A Tactical Periodisation Model for Gaelic Football

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About me

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• 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 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).
Defence to Attack Transition - Attacking Down the Wings

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
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
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

- An amateur sport - less training days
- Players travel long distances for training
- Work commitments
- Demands of the sport?
Running Demands of the Game

Adult Males

Mangan et al., 2017 & Mangan et al., 2019
Running Demands of the Game

M/Min Adult Males

- Full Back: Elite 103, Sub-Elite 95
- Half Back: Elite 115, Sub-Elite 113
- Midfield: Elite 135, Sub-Elite 117
- Half Forward: Elite 118, Sub-Elite 122
- Full Forward: Elite 99, Sub-Elite 97

Mangan unpublished observations
Running Demands of the Game

M/min Adult Females

- Full Back: 105, 101
- Half Back: 123, 130
- Midfield: 124, 133
- Half Forward: 128, 98
- Full Forward: 97, 86

Reid, Collins & Mangan 2019 unpublished
How is this running demands data useful?

<table>
<thead>
<tr>
<th>Planning</th>
<th>Planning training load around matches</th>
</tr>
</thead>
<tbody>
<tr>
<td>Creating</td>
<td>Creating training games to replicate match demands</td>
</tr>
</tbody>
</table>
Technical Demands of the Game

Mangan unpublished observations
Technical Demands of the Game

Sub Elite Adult Males

<table>
<thead>
<tr>
<th>Position</th>
<th>Possessions</th>
<th>Total Pass Attempts</th>
<th>Total Tackle Attempts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full Back</td>
<td>11</td>
<td>11</td>
<td>3</td>
</tr>
<tr>
<td>Half Back</td>
<td>16</td>
<td>16</td>
<td>3</td>
</tr>
<tr>
<td>Midfield</td>
<td>17</td>
<td>15</td>
<td>4</td>
</tr>
<tr>
<td>Half Forward</td>
<td>19</td>
<td>16</td>
<td>4</td>
</tr>
<tr>
<td>Full Forward</td>
<td>16</td>
<td>12</td>
<td>2</td>
</tr>
</tbody>
</table>
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

An amateur sport - less training days
Players travel long distances for training
Work commitments
Demands of the sport

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
Tactical Periodisation Model cycle for Gaelic football
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

Step 1. Consider what is your coaching philosophy and how you want the game to be played

Step 2. Decide your principles of play and whether they suit your players
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

Step 5. Work on principles of play in large groups

Step 6. Create match scenarios, how will teams react to your principles of play, how do your players react to this
“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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