

The “Psychology” of Sport: Mental Toughness Skills for the High School Student-Athlete

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Thought for the day...

DEFINING SPORTS PERFORMANCE >>>

**“When you’re through learning,
you’re through.”**

-John Wooden



$$\begin{aligned}
 h^{\tau\tau} &= 4\epsilon^4 \sum_{A=1,2} \frac{P_A^\tau}{r_A} \\
 &+ \epsilon^6 \left[-2 \sum_{A=1,2} \frac{m_A}{r_A} \{ (\bar{n}_1 \cdot \bar{n}_A)^2 \} + 2 \frac{m_1 m_2}{r_{12}} \bar{n}_{12} \cdot (\bar{n}_1 - \bar{n}_2) \right. \\
 &\quad \left. + 7 \sum_{A=1,2} \frac{m_A^2}{r_A^2} + 14 \frac{m_1 m_2}{r_1 r_2} - 14 \frac{m_1 m_2}{r_{12}} \sum_{A=1,2} \frac{1}{r_A} \right] + \mathcal{O}(\epsilon^7), \\
 h^{ij} &= 4\epsilon^4 \sum_{A=1,2} \frac{m_A v_A^i v_A^j}{r_A} \\
 &+ \epsilon^4 \left[\sum_{A=1,2} \frac{m_A^2}{r_A^2} n_A^i n_A^j - \frac{8m_1 m_2}{r_{12} S} n_{12}^i n_{12}^j \right. \\
 &\quad \left. - 8 \left(\delta_{kl}^i \delta_{kl}^j - \frac{1}{2} \delta^{ij} \delta_{kl} \right) \frac{m_1 m_2}{S^2} (\bar{n}_{12} - \bar{n}_1)^k (\bar{n}_{12} + \bar{n}_2)^l \right] + \mathcal{O}(\epsilon^5), \tag{131}
 \end{aligned}$$

Dr. Carr's Background

DEFINING SPORTS PERFORMANCE >>>

- Collegiate football (DIII) player: GA FB Coach
- Sport Psychologist @ Washington State University, Arizona State University, The Ohio State University, Purdue University, & Indiana University (current consulting role)
- US Ski Team (10 yrs); USA Diving (4 yrs); 2 Olympic Games (2002, 2008); USOC Sport Psychology Registry since 1992
- Professional teams: Arizona Cardinals (1994-95); Kansas City Royals (1999-2005); Columbus Crew (1996-2000); Indiana Fever (2001 to present); Oklahoma City Thunder (2009-2011); Indiana Pacers (2011-Present)
- Over 20 years experience as a psychologist in sport and performance (US Navy OCS)

What is Performance Psychology?

DEFINING SPORTS PERFORMANCE >>>

- ...refers to “excellent” performance within a field where excellence counts (Hays, 2006)
- Performance often occurs in front of others (e.g. audience)
- Performers must meet certain performance standards...are judged to a certain proficiency/standard...there are consequences to poor performance...and, good coping skills are intrinsic to excellent performance (Hays and Brown, 2004)
- ...talents/skills must be delivered at a specific point in time

An Underlying Model for Change:

DEFINING SPORTS PERFORMANCE >>>



Thoughts

Behaviors

Consequences

$$h^{\tau\tau} = 4\epsilon^4 \sum_{A=1,2} \frac{P_A^r}{r_A}$$

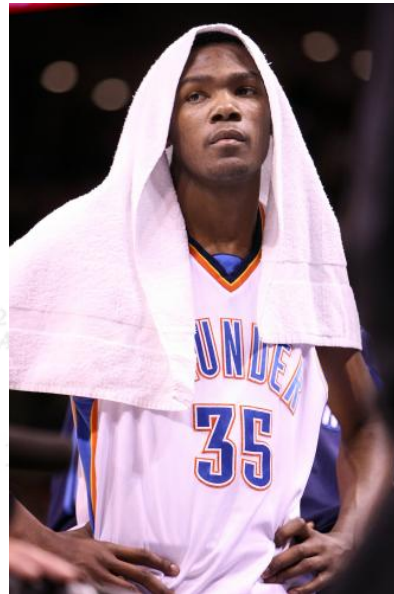
$$+ \epsilon^6 \left[-2 \sum_{A=1,2} \frac{m_A}{r_A} \{(\bar{n}_A \cdot \bar{v}_A)^2 - v_A^2\} + 2 \frac{m_1 m_2}{r_{12}^2} \bar{n}_{12} \cdot (\bar{n}_1 - \bar{n}_2) \right]$$

$$h^{ij} = 4\epsilon^4 \sum_{A=1,2} \frac{m_A v_A^i v_A^j}{r_A}$$

$$+ \epsilon^4 \left[\sum_{A=1,2} \frac{m_A^2}{r_A^2} n_A^i n_A^j - \frac{8m_1 m_2}{r_{12} S} n_{12}^i n_{12}^j - 8 \left(\delta^i_k \delta^j_l - \frac{1}{2} \delta^{ij} \delta_{kl} \right) \frac{m_1 m_2}{S^2} (\bar{n}_{12} - \bar{n}_1)^k (\bar{n}_{12} + \bar{n}_2)^l \right] + O(\epsilon^5), \quad (131)$$

What is “Excellence” in Athletes?

DEFINING SPORTS PERFORMANCE >>>



What are some of the characteristics of elite, high-performing athletes....or “excellent” athletes (and other elite performers)?



Personal Characteristics of Elite Athletes

DEFINING SPORTS PERFORMANCE >>>

- Self-confidence
- Motivation (intrinsic)
- Competitiveness (focus on process)
- Independence
- Open and striving to learn and improve
- Need to be creative and innovative
- Perseverance
- Leadership
- Mental “toughness”
- Strong/smart work ethic
- Sense of “balance”
- Use of mental preparation skills
- Optimistic

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What is Mental “Toughness”?

DEFINING SPORTS PERFORMANCE >>>



(13)

(131)

Defining “Mental Toughness”

DEFINING SPORTS PERFORMANCE >>>

Mental toughness is having the natural or developed psychological edge that enables you to:

***Generally, cope better than your opponents with the many demands (games, training, lifestyle) that sport places on a performer**

***Specifically, be more consistent and better than your opponents in remaining determined, focused, confident, and in control under pressure** (Jones, et al, 2002)

Attributes of Mental Toughness

(Jones, et al, 2002)

DEFINING SPORTS PERFORMANCE >>>

- **Self-belief**
 - ***belief in ability to achieve goals**
 - ***belief you are different to opponents**
- **Motivation (desire/determination)**
- **Intrinsic motivation and using adversity as a source of determination**
- **Accepts competition anxiety, but has plan on how to deal with it**
- **Can maintain focus...ability to “balance”**
- **Maintains technique/effort in face of fatigue/pain**

Why Mental Training?

DEFINING SPORTS PERFORMANCE >>>

- How much of your sport (0-100%) is “mental”? (Confidence, Composure, Focus)
- Of all the mistakes/errors in your sport performance, what % of them are “mental” mistakes?
- Of all your training and preparation as an athlete, what % do you spend doing “mental training”?

Mental Training “Basics”

DEFINING SPORTS PERFORMANCE >>>

- **Goal Setting Skills**
 - Focus on Process...not Outcome
 - ”SCRAM”
 - Everyday application
- **Composure Skills**
 - Relaxation training (10-15 minutes/day)
- **Concentration/Focus Skills**
 - Imagery training
 - Visualizing “success” w/controllables

Mental Training “Basics”

DEFINING SPORTS PERFORMANCE >>>

- Develop your own “mental routine” that creates a connection with your “optimal performance”
 - What is my “optimal” performance?
 - How do I prepare for this?
 - Consistency in routine generates enhanced confidence
 - ”Focus” provides clarity; decreases “pressure”

GOAL: Enhanced Confidence/Composure/Concentration

Achieving “Flow”

(Csikzentmihalyi, 1990)

DEFINING SPORTS PERFORMANCE >>>

- Having Goals
- Being immersed in the activity
- Paying attention to what is relevant
- Enjoying the activity (emotional and cognitive)



Questions?

DEFINING SPORTS PERFORMANCE >>>

Thank You!

Additional questions?

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