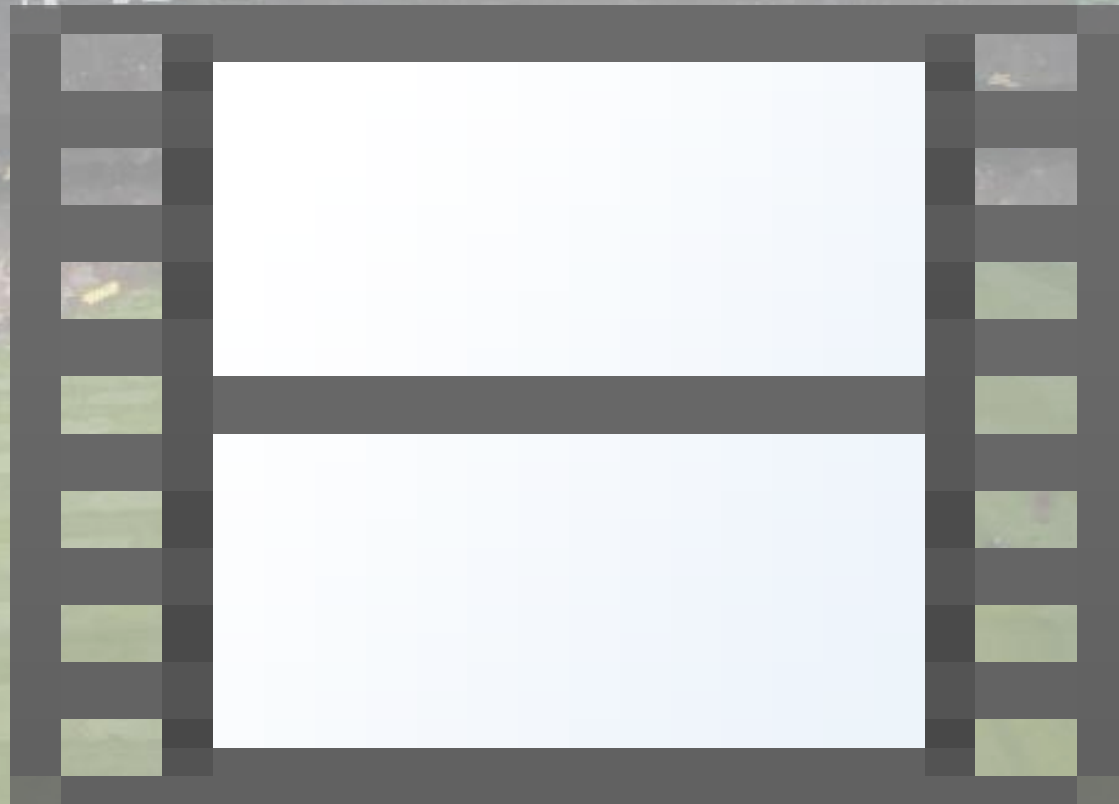
Are they effective at preparing players for matches?

SSG Study

- 4 mins long
- 4 v 4
- All players wore GPS + HR devices
- All games videoed



SSGs in Action



SSG Results

60 x 20m Pitch

- 34m/min running at high speed - 117% the demands of elite and 131% the demands of sub-elite
- Twice as many possessions per minute versus match-play, frequency of passes and tackles also higher



Midweek Off Day



Needed to give players a physical and mental rest



Positioned at least 2 days away from matches so players can switch off

Principles of Play (Match Tempo + Duration)



Speed of movement and thought is important



Working in large groups from 8v8 to 15v15.



Longer games (up to 10 minutes)



Lower volume than sub principles of play

Gym - Speed



SHORT AND SHARP
SESSION

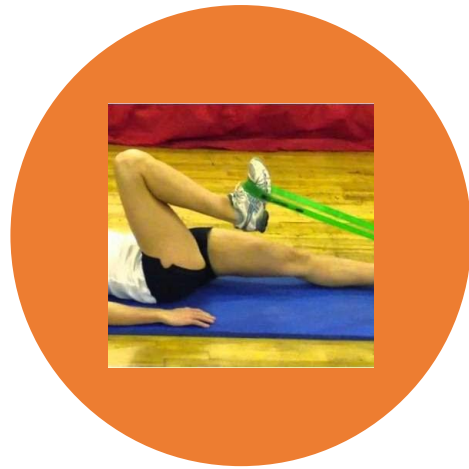


FOCUS ON EXPLOSIVE
MOVEMENTS



LOW REPS AND LONG
REST BETWEEN SETS

Day Off - Pre Activation



ACTIVATION



GET FOCUSED FOR THE
GAME

How to implement Tactical Periodisation



How to implement Tactical Periodisation



Step 3.



Decide on which training days you will use and stick to that where possible, for the season

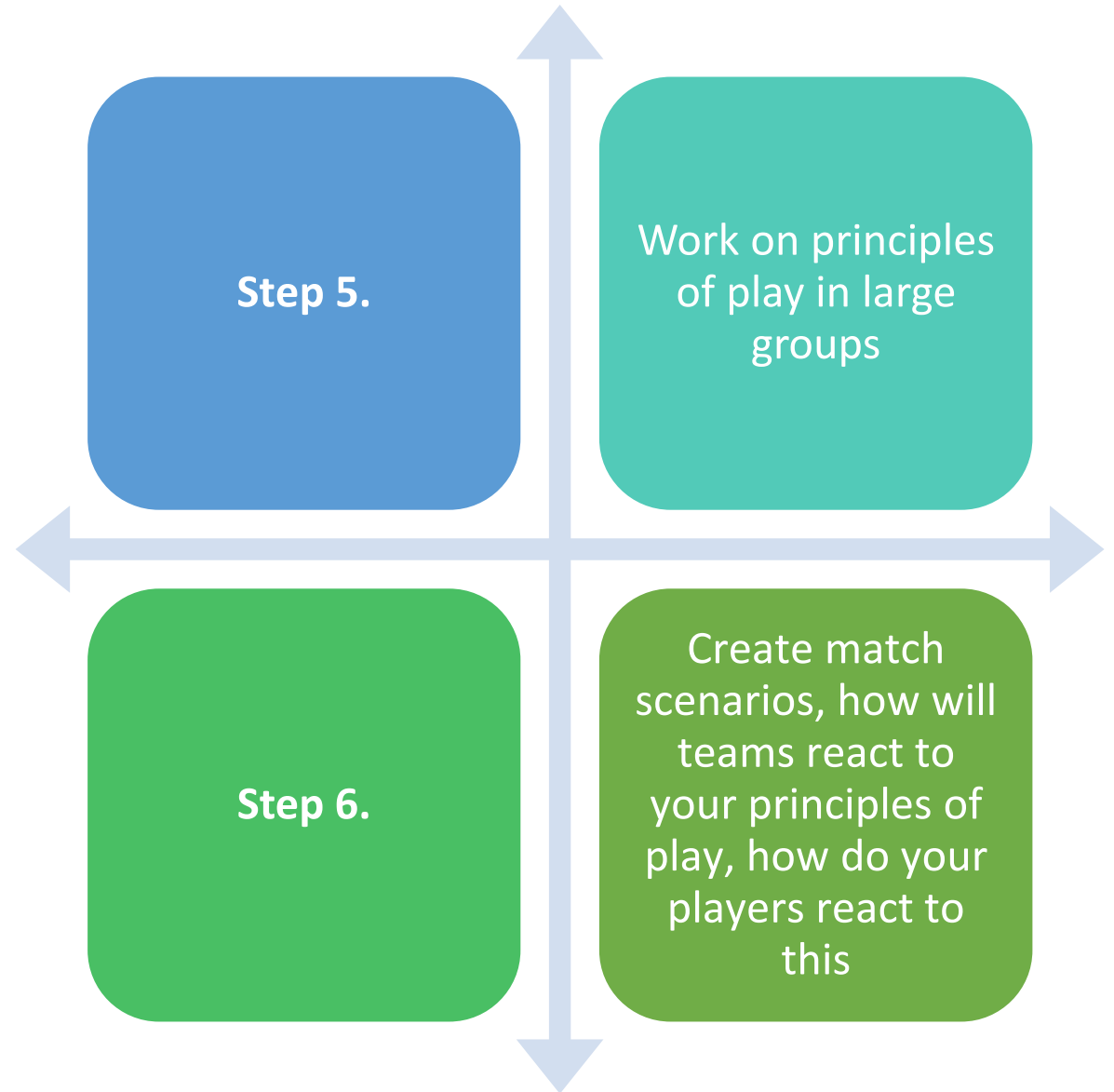


Step 4.



Break the principles of play into sub-principles and practice these sub principles in small groups

How to implement Tactical Periodisation



Summary

game

“The ~~world~~ as we have created it is a process of our thinking. It cannot be changed without changing our thinking.”

— **Albert Einstein**

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