What Is Concentration?

Concentration

The ability to maintain focus on relevant environmental cues.
What Is Concentration?

Three components of concentration

- **Focusing on relevant environmental cues**
  Selective attention: Select what cues to attend to and disregard.

- **Maintaining attentional focus**

- **Situation awareness**
  The ability to understand what is going on around oneself (size up a situation).
Concentration and Optimal Performance

Elite athlete peak performance is associated with

- being “absorbed in the present” and having no thoughts about past or future,
- being mentally relaxed and having a high degree of concentration and control, and
- being in a state of extraordinary awareness of both the body and the external environment.
Concentration and Optimal Performance

It is important to focus on only the relevant cues in the athletic environment and to eliminate distractions.
Four Types of Attentional Focus

**Broad**
- Used to rapidly assess a situation (e.g., a football quarterback rapidly assesses the positioning of the defensive backs)

**Narrow**
- Used to focus exclusively on one or two external cues (e.g., the ball)
- Used to mentally rehearse an upcoming performance or control an emotional state (e.g., mentally rehearse golf putting or taking a breath to relax)

**External**

**Internal**

**Direction**
Types of Attentional Focus

Key:
Several types of attentional focus are appropriate for specific sport skills and activities.
Shifting Attentional Focus

When the environment changes rapidly, attentional focus must also change rapidly. Time pressures during a competition make this difficult.
Attentional Problems

Internal distractions

- Attending to past events (e.g., what was?)
- Attending to future events (e.g., what if?)
- Choking under pressure
- Overanalysis of body mechanics
- Fatigue
Attentional Problems

External distractions

- Visual distractions
- Auditory distractions
- Gamesmanship
Choking as an Attentional Problem

An attentional process that leads to impaired performance and the inability to retain control over performance without outside assistance.
Choking: An Attentional Problem

Conditions leading to choking:
- Important competition
- Critical plays in a competition
- Evaluation by coaches, peers, and parents

Physical changes:
- Increased muscle tension
- Increased breathing rate
- Racing heart rate

Attentional changes:
- Internal focus
- Narrow focus
- Reduced flexibility

Performance impairment:
- Timing and coordination breakdown
- Muscle tightness and fatigue
- Rushing
- Inability to attend to task-relevant cues
Assessing Attentional Skills

- Test of Attention and Interpersonal Style (TAIS).

- The TAIS is a general trait measure. Sport-specific measures also exist. The TAIS is not without problems.

- Effective attenders can attend to several stimuli without getting overloaded and can narrow attentional focus without leaving out important information.

- Ineffective attenders are easily confused with multiple stimuli.
Assessing Attentional Skills

Psychophysiological measures

- EEG (brain activity)
  
  *Example:* Elite shooters can voluntarily reduce cognitive activity and enhance performance.

- Heart rate
  
  *Example:* Elite shooters experience cardiac decelerations just prior to performance.
Attentional Control Training

1. Assess (TAIS)
2. Awareness of demands of the sport
3. Identify situational specific problems that affects one’s arousal level
4. Identify personal tendencies in specific situations
5. Apply appropriate interventions
Attention X Performance Enhancement

1. Athlete needs to match the type of attention to the sport situation (selective attention)

2. Athlete must be able to shift to the appropriate type of concentration (flexible attention)

3. Athlete needs to control their level of arousal (prevent choking)
Way to promote selective attention?

1. Attend to the present
2. Attend to effort not outcome
3. Simplify, do not complicate.
4. Be aware of what is important in the skill or situation
   - develop attentional cues and triggers
5. Minimize distractions & uncertainty
6. Develop a performance protocol or routines
Promoting Attentional Shifting

1. Learn relaxation techniques
2. Teach athlete how to cope with pain
3. Develop a “just do it” focus instead of overanalyzing the skill or situation
How to prevent choking!

- Educate athletes about the causes of choking!
- Overlearn the skill
- Simulation practice
- Be aware of external and internal problems
- Be in best physical shape
Improving Concentration

- Use imagery
- Develop mental plans
- Use trigger words
- Parking technique
- Simulation practice
- Use positive self-talk
- Use non-judgemental thinking