Mental toughness behaviours in football

A behavioural analysis
Project Aims

The aim of the project is to identify specific behaviours that represent mental toughness in competitive football games.

Create a tool for Danish sport psychologists and coaches to measure and train mental toughness in football.
What is mental toughness?

Hanton, and Connaughton (2002) defined MT as:

Having the natural or developed psychological edge that enables you to:

- Generally cope better than your opponents with the many demands (e.g., competition, training, lifestyle) that are placed on you as a performer,

- Specifically, to be more consistent and better than your opponents in remaining determined, focused, confident, resilient, and in control under pressure.
What is mental toughness?

Coulter, Mallet, & Gucciardi, (2010) more recently defined MT as:

Mental toughness is the presence of some or the entire collection of experientially developed and inherent values, attitudes, emotions, cognitions, and behaviours that influence the way in which an individual approaches, responds to, and appraises both negatively and positively construed pressures, challenges, and adversities to consistently achieve his or her goals.
What is mental toughness?


Three common components can be seen across the definitions.

1. Mental toughness is important both in the athletes’ sporting and non-sporting lives.

2. A critical aspect of mental toughness includes consistently being better than your opponents, as well as repeatable and consistent high performance.

3. Mental toughness appears to be a concept that is a combination of natural or inherent values, as well as developed or trainable abilities.
Figure: Jones, Hanton and Connaughton’s (2007) framework of mental toughness models.
Figure. A Conceptual overview of mental toughness in Australian soccer (Coulter et al., 2010).
Mental toughness in football

Thelwell, Weston and Greenless (2005) identified ten key factors of mental toughness in professional football:

1. Having total self-belief at all times that you will achieve success.
2. Wanting the ball at all times (when playing well and not so well).
3. Having the ability to react to situations positively.
4. Having the ability to hang on and be calm under pressure.
5. Knowing what it takes to grind yourself out of trouble.
6. Having the ability to ignore distractions and remain focused.
8. Having a presence that affects opponents.
9. Having everything outside of the game in control.
10. Enjoying the pressure associated with performance.
Mental toughness ’behaviours’

Catch-phrases
- increase “effort when it is required”
- “completely focused on the job at hand”
- “making the correct decisions”
- “reacting to positively”

Concrete(ish) actions:
- ‘quickly’ regaining composure,
- chasing every ball and player down
- effective decision making
- competing in every single challenge, and taking risks
- the ‘unglorified’ tasks (‘1%er’s’) eg.,
  • blocking opposition passes and shots
  • running into space to open up the opposition
  • redoubling work rate to cover open ground
  • positive body language.
Method

1. Video observation 45 hours of football games
   – U/18 female Danish team (32.3%), Superliga (22.6%), UEFA European Cup (29%) & Denmark women World Cup qualifying (16.1%).
   – List of 28 on-field behaviours

2. Validity analysis
   – Expert coaches and psychologists
   – Asked to identify game situations where mental toughness is important
   – Asked to rate behaviours with regards to their relevance to mental toughness. That is, what the most important mental toughness behaviors

3. Reliability analysis
   – Interobserver reliability
   – Intraobserver reliability
Example
Results - Situations

Internal
- Making an error
- Being consistently beaten by your opponent
- Getting a yellow card
- Being injury, and playing on
- Coping with fatigue

External Environment
- Responding to poor referee decisions
- Intimidated by opponent off the ball
- Being criticized by others
- Poor pitch or weather conditions
- Being consistently fouled

External Match
- Conceding or scoring a goal
- Being ahead or behind on the scoreboard
- Time periods (e.g., first/last 10 min, +/- half-time)
- Not being involved in the game (e.g., striker/GK)
- Opposition changes tactics
- You (or opponent) going down to 10 men
# Results - Behaviours

<table>
<thead>
<tr>
<th>N</th>
<th>Behavior Category</th>
<th>Coach</th>
<th>Psych</th>
<th>Total</th>
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<th>Behavior Category</th>
<th>Coach</th>
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<td>Quick recovery after an error</td>
<td>5.73</td>
<td>6.50</td>
<td>6.05</td>
<td>15</td>
<td>Football skill – effective</td>
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<td>2.13</td>
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<td>Wanting the ball - Movement</td>
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<td>Motiv communication- Team</td>
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<td>17</td>
<td>Technical communication - Referee</td>
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<td>Tactical communication - in play</td>
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<td>Interaction with people off field</td>
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<td>Having a physical presence</td>
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<td>Aggressive after an error</td>
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<td>Slow recovery after an error</td>
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## Results - Behaviours

### General
- **Scanning the game** – Visually scanning the field to see position of team mates or opponents
- **Having a physical presence** – Hard tackling, fighting for position and pushing opponent off the ball
- **Football skill (effective)** – Effective pass, shot, tackle that has a positive impact on the game
- **Enjoying the game** – Smiling, laughing, body language that you’re enjoying the game

### Offensive
- **Wanting the ball (Movement)** - Making a run into space to receive the ball, or win a free ball
- **Playing with confidence** - Dribbling, shooting, ‘trick’. Having confidence to take risks & impact the game
- **Taking time on the ball** - Holding the ball; Looking for options; Deliberate first touch away from defender

### Defensive
- **Quick recovery after an error** – Chasing the ball; Making a 2nd effort, getting quickly into position
- **Covering a position or player** – Sprint into the defensive line (counter); Pushing into the middle of the pitch
- **Pressuring your opponent** – Sprinting to press an opponent, Closing down your opponent
- **Following an opponent** – Running with an opponent not in possession of the ball; Covering movements

### Communication
- **Wanting the ball (Communication)** - Calling for ball; Pointing to your feet, eye contact; Pointing to space
- **Motivation** - Encouragement, celebrating; Hi-5; Slapping team-mate on the back; Clapping; 'Calm it down'
- **Tactical (in play)** – Calling timing to teammates ("Man on"); Point + directing play (offensive + defensive)
- **Tactical (in break)** - Tactical discussion with team-mates: Analyzing + instruction
Results – Reliability

Inter-observer
3 coaches & 2 psychologists viewed the top 10 behaviors. Asked to say which behaviour they saw:
• 98% agreement (coaches)
• 92% agreement (psychologists)

Intra-observer
2 scoring of the same video – 84% agreement
Practical implications

Tool for development or training players (e.g., goal-setting)

Measurement tool

Scouting

Consistency of behaviors both within and across games

Need undergo training of the checklist & observation method

Mental toughness behaviors may be position specific

Cultural differences in mental toughness
Future challenges

Mental toughness and Performance

Further validation (many games + patterns of behaviour)

Can you train MT?

Limitations of behavioural analysis
  • No access to thoughts
  • Situation specific

Mental weakness – Absence of MT or other behaviours

MT behaviours in training and off the pitch
Follow-up projects

Current projects:

Is there a difference between ‘mentally’ tough players and ‘non-mentally tough players’ with regards to the identified behaviours?

What is the relationship between mental toughness behaviours and performance?

Future projects:

What are the cognitions associated with the mental toughness behaviours?

Intervention study: Can we train MT to improve performance?

MT and physical effort in games?
Cheers!

Thanks for your time!

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