

Anxiety – Part 1

Sport and Exercise Psychology



Today's Lecture Overview

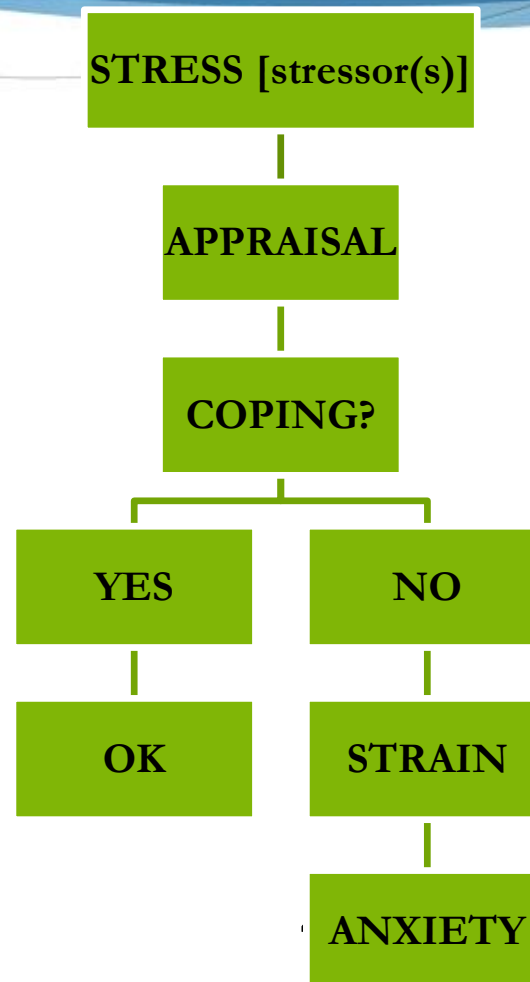
- ◆ Introduction and recap
- ◆ Directional perceptions research - Quantitative
- ◆ Frequency research – Quantitative
- ◆ Measurement
- ◆ Readings...

What is stress?

- ◆ **Stress:** an ongoing *transaction* between an individual and the environmental demands associated primarily and directly with the competition within which they are operating.
- ◆ **Stressors:** the environmental demands associated primarily and directly with the competition within which an individual is operating.

Interactional Definition

Anxiety is a negative response to a stimulus, with stressor(s) as the stimulus (Jones & Hanton, 2001; Jones, 1995; Lazarus, 1966)



Anxiety

A specific *negative emotional* response occurring when a performer appraises competitive stressors as uncertain threats.

This response may include such symptoms as worry along with a heightened perception of physiological arousal.

Hanton et al. (2011)

Measurement Developments

Unidimensional Anxiety

- ◆ State vs. Trait

- ◆ SCAT (1977)

- ◆ CSAI (1980)

Measurement Developments

Multidimensional Anxiety

- ◆ Cognitive vs. Somatic

- ◆ CSAI-2

- (Martens, Burton, Vealey, Bump & Smith, 1982, 1990)

- ◆ Cognitive Anxiety

- ◆ Somatic Anxiety

- ◆ Self-Confidence

RESEARCH AREAS (Multidimensional Anxiety)

- ◆ Antecedents
- ◆ Temporal Patterning
- ◆ Anxiety-Performance Relationship
- ◆ Catastrophe Models
- ◆ Individual Difference Variables
- ◆ Directional Perceptions

MEASUREMENT CRITICISMS

- ◆ Limited measurement dimension associated with the ‘*intensity alone*’ approach to assessing anxiety responses (i.e., level or amount of anxiety)

MEASUREMENT CRITICISMS ⁽³⁾

💧 2. Directional Interpretations

Anxiety Always Negative
(North America)

An Important Point

- ◆ Researchers traditionally labeled the entire range of emotions associated with evaluation as *anxiety* and therefore failed to distinguish between facilitative debilitative states, assuming anxiety is negative.

Jones (1995a).

Contrary Evidence: Test Anxiety

Alpert & Haber (1960)

- ◆ Anxiety Achievement Test (AAT)
 - ◆ Inventory Item “*nervousness while taking a test helps me to do better*” was a better predictor of performance than traditional negative scales

Wine (1980) - Bidirectional Model

- ◆ Certain individual's meet stressful exam demands from problem solving perspective (Positive); others become self-preoccupied with failure & social evaluation (Negative)

Initial Evidence: Sport Psychology

Mahoney & Avenier (1977)

- ◆ Qualifiers vs. Non- qualifiers for 1976 Olympic Gymnastics Team
- ◆ Qualifiers viewed anxiety as a stimulant towards performance

Recent Evidence: Sport Psychology (2)

Catastrophe Models (Hardy, 1990)

- ◆ Performers use elevated levels of cognitive anxiety to enhance performance provided they can control the level of physiological arousal.

Anecdotal criticisms of North American Viewpoint:

- Jonny Wilkinson (World Cup winner, British Lion)

“The responsibility as England’s kicker does scare me. I worry all the time about it, but the important thing is that I know I can worry about it. It’s not a bad thing, or a detrimental thing, to worry. As long as when I go to take the kick, my routine is there, and my visualization, I can be as fearful as I like and think: ‘I’m really, really concerned about this’. But as long as everything is in place, the ball will go where you want it to.”

- How would you describe Jonny’s ‘appraisal’ of the demands here

Direction Introduced into Sport Psychology Literature (Jones, 1991)

- ♦ "One performer might be concerned about an upcoming event, to the extent that s/he is worried and in a near panic state. Another performer who is also 'very concerned' might view such a state as very necessary since it signals the importance of the event and means that she or he will invest effort in it (cf., Eysenck, 1984), thus constituting a motivated, facilitative state"

(Jones, 1995; p.463).

Additional Measurement Scale

Jones & Swain (1992)

- ◆ Original Intensity Scale
 - ◆ 1 (“not at all”) to 4 (“very much so”)
 - ◆ Range: 9 to 36
- ◆ Additional DIRECTION Scale
 - ◆ -3 (“very debilitating”) to +3 (“very facilitative”)
 - ◆ Range: -27 to +27

Recap....

- ◆ Stress is a process
- ◆ Anxiety is a negative emotional (response)
- ◆ Anxiety is multidimensional (cognitive/somatic)
- ◆ Measuring only the level (intensity) of anxiety responses is potentially limited
 - ◆ Why??
- ◆ What else should we also consider measuring in addition to the level of anxiety?

Research Progress



See Wagstaff, Neil, Mellalieu, and Hanton (2011)

Quantitative Support for Direction: Individual Difference Studies

See - Mellalieu, Hanton, & Fletcher (2006)

- ◆ Skill Level
- ◆ Control
- ◆ Performance
- ◆ Coping
- ◆ Sport Type
- ◆ Cohesion
- ◆ Gender

Study in Detail: Skill level

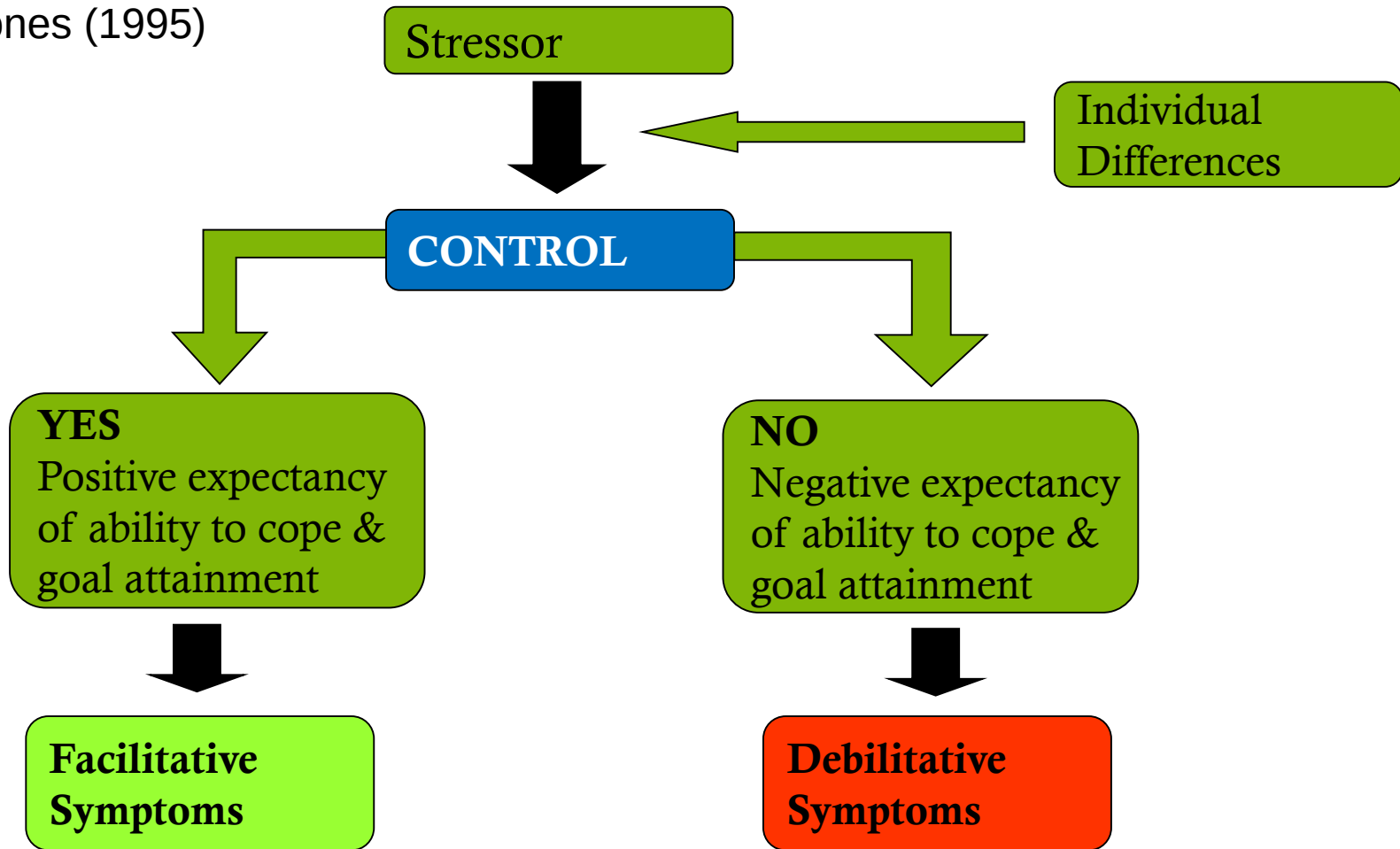
- ◆ Jones, Hanton & Swain (1994)
 - ◆ N=211 Elite and Non-Elite Swimmers
 - ◆ Olympic Trials competition
 - ◆ Modified CSAI-2 one hour before racing
 - ◆ No significant intensity differences
 - ◆ Elite significantly more facilitative
 - ◆ Elite more confident

Focus on Analysis: ANOVA Summary

Mod. CSAI-2 Subscales	Non Elite Mean	Elite Mean	<i>P</i>
Cog. Intensity	20.25	20.21	NS
Cog. Direction	0.47	4.07	<.01
Som. Intensity	18.79	18.91	NS
Som. Direction	1.54	6.59	<.001
Confidence	20.81	25.09	<.001

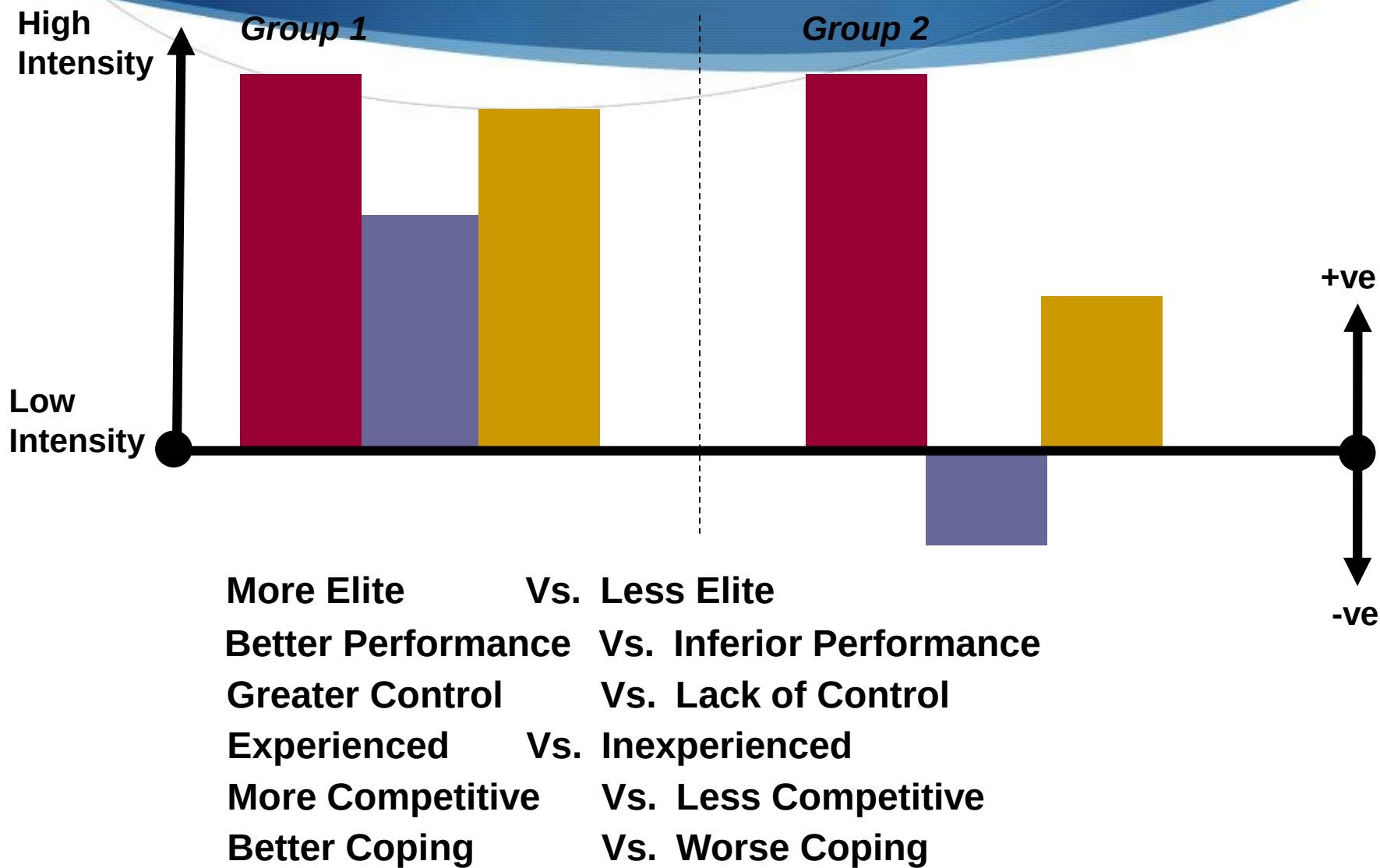
Study 2 in Detail: Control Model

Jones (1995)



Study 2 in Detail:

- ◆ Jones & Hanton, 1996
 - ◆ N=91 Swimmers
 - ◆ Modified CSAI-2 one hour before racing
 - ◆ Goal Attainment Expectancy Scale
 - ◆ Outcome, Performance, Process Goals
 - ◆ “To what extent do you think you will achieve the goal”
 - ◆ Definitely NO to Definitely YES
 - ◆ Positive versus Negative/Uncertain Goal groups
 - ◆ No intensity differences
 - ◆ Positive expectancy group more facilitative



Intensity **Direction** **Confidence**

Summary Of Quantitative Studies

- ◆ Make sense of the chart
- ◆ Chat through it...What is the broad summary picture that emerges from that 8-10 year period of quantitative research?
- ◆ What are the broad implications (for practitioners/performers/coaches) that emerge from the pattern of findings?

What do we still need to know

- ◆ Facilitative interpretations associated with a range of positive personal and performance attributes
 - ◆ Therefore, perhaps worth developing a facilitative interpretation!!!
- ◆ What we don't know.....
 - ◆ How and why?
 - ◆ Development of facilitation?
 - ◆ Can debilitation be restructured?
 - ◆ What about frequency (Part 2)