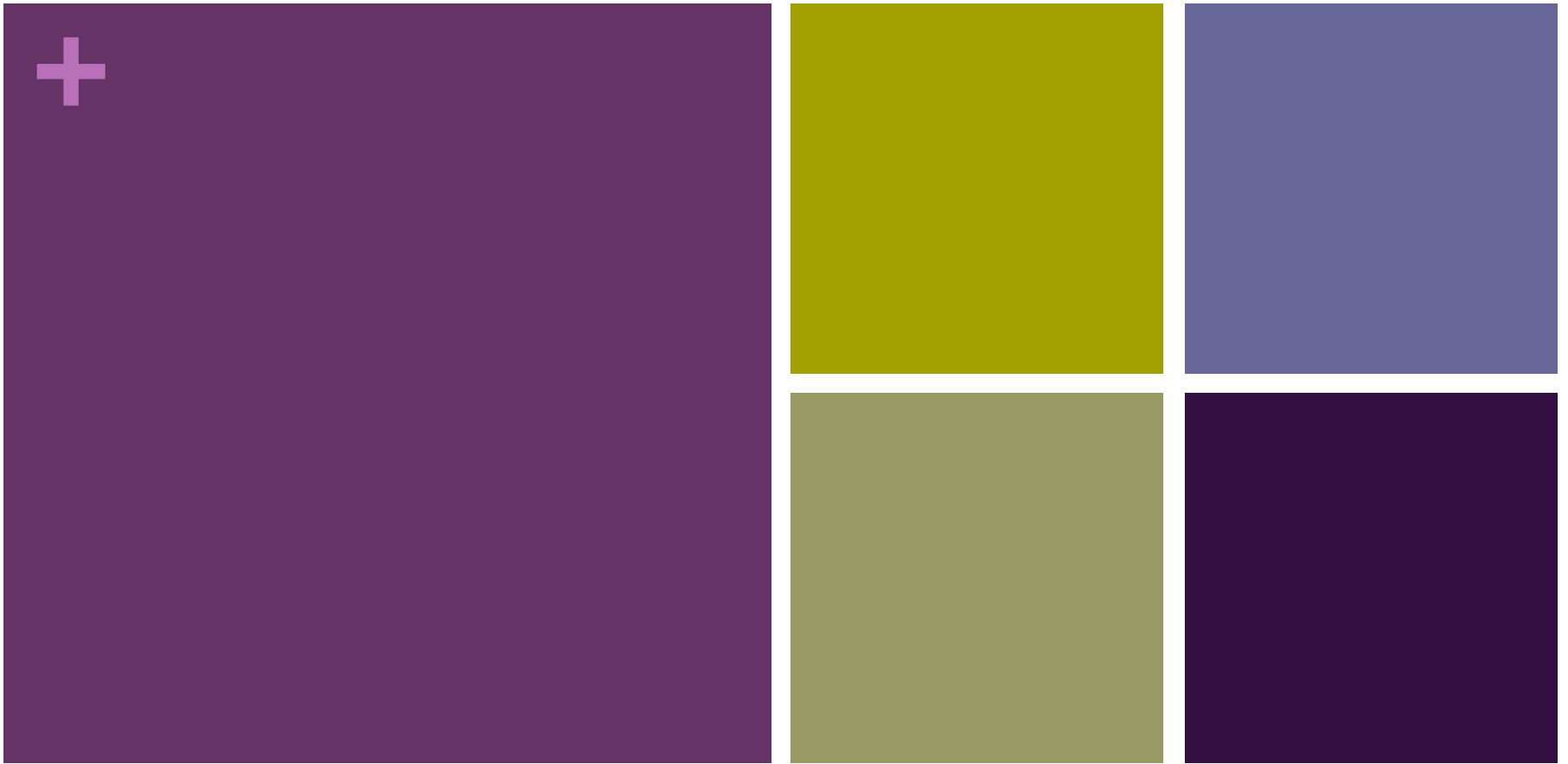


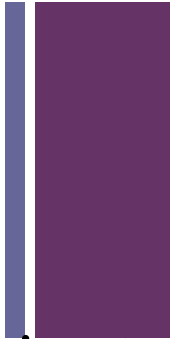


**Measuring Intensity, Directional Perceptions
and Frequency of Intrusions**

+ Modified CSAI-2 (Task)

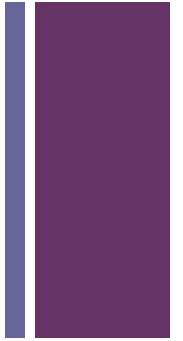
- Intensity scale.... Level or the amount that you are experiencing the symptom
 - 1 “not at all” to 4 “very much so”
- Directional Perceptions scale.... Whether you interpret your felt intensity levels as facilitative (positive) or debilitative (negative) to your upcoming performance
 - -3 “very negative” to +3 “very positive” (0 = unimportant)
- Frequency scale.... The amount of time you are experiencing the symptoms for (How often are they occurring for at that time)
 - 1 “never” to 7 “all of the time”
- Three constructs within the inventory
 - Cognitive anxiety
 - Somatic anxiety
 - Self-confidence

+ Task.....



- Recreate the thoughts and feelings you experienced prior to the most important sporting event you have competed in.
 - Use the frame of reference for a time period of 1 hour prior to performance
- Read the instructions above carefully and then:
 - Complete question 1 across the dimensions of intensity, direction and frequency of intrusion before moving to question 2.
 - Repeat this process for all 27 questions.
(i.e., don't move onto the next question until you have completed the intensity and frequency of intrusion dimensions for the statement you have just read).

+ Scoring....

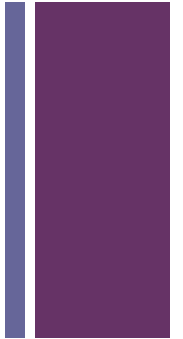


■ Cognitive Intensity

- Add the scores you have circled (between 1 and 4) for the following items (your score should fall between 9 and 36).

Items: 1 4 7 10 13 16 19 22 25

CA Intensity score _____



■ Cognitive Direction:

- Add the scores you have circled between -3 and +3 for each of the following items (take into account the sign). The result should be a total between -27 and +27.

Items: 1 4 7 10 13 16 19 22 25

CA Direction: _____

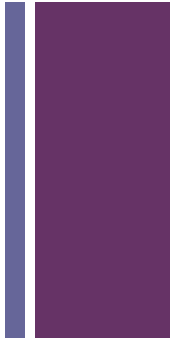


■ Cognitive Frequency of Intrusions

- Add the scores you have circled (between 1 and 7) for the following items (your score should fall between 9 and 63).

Items: 1 4 7 10 13 16 19 22 25

CA Frequency score _____



■ Somatic Intensity

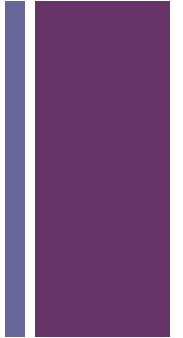
- Add the scores you have circled (between 1 and 4) for the following items (your score should fall between 9 and 36).

Items: 25 8 11

14*(reversed scoring. 4 = 1, 3 = 2, 2 = 3, 1 = 4)

17 20 23 26

SA Intensity score _____



■ Somatic Direction:

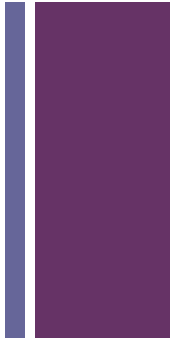
- Add the scores you have circled between -3 and +3 for each of the following items (take into account the sign). The result should be a total between -27 and +27.

Items: 2 5 8 11

14 (no reverse scoring on direction scale)

17 20 23 26

SA Direction: _____



■ Somatic Frequency of Intrusions

- Add the scores you have circled (between 1 and 7) for the following items (your score should fall between 9 and 63).

Items: 25 8 11 14 17 20 23 26

SA Frequency score _____



■ Self-Confidence Intensity

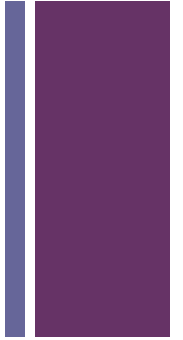
- Add the scores you have circled (between 1 and 4) for the following items (your score should fall between 9 and 36).

Items: 36 9 12 15 18 21 24 27

SC Intensity score _____



Scoring the inventory...

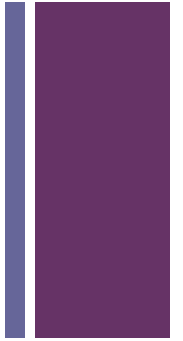


■ Self-Confidence Direction

- Add the scores you have circled between -3 and +3 for each of the following items (take into account the sign). The result should be a total between -27 and +27.

Items: 3 6 9 12 15 18 21 24 27

SC Direction: _____

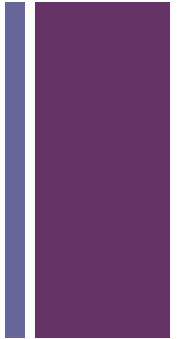


■ Self-Confidence Frequency of Intrusions

- Add the scores you have circled (between 1 and 7) for the following items (your score should fall between 9 and 63).

Items: 36 9 12 15 18 21 24 27

SC Frequency score _____



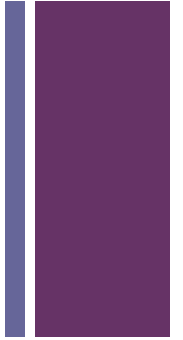
- Cognitive Intensity = _____
- Cognitive Direction = _____
- Cognitive frequency of intrusion = _____

- Somatic Intensity = _____
- Somatic Direction = _____
- Somatic frequency of intrusions = _____

- Self-confidence intensity = _____
- Self-confidence Direction = _____
- Self-confidence frequency of intrusions = _____

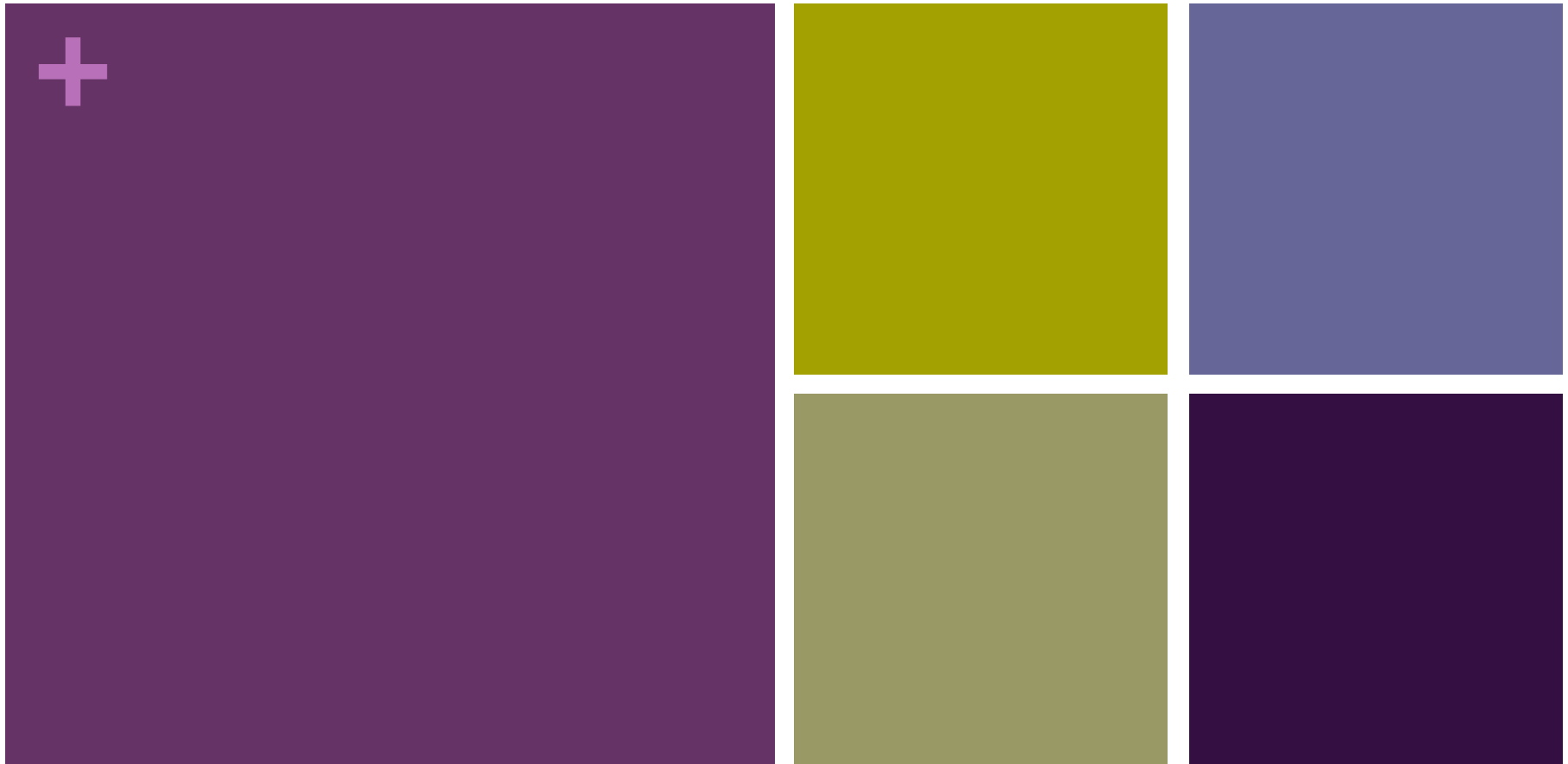
+ Task: Issues to Consider

- Your individual scores
- Issues with the inventory?
- Appropriateness/applicability of the three dimensions?
- Critique the questions
- Critique the measurement of each dimension
- How easy was it to recall intensity versus frequency information?



- Critique of the modified CSAI-2
 - See Burton and Naylor (1997)
 - Lane et al. (1999)

- Revised CSAI-2
 - Martinent et al. (2010)

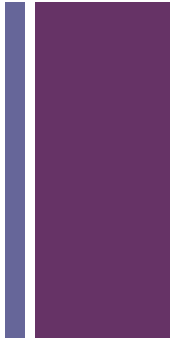


Anxiety Part 2: Frequency of Cognitive Intrusions

SHSS5079 – Sport Psychology



Multidimensional Anxiety Theory: (MAT)



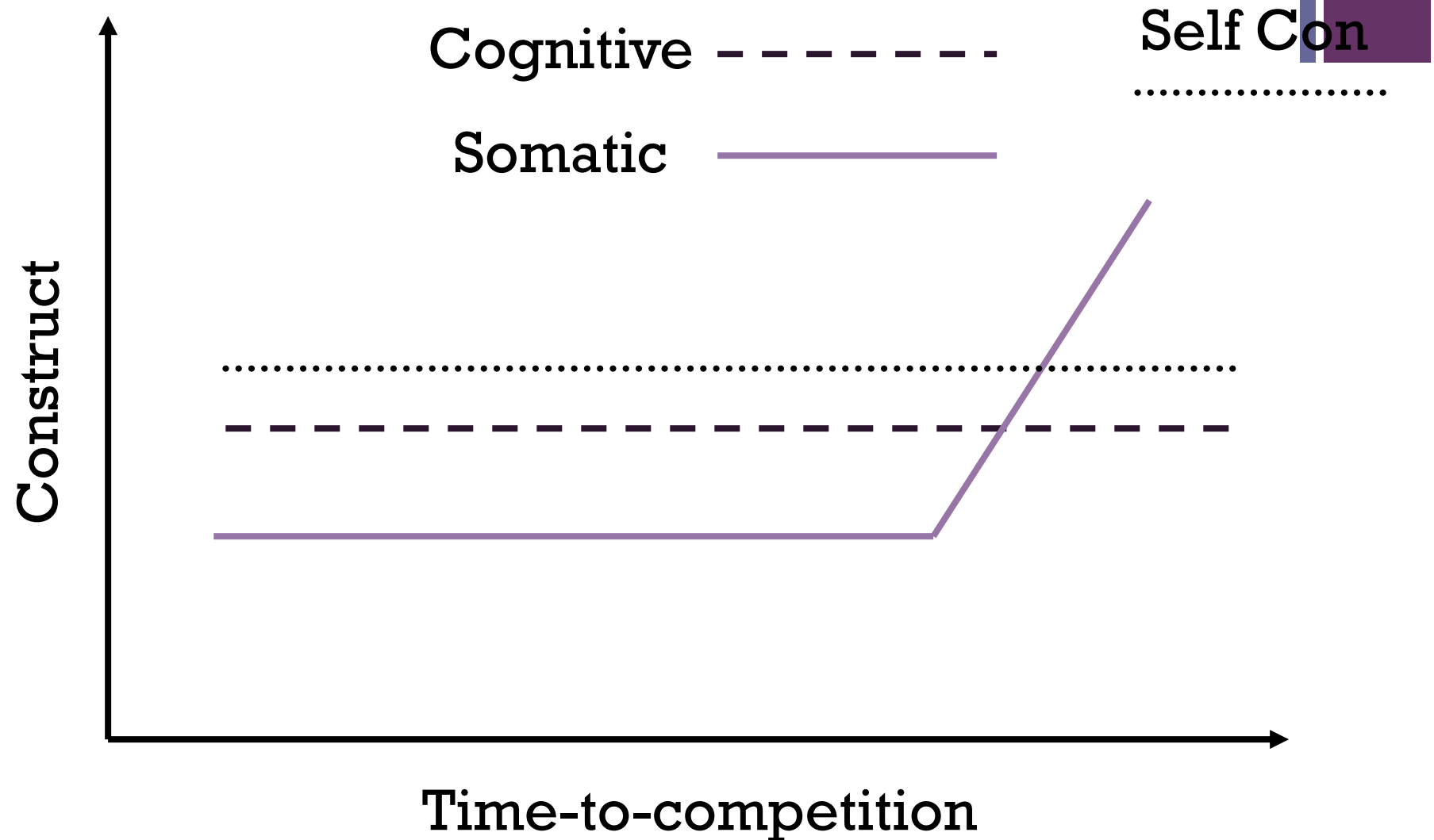
- Martens et al. (1990)
 - Multidimensional anxiety theory (MAT)
 - Development of the Competitive State Anxiety Inventory-2 CSAI-2

- Additive

- Three constructs to predict performance
 - Cognitive anxiety
 - Somatic anxiety
 - Self-confidence

+

Temporal MAT Predictions: Intensity





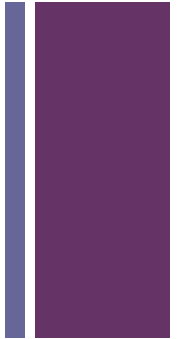
Time-to-event: Why bother ??





Time-to-event: Why bother ??

- Temporal = Time-to-event
- Why bother ??
 - Understanding (know when symptoms change)
 - Design and implementation of psychological skills interventions
 - Know when it changes = Prescriptive points for intervention during preparation time for competition
- Stop the 'Fire fighting approach' to sport psychology interventions (Shambrook & Bull, 2001)
- Winning – the science of preparation: Do we intervene with appropriate rationale (i.e., theoretical reasoning) as players prepare for competition ???
- Periodisation of psychological skills



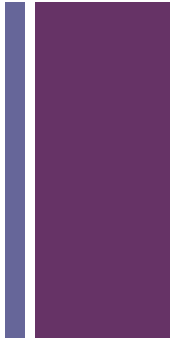
+ Further Considerations

■ A Process-Orientation

- “The essence of stress, coping and adaptation is change... unless we focus on change we cannot learn how people come to manage stressful events and conditions” (Lazarus, 1999; p.150)
- Empirical anxiety research is proliferated with studies collecting data at one single time point usually focused upon times immediately before the event research (Cerin et al., 2001)
- Intervention based research is proliferated with studies giving interventions for immediately before competition (e.g., Hanton and Jones, 1999b; Maynard et al. 1995a, b; Maynard et al. 1998)



Temporal Research I: Intensity



■ Method

- Several data collections at set times during the week leading up to competition (7 days, 2 days, 1 day, 2 hours, 30 mins)
- See Cerin et al. (2001) for review

■ Cognitive anxiety

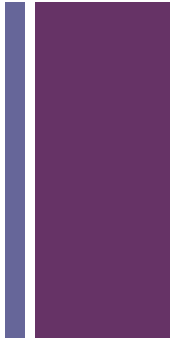
- MAT no change over time
- Research support equivocal
 - Early increases – Campbell & Jones (1995, 1997); Perkins & Williams (1994)
 - Increases close to competition – Slaughter et al. (1994); Swain & Jones (1990, 1991, 1992)

■ Somatic anxiety

- MAT increase close to event
- Research support equivocal (equivocal in relation to point of increase)
 - Supportive – Campbell & Jones (1995); Slaughter et al. (1994); Swain & Jones (1990, 1991, 1992)
 - Early increases – Perkins & Williams (1994); Swain & Jones (1990, 1993)



Temporal Research II: Intensity....



- Self-confidence

- MAT no change over time

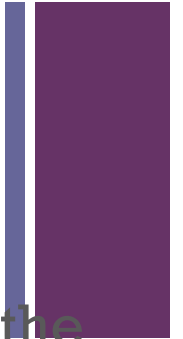
- Research support equivocal (some supportive, some not)

- No change-over-time – Campbell & Jones (1995); Jones et al. (1991)

- Decrease close to competition – Campbell & Jones (1997); Swain & Jones (1990; 1992)

- Therefore, traditional temporal anxiety studies produced equivocal results in relation to the main tenets of MAT.....

- WHY ???



MAT Limitations...

- Limited measurement dimension associated with the *'intensity alone'* approach (i.e., level or amount of anxiety)

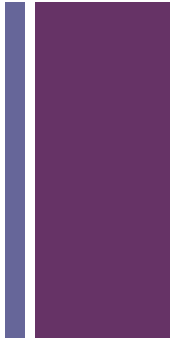
- **1. Frequency of cognitive Intrusions**

“Proportion of time during which cognitions about the upcoming competition occupy the performer's thoughts”

How often..... occurrence



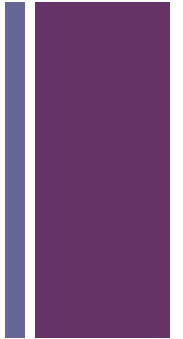
Frequency of intrusions



- The amount of time an athlete spends attending to or experiencing their competitive anxiety related symptoms (Swain & Jones, 1993)
 - A measure of symptom *occurrence*
- Rationale
 - Emotional main stream (affect) researchers
 - Frequency information easier to encode, recall and report (Diener et al., 1991; Kardum, 1999)



Early Frequency Research....

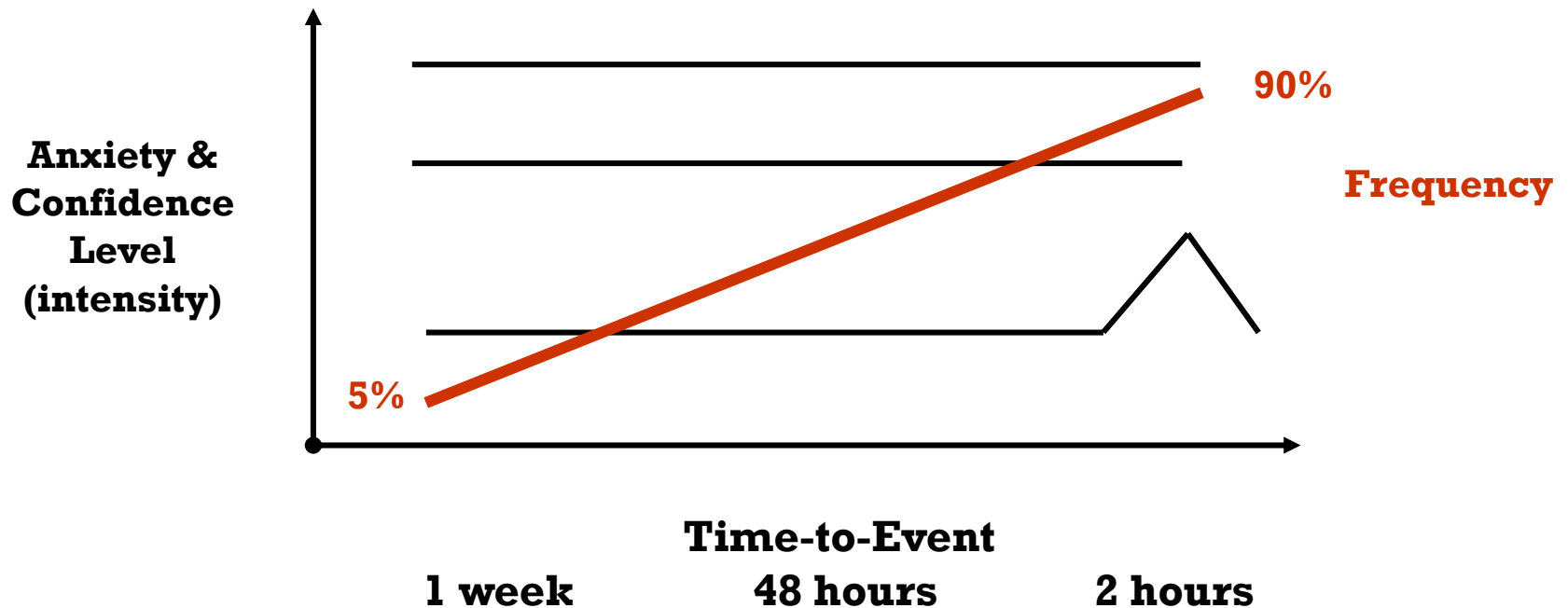
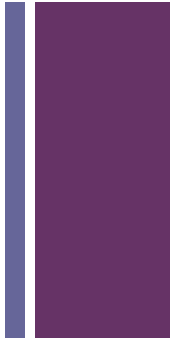


- Swain and Jones (1990)
 - 60 Male track athletes
 - % Thinking item added to the CSAI-2 (0% never, 100% = all of the time)
 - 5.7% (1 week) to 82.4% (1 hour)

- Swain and Jones (1993)
 - Formal scale added to the CSAI-2
 - 1 (never) to 7 (all the time)
 - 48 hr pre-competition time period
 - Intensity scores remained stable
 - Frequency scores increased progressively towards performance

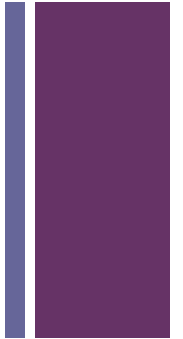


Early Frequency Findings ⁽²⁾





Early Frequency Research: Summary



- Frequency more variable over time
 - Explain equivocal traditional anxiety research
- Frequency easier for performers to recall and encode
 - Evidence from mainstream psychology
- Understanding..... Frequency
 - Potentially a more sensitive dimension to use to underpin appropriate times for intervention during the preparation times for competition



More Contemporary Temporal Research: The 'new' dimensions



- Rationale for research
 - Limited time-to-event research into the new dimensions
 - Critical for the timing of interventions during preparation time for competition
- Existing research
 - Short temporal phases (48hr to 24 hr pre-competition)
 - Research only assessing intensity and frequency
 - What about research assessing intensity, direction and frequency of intrusions over time
 - Woodman and Hardy (2001).... No research study has yet to consider the dimensions of intensity, directional perceptions and frequency of cognitive intrusions collectively within one research design



Hanton, Thomas & Maynard (2004)

Competitive anxiety responses in the week leading up to competition:
The role of intensity, direction and frequency dimensions

- Function of Skill Level
- 82 competitive athletes
 - National (37)
 - Club (45)
- Time phases
 - 7 days • 1 hour
 - 2 days • 30 mins
 - 1 day

– CSAI-2

- Intensity
- Direction
- Frequency of intrusions

– Data Analysis

- MANOVA-RM (skill x time)



Hanton, Thomas & Maynard (2004): Summary of Findings

Between Subject Effects	Within Subject Effects	
Direction	Intensity	Frequency
<u>Cognitive Anxiety</u> - Club athletes more negative interpretation than National athletes <u>Somatic Anxiety</u> - Club athletes more negative interpretation than National athletes	<u>Cognitive Anxiety</u> - ↑ 2 hr to 30 min <u>Somatic Anxiety</u> - ↑ 2 hr to 30 min <u>Self confidence</u> - ↓ 2 hr to 30 min	<u>Cognitive Anxiety</u> - ↑ 7 days to 2 days, ↑ 1 day to 2 hrs, ↑ 2hrs to 30 min <u>Somatic Anxiety</u> - ↑ 7 days to 2 days, ↑ 2hrs to 30 min <u>Self confidence</u> - ↑ 7 days to 2 days



Hanton, Thomas & Maynard (2004): Summary

- Symptoms change (intensity/frequency) during competition preparation
- Frequency of intrusions more sensitive to temporal change than intensity
- Skill level an insensitive between subjects variable across all the dimensions



Task:

Thomas, Maynard & Hanton (2004)

- Summarise this paper...

