SIGNAL AND NOISE? WHOSE DRIVING ELITE PERFORMANCE?

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A DISCLAIMER!!!

Today I’ll talk about:

Has the coaches dominance gone in elite sport?

Olympics cycling: Marginal gains underpin Team GB dominance

OPERATIONALISING MARGINAL GAINS – TALKING ABOUT THE SIGNAL

The New Kids on the Block

Athlete and Coach
**SCIENCE IN SPORT**

Scientific approach + new technology = Better Decisions

**UNDERSTAND TRAINING**

- Physiological Needs
  - Aerobic
  - Anaerobic
  - Specific Muscle

- Low Intensity
- High Intensity
- Speed
- Speed Endurance
- Strength
- Flexibility

Adapted from Bangsbo (1994)

**THE IMPORTANCE OF MONITORING**

**MONITORING TRAINING IN THE EPL**

- EX
- TIME
- ORGANISATION
- ACTIVITY:
- HEART RATE
- GPS
- SUBJECTIVES
- BIOCHEMICAL
POTENTIAL IMPLICATIONS OF TRAINING LOAD MANAGEMENT

Number of games played in the English Premier League

<table>
<thead>
<tr>
<th>Player</th>
<th>2011/2012</th>
<th>2012/2013</th>
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<tbody>
<tr>
<td>Player 1</td>
<td>12</td>
<td>34</td>
</tr>
<tr>
<td>Player 2</td>
<td>22</td>
<td>32</td>
</tr>
<tr>
<td>Player 3</td>
<td>24</td>
<td>33</td>
</tr>
</tbody>
</table>

Increased player availability

THE COMPLEXITY OF MONITORING IN FOOTBALL

DOS SCIENCE/DATA GIVE US ALL THE ANSWERS?

IS THE DATA ACCURATE?

VALID

PRACTICAL
DATA: KEY ISSUES ASSOCIATED WITH MEASUREMENT

What do you measure?

How do you measure it?

How do you interpret the data?

SPORT SCIENCE AS SURVEILLANCE?

Opinions about sport science often based on fact but extrapolated well beyond the available evidence and support more by belief than the data

“How STRONG IS THE SIGNAL?”

- “Scienceiness”
  - Over-simplifying the complex

39-43 "checks" each week
POTENTIAL CONSEQUENCES OF A MORE COMPLEX SYSTEM – THE NOISE GETS LOUDER!!!!!!!

WHAT ARE THE ESSENTIAL ROLES FOR PERFORMANCE?

ROLE CLARITY AND IT’S PROBLEMS

HAS THE NOISE EXCEEDED THE SIGNAL?

ROLE EVOLUTION NOT REVOLUTION

THE COACHES VOICE HAS NEVER BEEN MORE IMPORTANT IN HELPING DETERMINE WHAT’S IMPORTANT

“STAY” – DON’T GET CARRIED AWAY – REMEMBER WHOSE IN CONTROL
REMEMBER MY DISCLAIMER!!!

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