



“FOCUSING THE MIND’S EYE”

THE INS AND OUTS OF ATHLETIC CONCENTRATION

Brian H. Jackson, Ph.D.
Department of Exercise Science
Pacific University

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What happened?

- A professional golfer misses a critical putt when a photographer snaps a picture...
- Even with 10,000 screaming fans in the arena, the basketball player can hear exactly what the coach is saying from the bench...
- When the quarterback dropped back to pass, he was so excited that he did not see the linebacker breaking through the line to his right...

What is Attention?

- Focalization and limitation of information processing resources (Schmidt & Wrisberg, 1999)
- Conscious or non-conscious engagement in perceptual, cognitive, and/or motor activities before, during, and after performing skills (Magill, 2001)

What is Concentration?

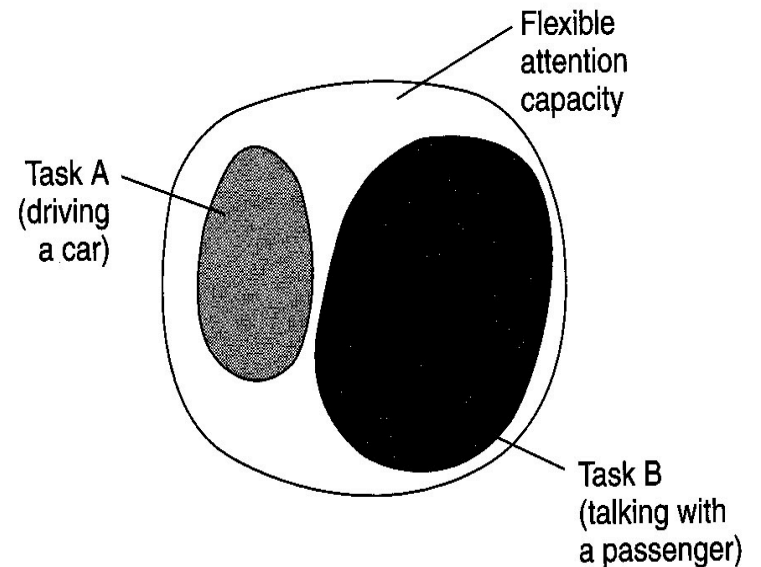
“...the ability to maintain focus on relevant environmental cues”



Concentration = Focused Attention

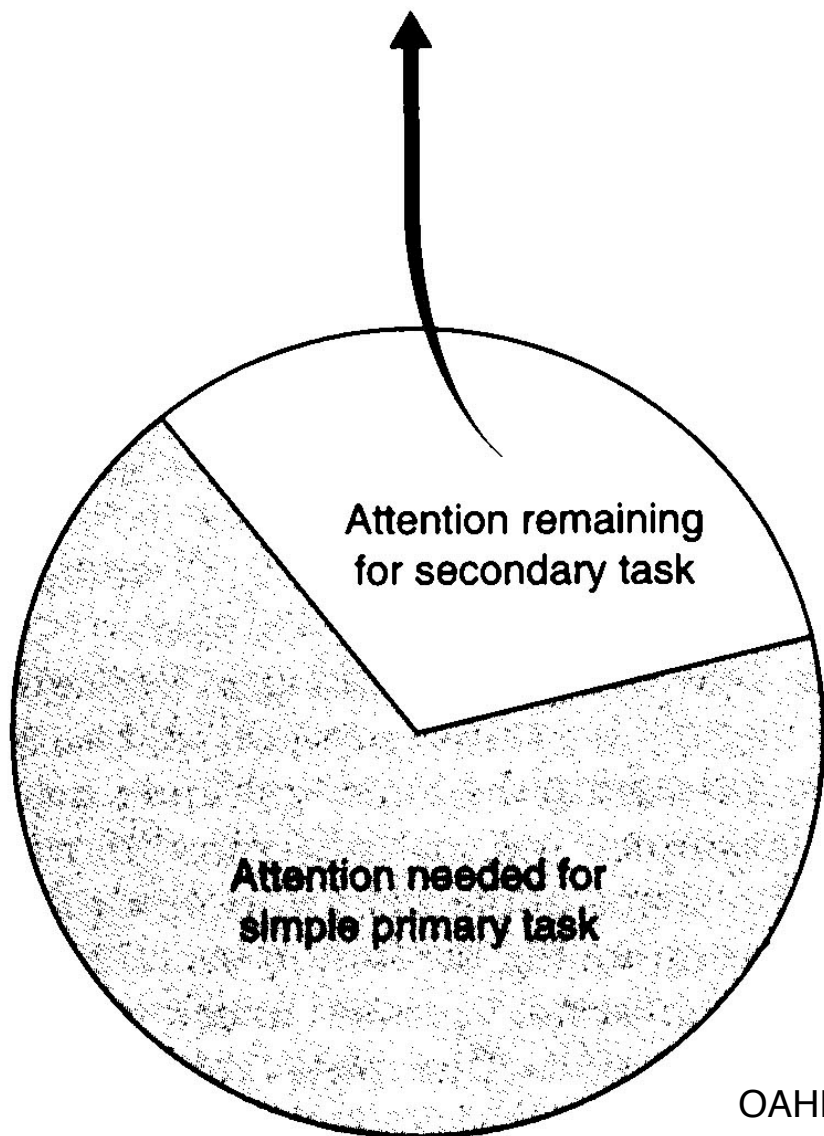
Limited Attention

- Can perform several tasks simultaneously, as long as the “resources” are available
- Increase in attention on one may decrease the ability to attend to the other



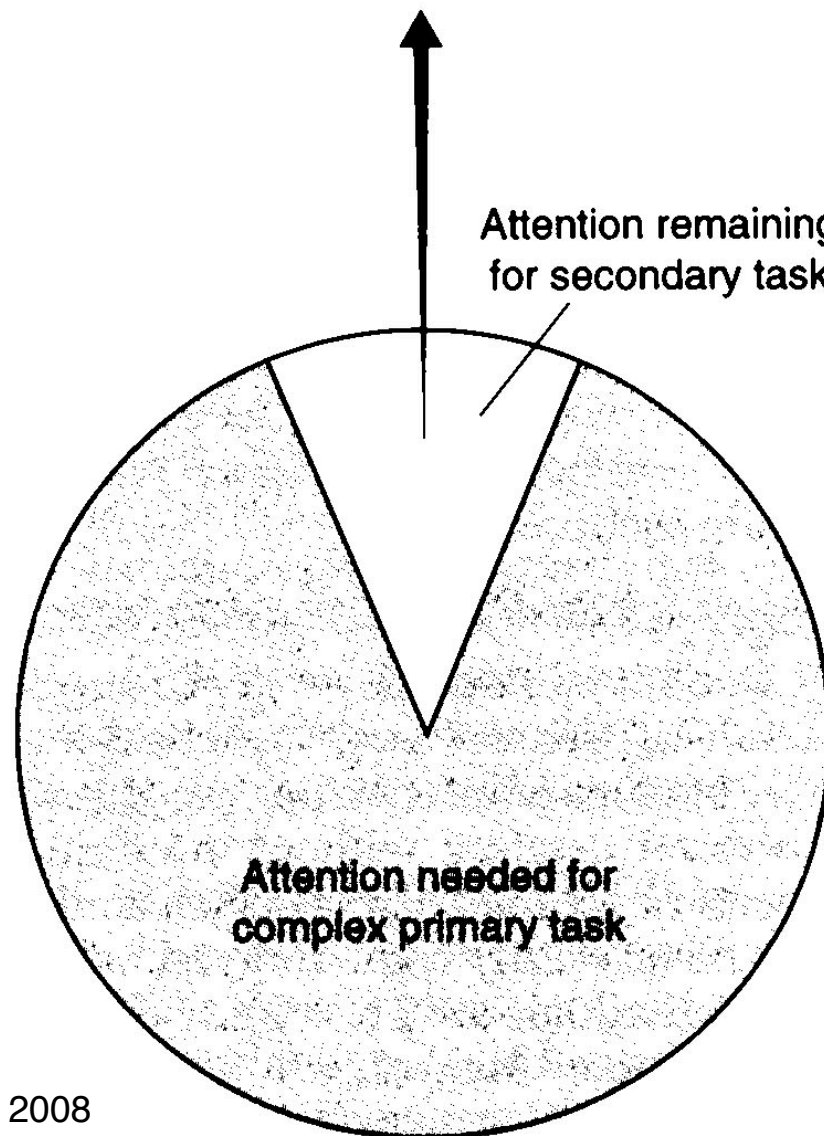
a

Good secondary task performance



b

Average secondary task performance

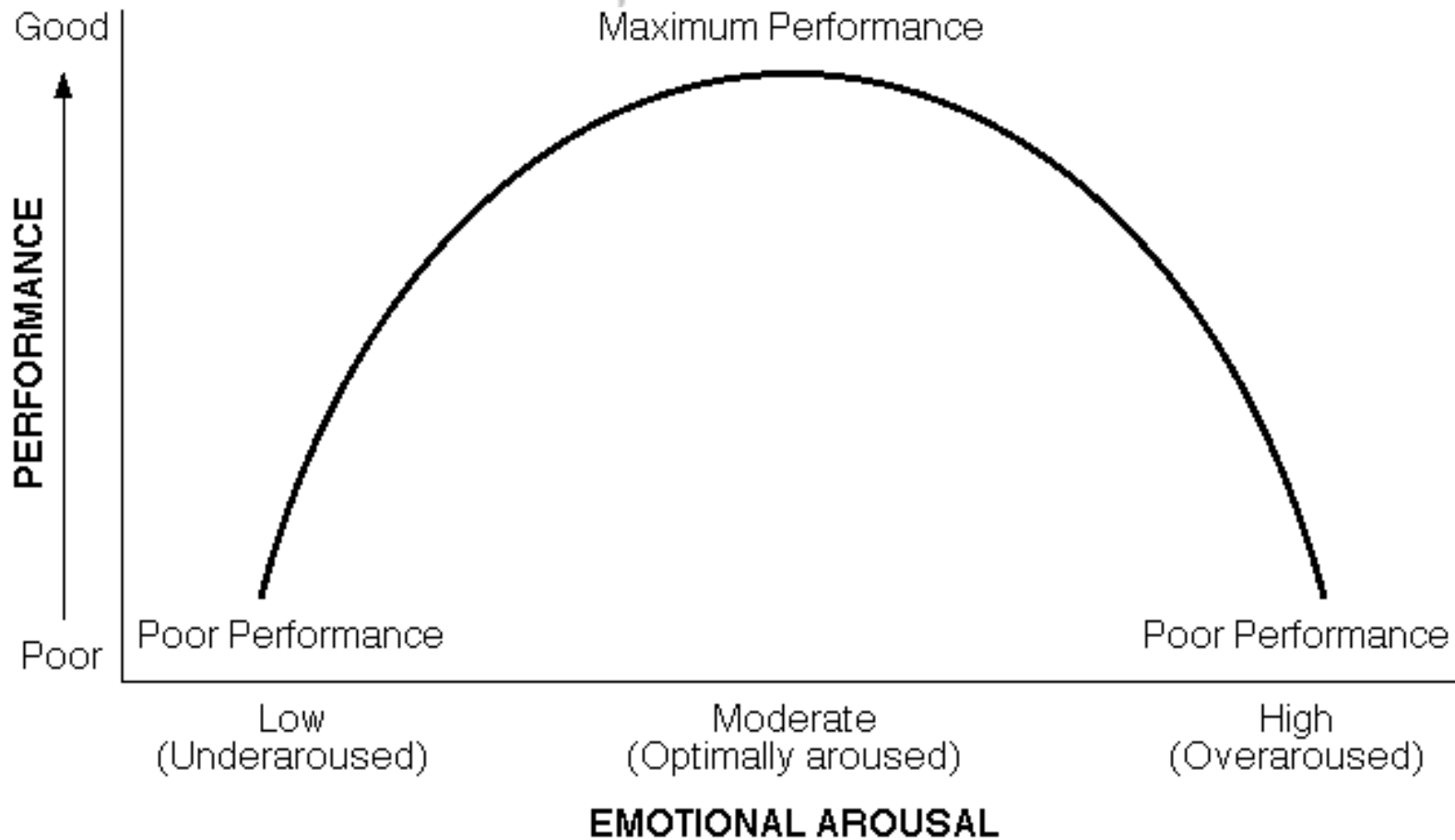


How does arousal affect attention?

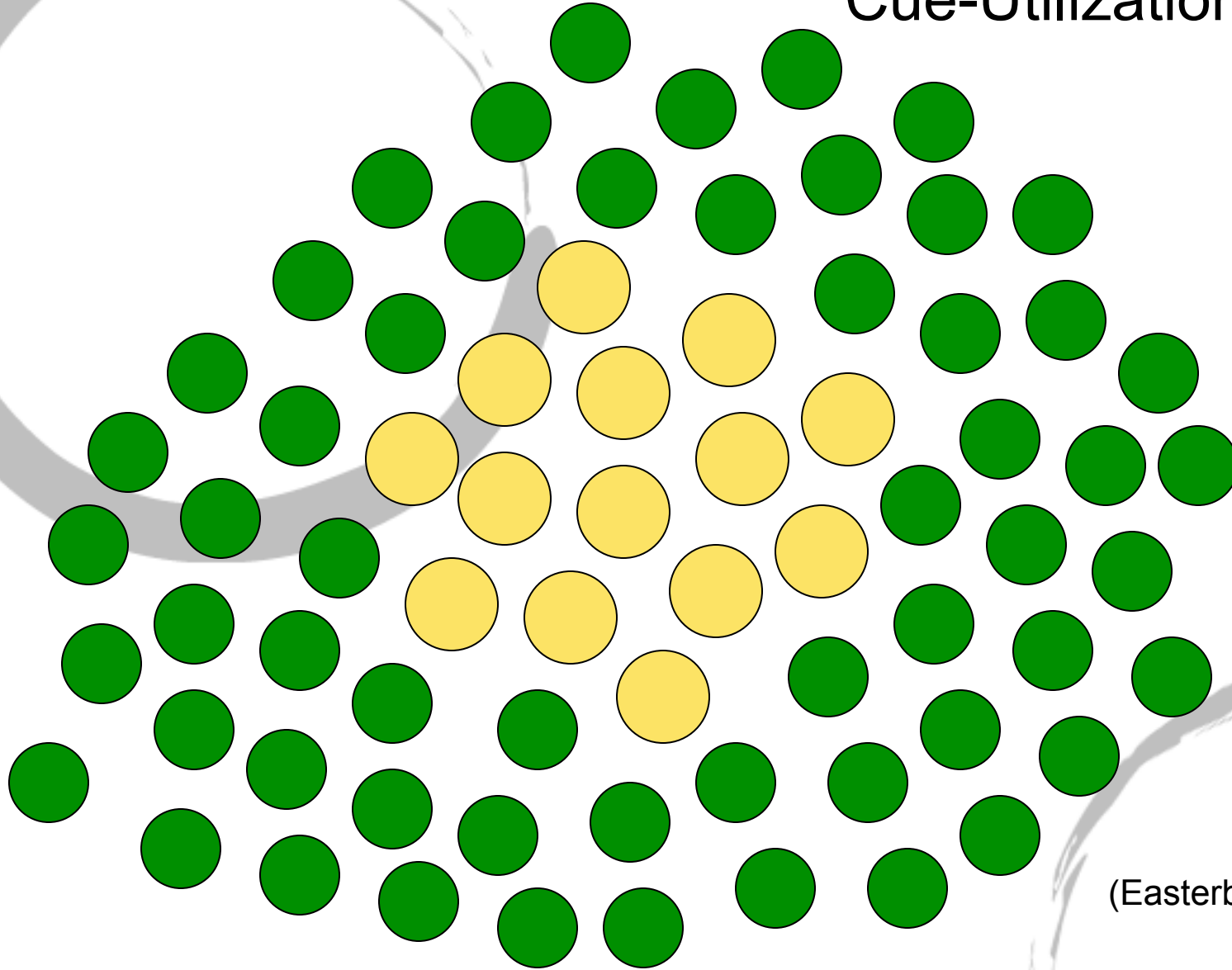
Perceptual narrowing: increased arousal causes increased narrowing of the attentional focus

- Beneficial when the stimulus is expected
 - baseball pitch
- Detrimental when stimulus is not expected
 - football play (quarterback)

Inverted-U Hypothesis

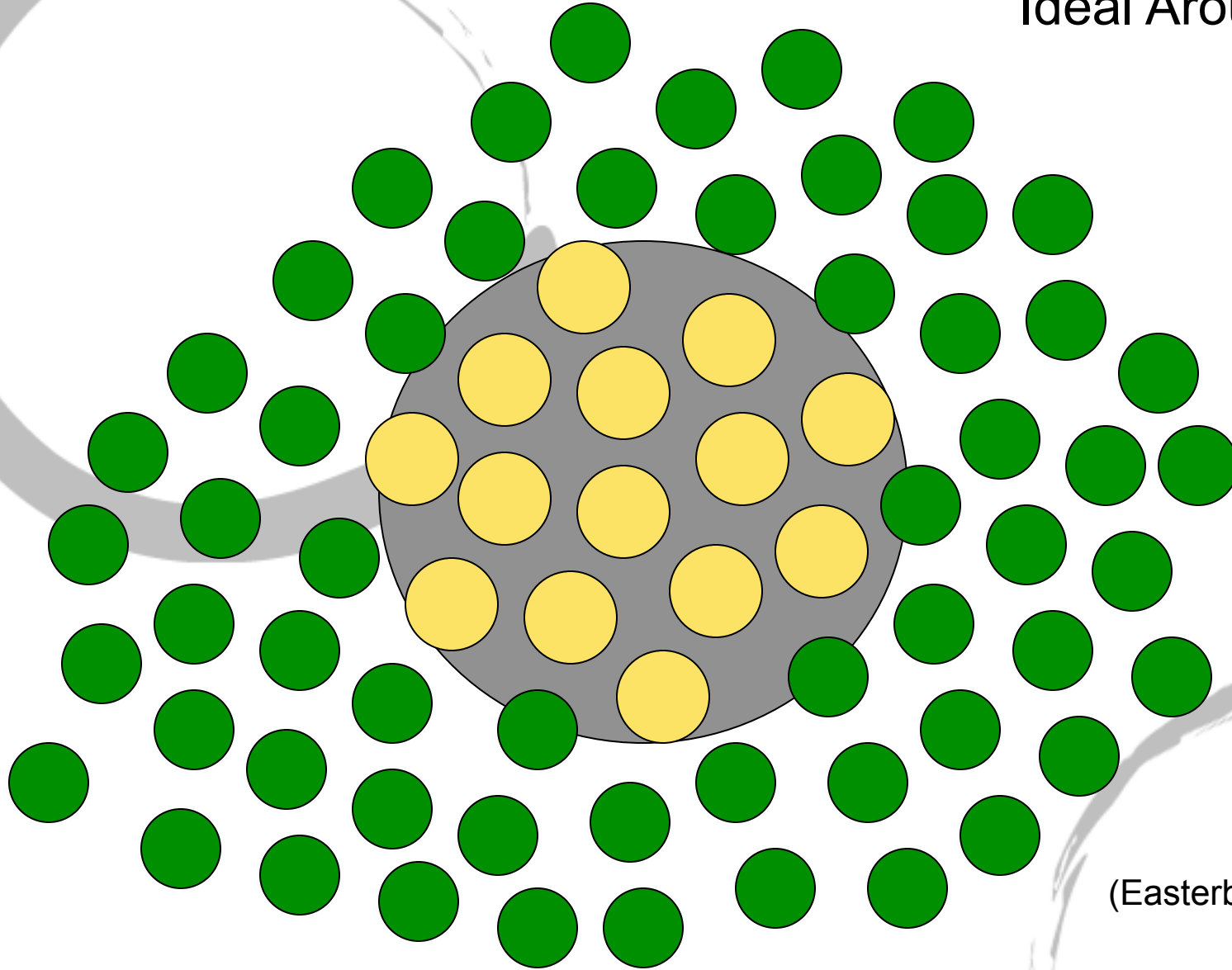


Cue-Utilization Theory



(Easterbrook, 1959)

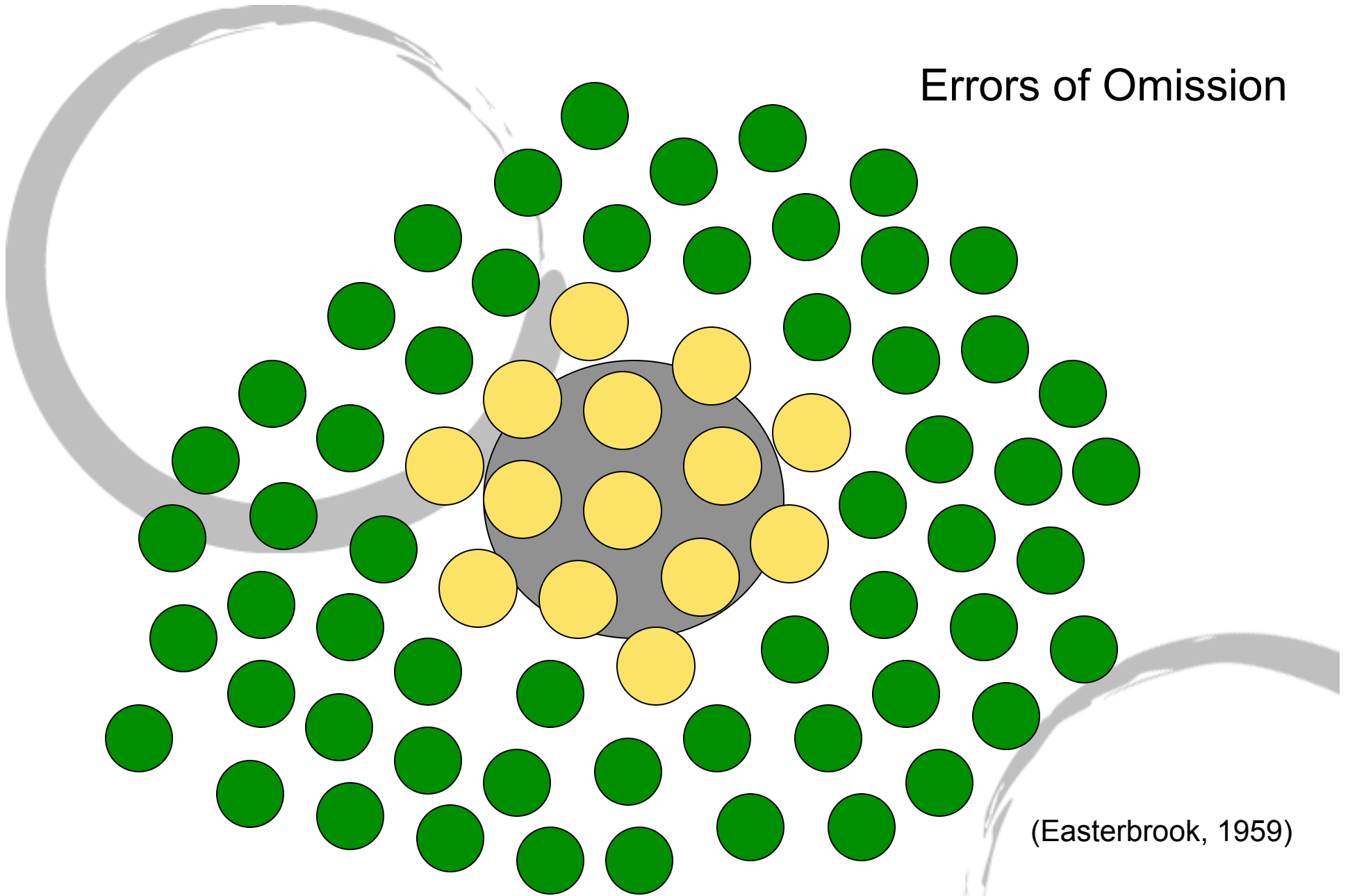
Ideal Arousal



(Easterbrook, 1959)

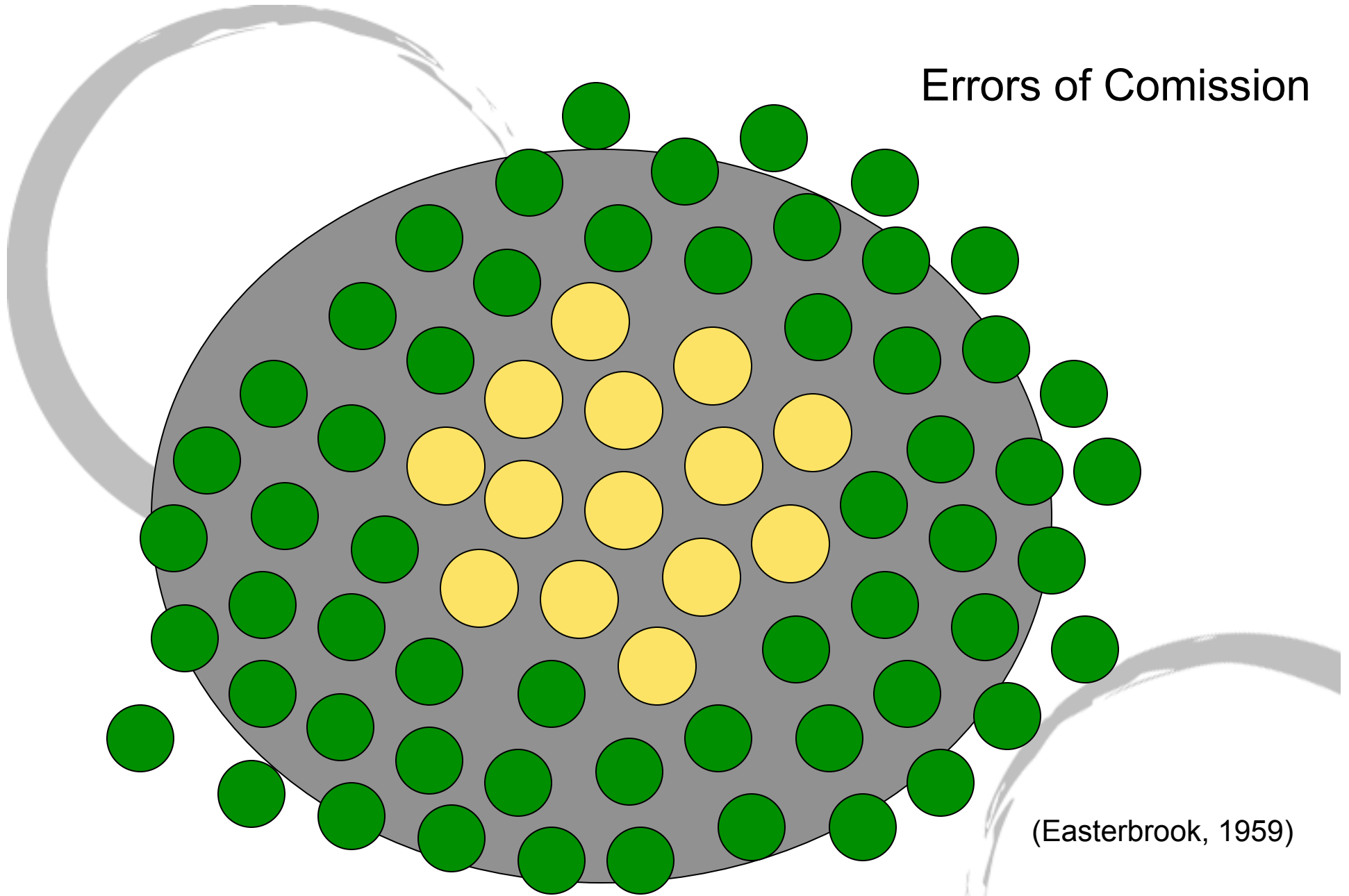
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Errors of Omission



(Easterbrook, 1959)

Errors of Comission



(Easterbrook, 1959)

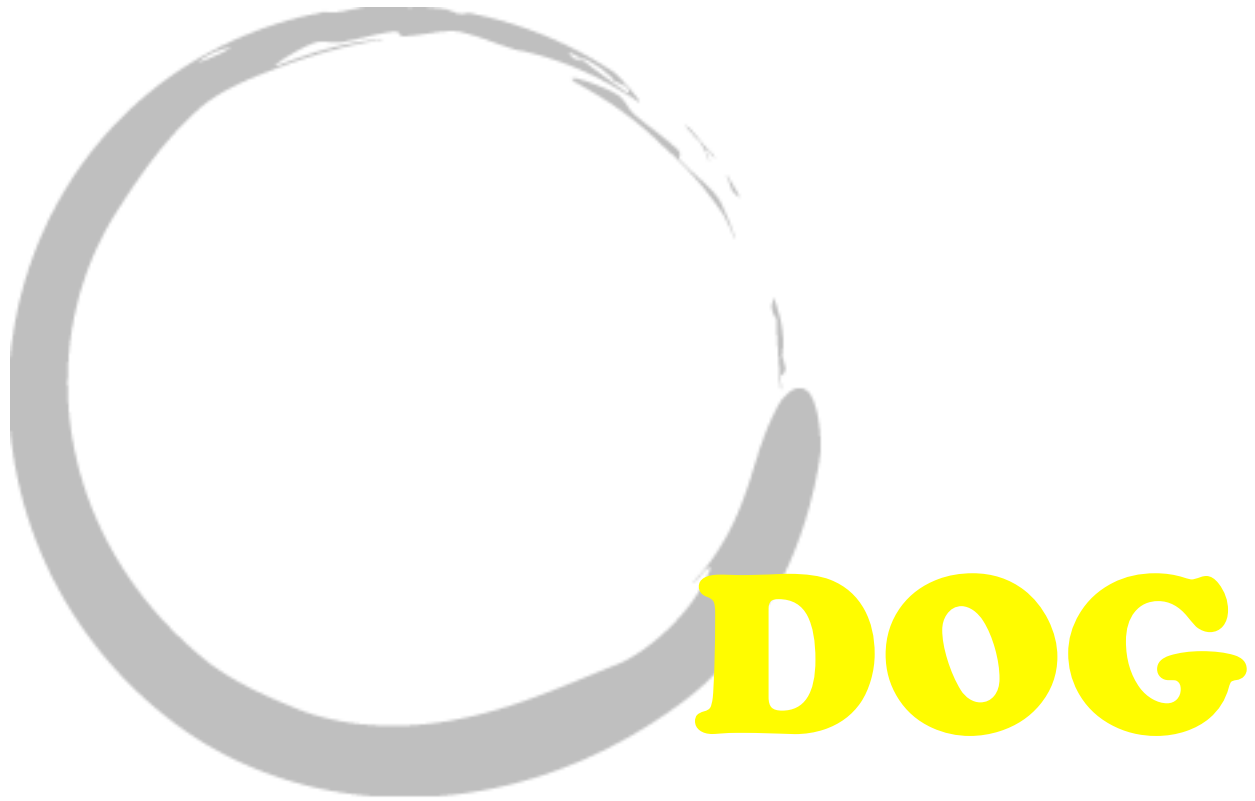
So what draws our attention?

- Meaningful stimuli:
 - “Cocktail Party Effect”
 - Certain voice the stands out

- “Out of the ordinary” stimuli:
 - Noise at golf match vs. basketball game
 - “Sniffing” during a test

Conflicting Stimuli

- ***Stroop Effect:*** decrease in reaction time when conflicting visual stimuli is present
- *As quickly as possible, respond by stating the color in which the words are written...*



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GREEN

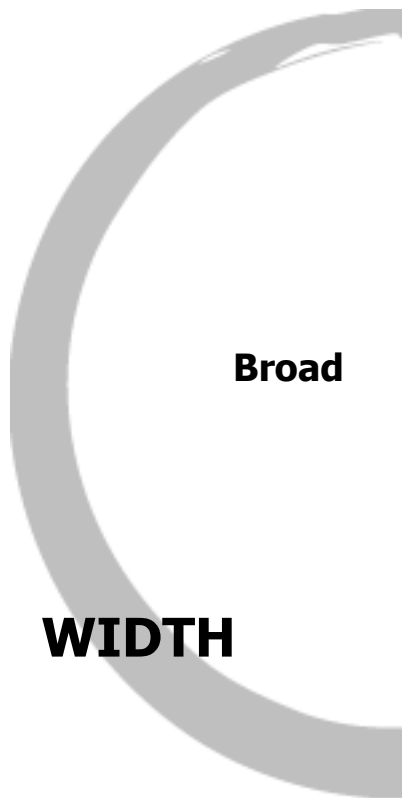
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BLUE



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WIDTH

Broad

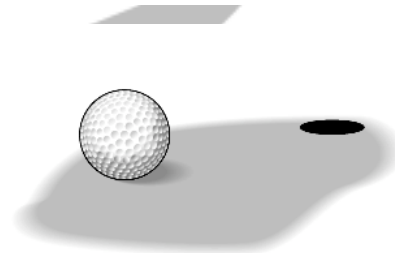


Used to rapidly assess a situation (e.g., a football quarterback rapidly assesses the positioning of the defensive backs)



Used to analyze and plan (e.g., developing a game plan or strategy)

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

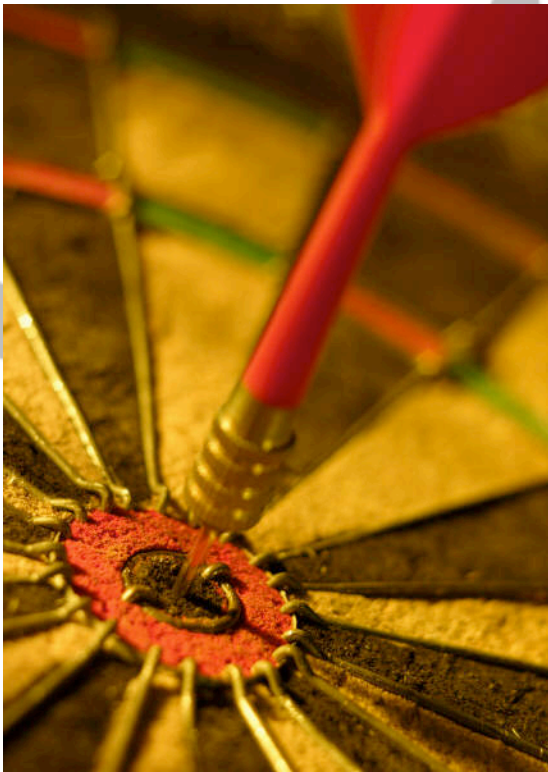
Internal

DIRECTION

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(Nideffer, 1995)

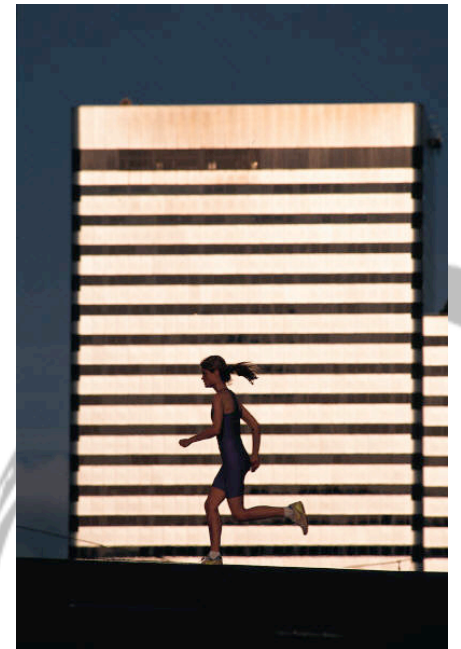
Shifting Attentional Focus



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

Attentional Problems

- Internal distractors:
 - Attending to past events (e.g., what was?)
 - Attending to future events (e.g., what if?)
 - Overanalysis of body mechanics (i.e., paralysis by analysis)
 - Choking under pressure
- External distractions
 - Visual distractions
 - Auditory distractions
 - Gamesmanship

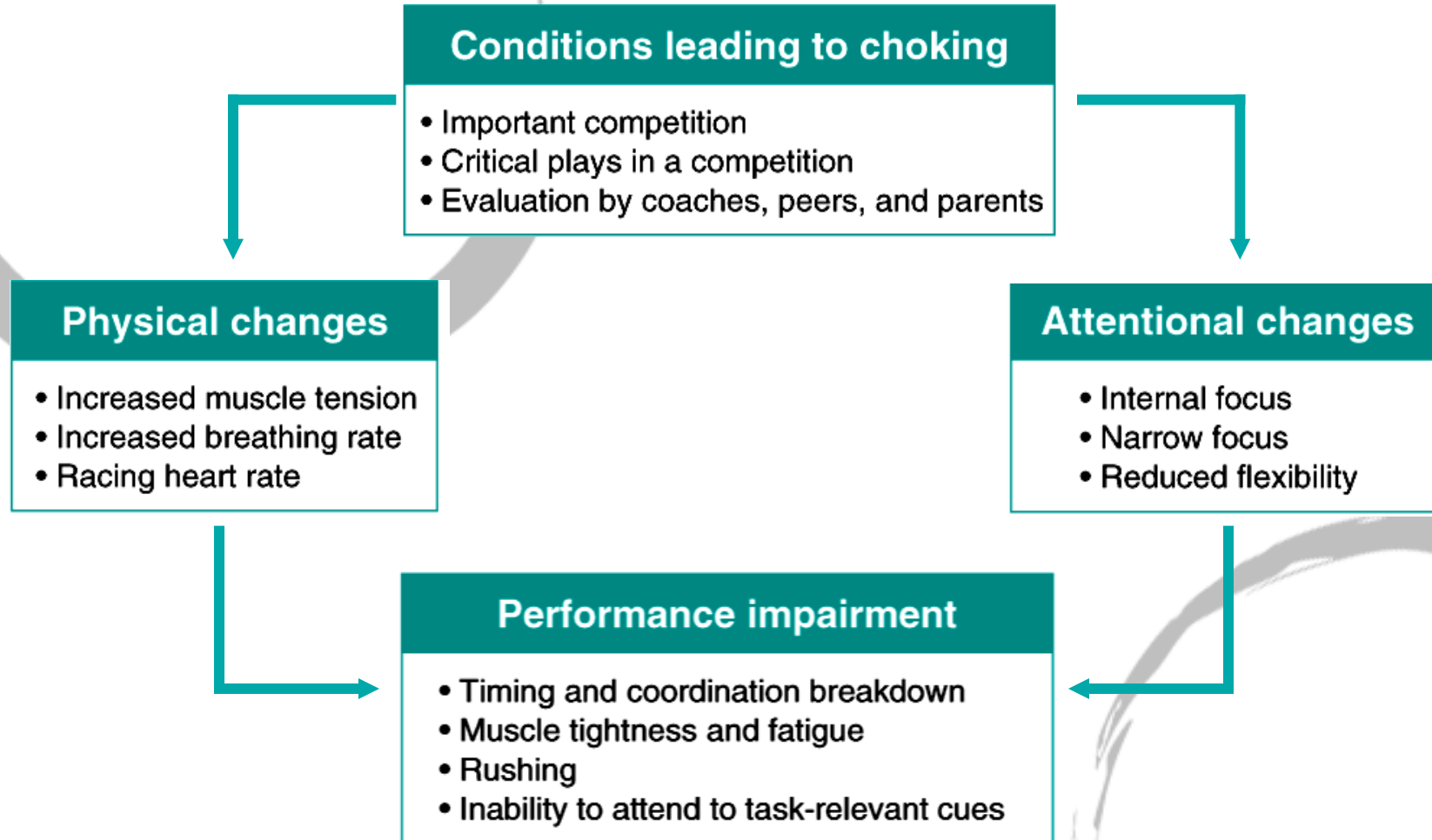


Choking as an Attentional Problem



- An attentional process that leads to impaired performance and the inability to retain control over performance without outside assistance

Choking....Attentional Problem?



Concentration & 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 & having a high degree of concentration & control
 - Being in a state of extraordinary awareness of both the body and the external environment

Tips for Improving Concentration

- Use simulations in practice (i.e., practice with distractions present)
- Regulate arousal/emotions
- Practice attentional control (cue words)
- Establish routines before and during the event
- Stay focused in the present



Thank You!

Dr. Brian H. Jackson

Exercise Science Department & Men's Tennis Coach

BrianJackson@pacificu.edu

503.352.2068



Pacific
University
Oregon

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