Anxiety and Arousal in Sport
What is the relationship between anxiety, arousal, and sport performance?

How pumped-up or how calm should one be???
Arousal

- A physiological activation of a person (from coma to intense activation)
- Neutral until interpreted, when it is felt as positive or negative
- Under control of the ANS (autonomic nervous system)
Neurophysiology of arousal

PERCEIVED STIMULUS

CORTICAL ASSOCIATION AREAS

HIPPOCAMPUS-SEPTUM
- Fornix
- Anterior & Preoptic Hypothalamus

AMYGDALA
- Stria Terminalis
- Posterior & Lateral Hypothalamus

“FIGHT OR FLIGHT”

ANXIETY

CRH

Pituitary

ACTH

Cortex

Medulla

Cortisol and Other Corticosteroids

Epinephrine and Other Catecholamines

Hypothalamic-Pituitary-Adrenal Activation

Sympathetic Adrenal-Medullary Activation
Arousal

- HR, BP, RR

Biochemicals (hormones)

- Muscle Tension (EMG)
- Palmar sweating & GSR
Anxiety

- How do athletes experience anxiety?
  What are the symptoms?
State vs. Trait anxiety

- Situation-specific (State Anxiety)

vs.

- Generalized anxiety (Trait Anxiety)
Experiencing anxiety

Anxiety components

Emotional/Cognitive
Physiological
Behavioral
Measuring anxiety

Anxiety

- Emotional/Cognitive (self-report inventories)
- Physiological (arousal measures)
- Behavioral (observation)
What is the relationship between anxiety, arousal, and sport performance?

How pumped-up or how calm should one be???
The relationship between arousal, anxiety, and performance is curvilinear and in the shape of an inverted-U.

For any task, there is an optimal level of arousal/anxiety depending on the sport, situation, and individual.
Kicker Psychology


Billy Cundiff
Why do athletes "choke?"

- reasons...??
- Explanatory model (A-B-C-D-E)
  - A = Athlete (what he/she brings to the situation)
  - B = Ballgame (the actual situation)
  - C = Cognitive appraisal
  - D = Dread & Dry mouth
    (the emotional & physiological responses)
  - E - Execution (the sports performance)