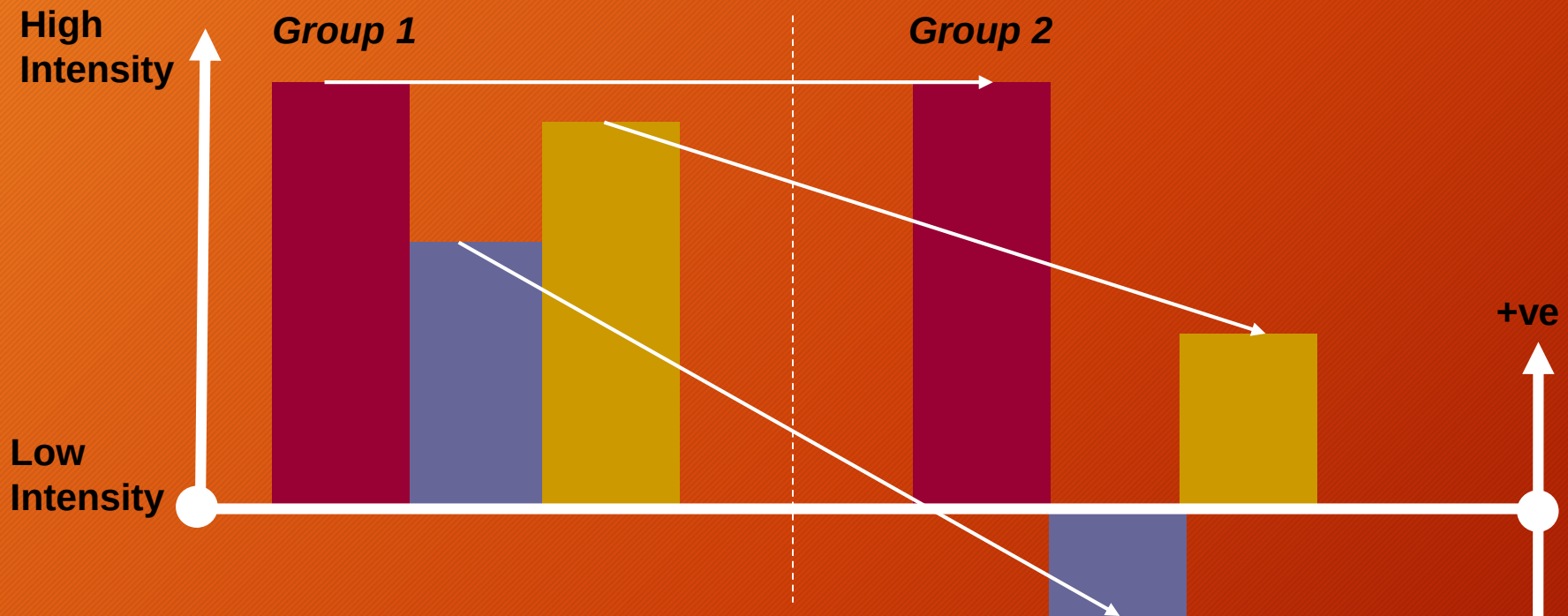


Competitive Anxiety

Level 6 Sport and Exercise Psychology

Alison Connaughton

Qualitative Research



More Elite Vs. **Less Elite**
Better Performance Vs. **Inferior Performance**
Greater Control Vs. **Lack of Control**
Experienced Vs. **Inexperienced**
More Competitive Vs. **Less Competitive**
Better Coping Vs. **Worse Coping**

Intensity **Direction** **Confidence**

Generally Consistent Findings

- No difference in intensity level but one group (positively oriented) more facilitative in interpretations
 - Competitiveness (Jones & Swain, 1992)
 - Performance (Jones et al., 1993)
 - Expectancies of goal achievement (Jones & Hanton, 1996)
 - Skill Level (Jones et al., 1994; Jones & Swain, 1995)
 - Swain & Jones, 1996 (↑ performance variance)

Encouraging initial evidence.....But

- Where do we now go with this information?
- **Need to examine the mechanisms underlying sport performers' differing interpretations of similar anxiety symptoms.**
- **Why?: To aid athletes to achieve optimal pre-performance psychological states**
- **How do we explore 'direction' in a bit more detail?**

Encouraging initial evidence.....But

Research Questions that emanated from direction (Quantitative research)

- Are you born as 'a facilitator' or do you learn how to view symptoms as facilitative?
- How have individuals developed the ability to positively interpret anxiety ?

If we can answer these two then:

- Is it possible to restructure negative anxiety interpretations that performers experience prior to stressful competitions?

Key Movements in Anxiety Research



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

Hanton & Jones (1999a)

DEVELOPMENT OF COGNITIVE SKILLS & STRATEGIES IN ELITE SWIMMERS.

Purpose of Study

- How do individuals acquire the cognitive skills & strategies which enable them to interpret pre-race thoughts & feelings as facilitative

Method:

- 10 elite Male swimmers

Involvement Progressive Questionnaire

- 3 Phases (initial exposure to present day)
- Semi-structured Interview Guide
 - Six sections:
 - 1.Introduction & guide
 - 2.Initial experiences to swimming
 - 3.Increased commitment & early competitions
 - 4.Total commitment
 - 5.Current experiences & mental skill utilisation
 - 6.Advice & recommendations regarding restructuring debilitating interpretations

Method:

Data Analysis:

- **Inductive Content analysis**
 - Organisation of raw data (i.e., transcripts) into interpretable and meaningful themes
 - Clustering quotes around common threads (themes)
 - Cluster themes into higher order themes in a hierarchical fashion until you can not locate a higher order theme

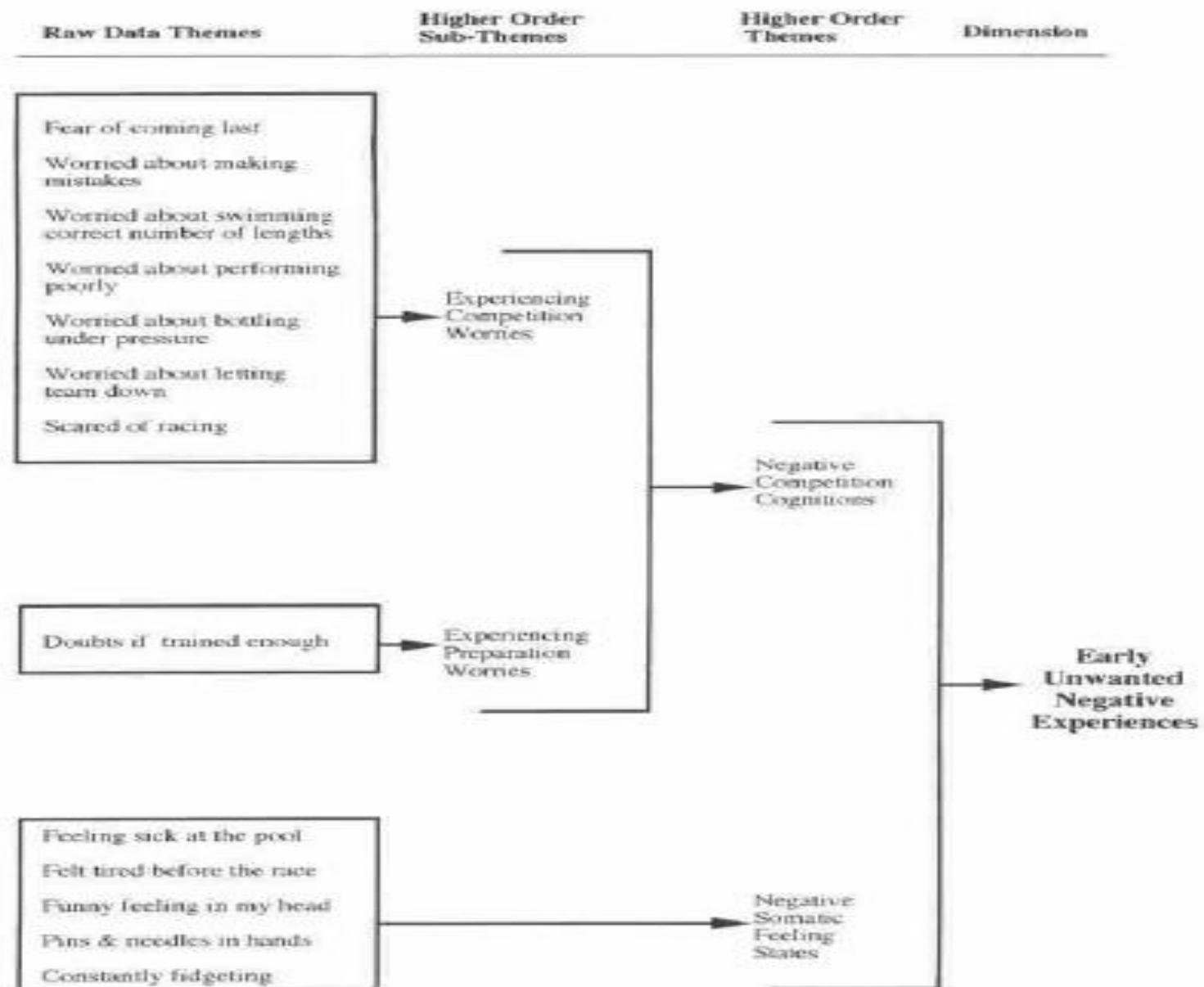


Figure 1 — Inductive content analysis: Early unwanted negative experiences.

Results:

- Early Unwanted negative experiences
- Learned at early age that nerves can be positive
- Developed a pre-competition routine
- Developed a pre-race routine
- Advice for others

Early Unwanted Negative Experiences

- Negative Competition Cognitions
 - “Fear of Coming Last”
- Negative Somatic Feeling States
 - “Feeling sick”

Learned at a Young Age that Nerves can be Positive

- Accepted Symptoms
 - “Discovered that’s what happens when you race”
- Required Symptoms
 - “Realised I wanted to experience anxiety”
- External Persuasion
 - “Told nerves bring out the best in you”
- Race Preparation Facilitation
 - “Discovered nerves increased my concentration”
- Cognitive Labeling of Symptoms as Positive
 - “Learned feeling nervous would be positive anxiety”

Pre-Competition Routine

- Mental Imagery
 - “Visualise the race in training”
- Goal Setting
 - “Set goals for every training session”

Pre-Race Routine

- Rationalisation of Thoughts & Feelings
- Accept and Require Symptoms
- Use Nerves to Facilitate Performance
- Positive Cognitive Labelling

Discussion:

- Swimmers not born with facilitative interpretations
 - They learned them over time
- How?
 - Advice from significant others
 - Accept feelings & thoughts as part of preparation
 - Realised anxiety was good for performance
 - Wanted these thoughts & feelings before competing and viewed them as positive
- Developed & refined methods to follow pre-competition & pre-race routines
 - **Why?:** In order to maintain these symptoms as facilitative:
 - **Key Psychological Skills: Mental Imagery & Goal setting**
- Facilitation not immediate or straightforward
 - Experiential learning & Educational methods
- **Question:** Can practitioners develop facilitative states in the performers they work with?

Hanton (2002)

The Why & How...

- Investigated Perceived Control of Anxiety and its relationship to Self-Confidence & Performance
 - in relation to Jones (1995) control process model
- Why anxiety is perceived as debilitating/facilitative towards performance
- How does perception of control influence interpretation
 - Differences between elite & non-elite

Aim

How performers process cognitive & somatic information
The strategies they adopt as a result
And how these affect confidence & performance

Method:

Interviewed 12 swimmers (6 elite & non-elite, male)

- **Semi-structured Interview Guide**
 - **Four sections:**
 1. Introduction & instructions (definitions)
 2. Experiences in swimming
 3. General & specific question regarding thoughts & feelings prior to competition and their impact on performance
 4. Validity questions

Method:
Data Analysis:

- **Inductive Analysis**

- Organisation of raw data (i.e., transcripts) into interpretable and meaningful themes regarding participant's causal beliefs of symptom-performance relationship
- Cross-case clustering of explanations around symptoms experienced
- Presented within Causal Networks
 - Visual representations of emerging relationships between anxiety symptoms and SC & Performance
 - In addition to description & supportive quotation

Discussion:

- Perceived Control: Key to interpretation
 - Over symptom intensity
 - Moderator for interpretation
- Cognitive & Somatic symptoms 'under personal control' lead to positive directional interpretation =
↑ SC & ↑ Performance.
 - Why:
 - Rational reason why symptom would increase performance
 - Associated with previous occasions where they performed well
- Cognitive & Somatic symptoms not 'under personal control' lead to negative directional interpretation =
↓ SC & ↓ Performance.
 - Why:
 - Rational reason why symptom would decrease performance
 - Associated with previous occasions where they performed sub-standard

Discussion: Accounts for anxiety:

- as a negative emotion that results in positive consequences:

E.g., Symptom intensity negative but 'perceived under control' resulted in the initiation of strategies (relaxation, increased focus / effort) that enhanced confidence and enabled superior performance (relaxed muscles allowed for flowing stroke which ↑ SC for race & ↑ efficiency of technique = ↑ performance)

- as a negative emotion that is perceived as necessary & positive

E.g., Symptom intensity 'under control' and perceived as necessary and positive for performance. (Increased heart rate perceived as necessary for sprint/optimal performance from dive) enhanced confidence and enabled superior performance

- Both groups perceived selected symptoms in a similar fashion
- Other symptoms differed:
 - **Non-elite:** thoughts and concerns about letting themselves or others down when under control, improved performance by causing them to increase effort to avoid disappointment for themselves or others (e.g., parents, coaches, team mates).
 - Eysenck and Calvo's (1992) worry can lead to increased motivation to improve performance in order to avoid negative evaluation by others.

- **Elite:** concerns, doubts, and worries perceived under control were viewed initially as negative but could trigger strategies (rationalization & relaxation) to overcome the negative cognitions.
- Blocking out the negative thoughts and images and replacing them with positive ones.
- Jones et al. (1994)
 - Elite performers who do experience debilitating anxiety symptoms possess an effective cognitive strategy for maintaining confidence levels.
- (Hanton and Jones (1999a):
 - strategies developed over time to interpret prerace symptoms as facilitative
 - prerace routine to rationalize thoughts and feelings into a positive state.

Practical Implications

- Attributions that result in heightened perceived control
- Cognitive and emotional control = more facilitative interpretations
 - Athletes learn to control prerace states through techniques such as cognitive restructuring, relaxation, and imagery,
 - Use controlled activation or 'psych-up' strategies.
- Manipulate cognitive and somatic symptoms to individually preferred pre-event states,
 - Allows maintenance of high levels of control, facilitative directional interpretations, and enhanced self-confidence.

Further Qualitative Studies: greater detail on the how & why

See Hanton et al. (2009) for review

- Hanton, Mellalieu, & Hall (2004) - in relation to facilitation and confidence;
- Hanton, Mellalieu & Young (2002) - in relation to a temporal element (24 hrs pre competition period);

Thomas, Hanton, & Maynard (2007a)

- Although research has indicated the dimensions are susceptible to temporal change, we don't know why facilitators and debilitators react differentially during the seven days preceding competition.
- Aim
 - Explore the underlying mechanisms associated with triggering temporal changes in anxiety symptoms between debilitators and facilitators
 - The psychological skills that debilitators and facilitators use to control these changes.

Thomas, Hanton, & Maynard (2007a)

Method:

- 16 Female hockey players pre-screened as facilitator or debilitator (CTAI-2 & CSAI-2)
- 6 facilitator & 6 debilitators
- Participants completed a booklet comprised of a list of cognitive & somatic symptoms each day for 7 days and 1 hour before competition
- Reported intensity & direction of symptom, and % time for frequency
- What triggered the symptom and what caused them to interpret the symptom as fac or deb
- Interviewed about experiences

Thomas, Hanton, & Maynard (2007a)

Data Analysis:

- Inductive Analysis
 - Organisation of raw data (i.e., transcripts) into interpretable and meaningful themes regarding participant's causal beliefs
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 - Visual representations of emerging relationships between anxiety symptoms and skill usage & Performance
 - In addition to description & supportive quotation

Thomas, Hanton, & Maynard (2007a)

Results

- Three phases:
 - Symptoms and Strategies Post-Performance
 - Symptoms and Strategies Two Days to One Day Pre-Performance
 - Symptoms and Strategies on Match Day

Thomas, Hanton, & Maynard (2007a)

Results

Phase 1: Symptoms and Strategies Post-Performance

- Triggered by reflecting back to their match-day performance
 - increase in the intensity and frequency of several cognitive post-performance symptoms.
- For the facilitators, experience of these negative cognitive post-performance symptoms invoked the implementation of two psychological skills. Imagery to review and replace negative post-performance images & rationalization to overcome the experience of negative cognitive post-performance symptoms.
- Replaced negative post-performance cognitive symptoms and images with positive ones.

Thomas, Hanton, & Maynard (2007a)

Results

Phase 1: Symptoms and Strategies Post-Performance

- Triggered by reflecting back to their match-day performance
 - increase in the intensity and frequency of several cognitive post-performance symptoms.
- Debilitators focused on negative images increasing a lack of “internal control” and this had a continued “negative” influence on performance preparation.

Thomas, Hanton, & Maynard (2007a)

Results

Phase 2 :Symptoms and Strategies Two Days to One Day Pre-Performance

- Triggered by involvement in squad-based training sessions
- Facilitators = increased intensity and frequency of cognitive symptoms
 - Used imagery rationalisation & restructuring, performance goals to overcome symptoms and increase perceived control
- Debilitators = increased intensity and frequency of cognitive & Somatic symptoms
 - Tried to use skills but not able to maintain control and this contributed to the debilitating interpretation of symptoms

Thomas, Hanton, & Maynard (2007a)

Results

Phase 3 :Symptoms and Strategies on Match Day

- Triggered by travelling to the match venue, arriving at the match venue, team talks, and warm ups.
- Increased intensity and frequency of cognitive & somatic symptoms for both groups.
- **Facilitators** Used rationalization/restructuring; positive self-talk; positive pre-performance imagery, performance and process goals, and relaxation to overcome symptoms and increase perceived control
- **Debilitators** tried to use skills (**imagery but lost control**) resulted in negative imagery and continued debilitative interpretation of symptoms.

Thomas, Hanton, & Maynard (2007a)

Implications

Facilitators were able to attain/maintain a positive pre-performance psychological state through the use of a refined repertoire of psychological skills within each of the three temporal phases.

Facilitators: control increases in the intensity and frequency of negative cognitive and somatic symptoms and subsequently interpret these symptoms as positive towards preparation for performance.

Debilitators attempted implementation of several psychological skills but did not possess the refined internal control over the form and function of these skills. Leading to a debilitating effect of the symptoms during the time preceding competition and perceptions of poor performances

What do we know so far

Implications of Qualitative research;

- Facilitative interpretation developed throughout career
- Perception of control
- Use of Psych skills
- (imagery, goal setting, thought stopping, relaxation techniques)
- Pre-competition and Pre-race routines
- Intensity & frequency change over time towards event
- Control here is key & effective use of psych skills
- Facilitation is linked with SC
- Specific Somatic & Cognitive Symptoms can be viewed + or —
- Individual preference, perception of control, and rationalisation of symptom effect

What's Next

Interventions:

- Can we change / re–structure performers' interpretation?
- Can we influence perception of control in performers that may lead to positive interpretation?
- What role does Self-Confidence play in interpretation?
- **Practical implications for Interventions with Performers**

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