

Sports Psychology: Strategies for Managing Performance Anxiety & Managing High Expectations Returning from Injury

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March 9, 2019



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Financial Disclosures

- I have no conflicts or financial relationships to disclose.. but I am open to any discussions or negotiations if someone would like to create any!

Learning Objectives

- People attending this lecture will be able to:
 - Describe how anxiety impacts performance
 - Identify strategies that target athlete's performance anxiety
 - Explain several ways to promote an athlete's return to sport following injury

Anxiety Overview

- Arousal (somatic)
 - General physiological or psychological activation that varies along a continuum
- Anxiety (somatic and cognitive)
 - A physiological activation of the body that is combined with emotional states (worry, nervousness, apprehension, negative thoughts)
- State vs Trait
 - State → situational specific
 - Trait → a stable part of one's personality

Anxiety and Stress in Athletes

- Intensity (aka Anxiety and Arousal)
 - Physiological activation
 - Bodily functions (HR, Blood Flow, Sweating)
 - Behavioral Responses
 - Motor activity changes (fidgeting, pacing, and reactions)
 - Cognitive and Emotional Responses (evaluations of physiological and behavioral changes that cause an emotional reaction)
 - Cognitive Anxiety → amount a person ruminates, worries, or has negative thoughts
 - Somatic Anxiety → amount a person is aware of/the change in their own psychophysiology

Central Nervous System

- **Autonomic Nervous System** – “automatic” nervous system
 - The autonomic nervous system controls involuntary body functions as breathing, blood pressure, heartbeat, and the dilation or constriction of key blood vessels and small airways in the lungs
 - There are 2 divisions of the autonomic nervous system
- **Sympathetic Nervous System**
 - Body’s activation system
 - The sympathetic nervous system functions like a gas pedal in a car
 - It triggers the “fight-or-flight” response, providing the body with a burst of energy so that it can respond to perceived dangers
- **Parasympathetic Nervous System**
 - Responsible for “rest and digest” response.
 - This functions like the brake in a car.
 - This system brings the body back to normal. Your heart rate slows, your breathing slows, muscles relax, and your gut begins digesting food again

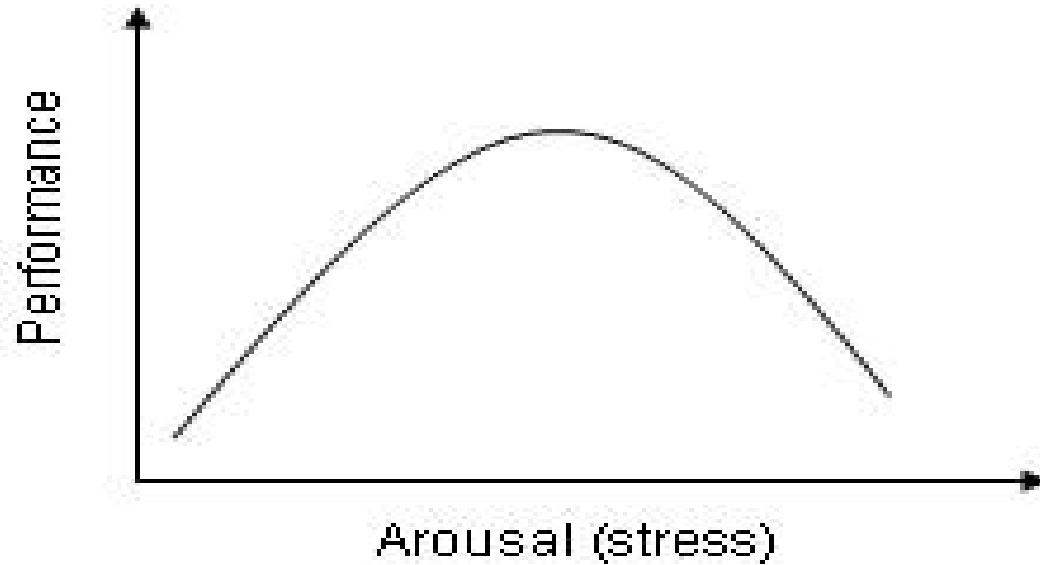
Balancing Act

- The Gas pedal
 - Your body first is flooded with adrenaline and then cortisol which causes increases in heart rate, breathing, and blood glucose, to give energy to the body
 - Your gut stops digesting food, and diverts blood to the heart, lungs, and brain to increase alertness and energy. This can lead to the “butterflies” or “nervous stomach” feeling. Muscles tense up- preparing for activity.
- The Brake
 - Your heart rate slows, your breathing slows, muscles relax, and your gut begins digesting food again
- These two systems work together to promote balance in your body
- Unfortunately, the body can also overreact to stressors that are not life-threatening
 - This is particularly true of individuals who have experienced an acute stressor (such as a severe illness or injury)
 - This may have sensitized them to changes in their body or their environment that are interpreted as dangerous or increases fear
 - Which turns on or maintains the stress response
- The good news is we can help “turn off” the stress response, by triggering the PNS (*the brake*)

Yerkes-Dodson Law: “Stress Curve”

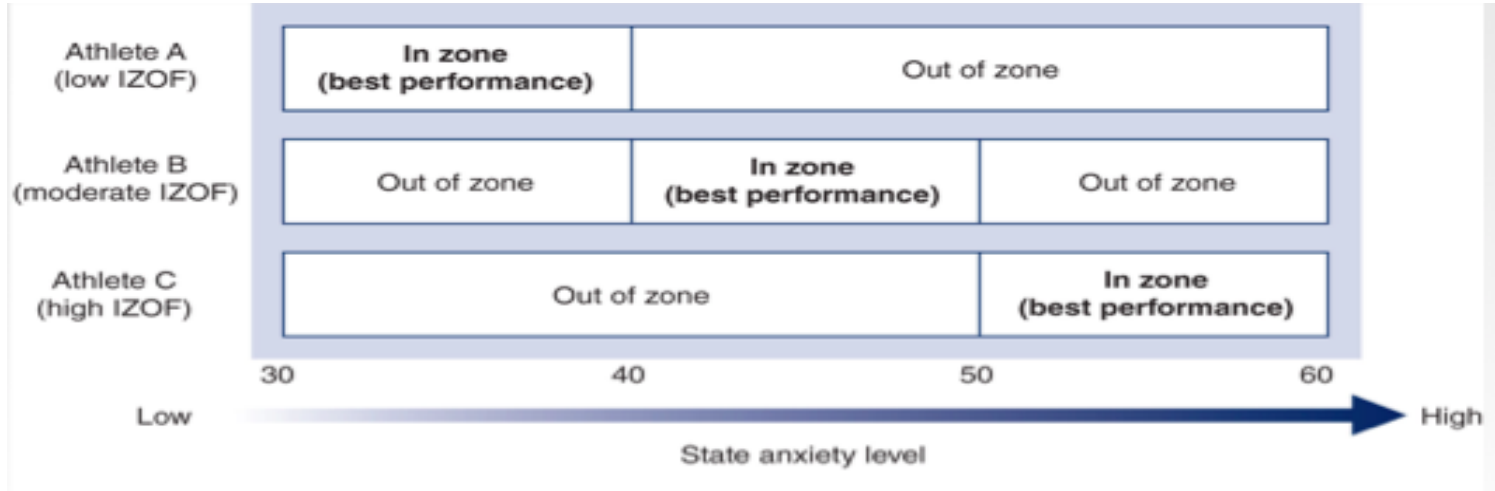
- At low levels of stress people are not motivated to perform well. People are lethargic and perform badly
- As arousal increases, performance also increases - but only to a point, after which increasing arousal actually decreases performance
 - Low motivation = boredom
 - Adequate motivation = "good stress"
 - Challenges like getting motivated to reach a goal, or being called on to exhibit your best skills
 - Good stress gets us engaged, enthused, and motivated
 - Distress = “bad stress”
 - When demands become too great for us to handle, when the pressure overwhelms us, too much to do with too little time or support; we enter the zone of bad stress
 - Damaging effects of stress hormones predominate under high levels of stress, or low levels of chronic stress
 - Too-high levels of those hormones over too long a period create imbalances in the immune and nervous systems, so we are more susceptible to illness, have trouble thinking clearly, and sleep poorly

Inverted-U Hypothesis



Individual Zone of Optimal Functioning (IZOF)

(Hanin, 2000)



- Emphasizes individual arousal level differs between athletes for optimal performance
- Range vs single point

How Stress Can Influence Injury

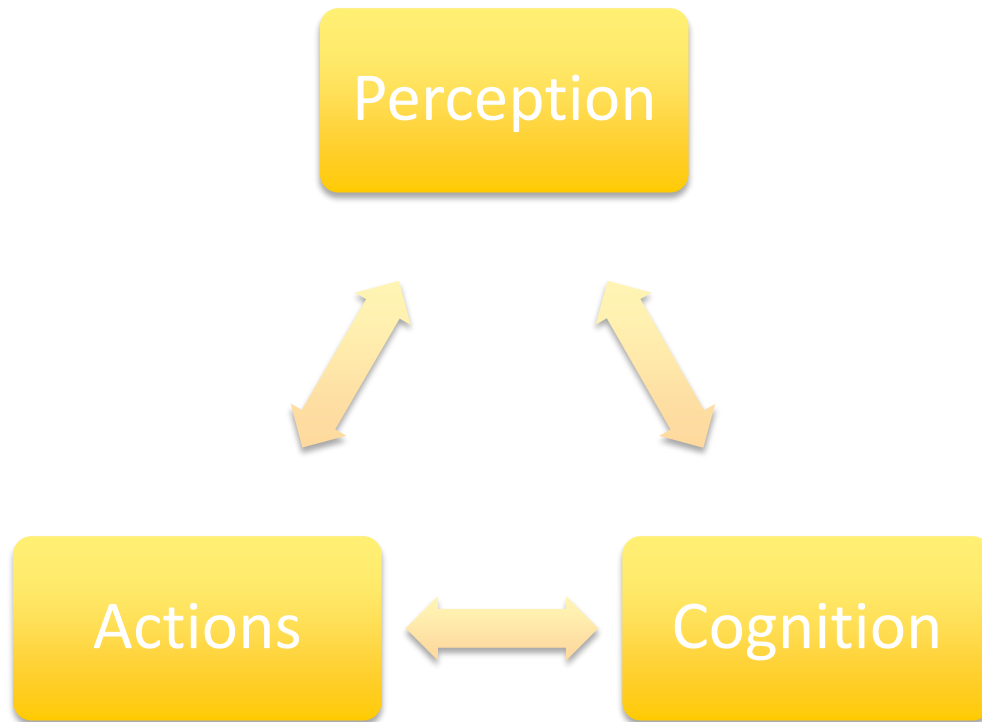
- An athletes' poor stress response can influence their increased risk of sport injury *(Anderson & Williams, 1999; Dvorak et al, 2000; Rogers & Landers, 2005)*
- Anxiety is one of the key personality factors that affect sport injury onset *(Ford, Eklund, & Gordon, 2000)*
- Same stressors will continue to influence subsequent injury rehabilitation
 - Impacts physical & psychosocial rehabilitation outcomes, and return to sport *(Brewer, Andersen, & Van Raalte, 2002; Wiese-Bjornstal et al, 1998)*

The Impact of Perceptions on Progress

(Ford, Ildefonso, Jones, & Arvenin-Barrow, 2017)

- When physical progress is consistent with an athlete's own perceptions of rehab success
 - Anxiety, worry, negative emotions, negative cognitive appraisals will decrease over time *(Houston, Cross, Saliba, & Hertel, 2014)*
- When progress rate does not match up with the athlete's desire, or setbacks occur
 - Anxiety likely increases
 - Higher risk of depression with athlete's who have a high sense of athletic identity *(Podlog et al, 2013)*

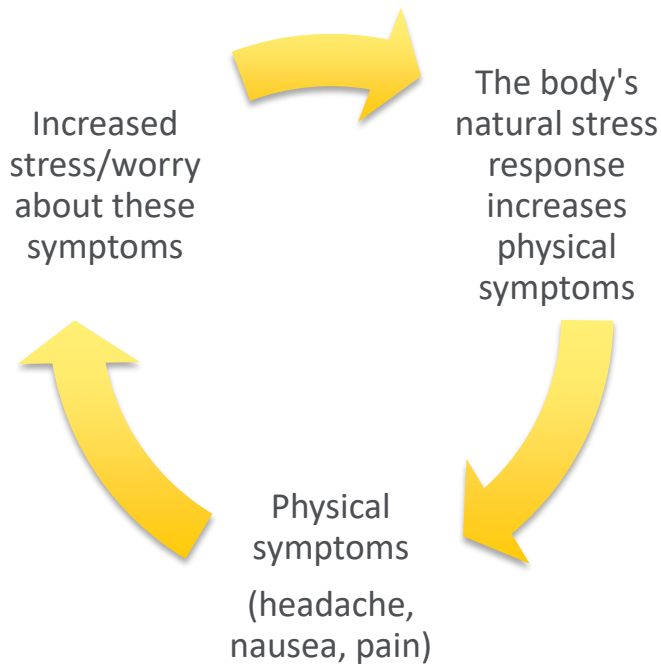
Moran's Attentional System



Attention

- Alertness or Vigilance
 - Focuses on attention as the development and maintenance of both short-term and long-term sensitivity as well as an optimal readiness for responding
 - Readiness depends on one's emotional status
 - Anxiety not only impairs performance but it also increases the risk for injury by limiting the ability to react to risks in the individual's environment
 - Emotional dysregulation impairs concentration in the following:
 - Narrowed attention: An individual's attention span becomes restricted and people miss important cues
 - Focused controlled processing: Under pressure there is a shifting away from automatic functioning to a conscious fixation on the process of performing
 - Inefficiently allocating attentional resources: An individual's attention becomes less focused on the task at hand for lower-level and/or highly anxious individuals
 - Distraction by irrelevant cues: An individual's response time to relevant cues slows and visual control diminishes

Role of Cognition/Thoughts



Cognitive Distortions

- How you think influences how you feel
- What we tell ourselves about a situation influences how we feel about it
 - If we are constantly telling ourselves negative things, negative feelings will result, which will negatively impact our behaviors
- Common Cognitive Distortions:
 - Catastrophizing – “attributing greater significance to an event, than is appropriate or accurate”
 - Dichotomous thinking – “black-or-white” or “all-or-none” thinking
 - “should’ s”, “must’s”, “ought's”

Managing Expectations

- Identified fear and re-injury anxiety were the main concerns for athletes returning to sport *(Podlog et al, 2007, 2011, 2013, 2015; Wierike et al, 2013)*
- Anxiety related to the inability and/or uncertainty to return to pre-injury level of performance and lack of athletic appearance have been found to influence a successful return to sport process *(Podlog et al, 2007, 2011, 2013, 2015; Wierike et al, 2013)*
- Lack of athletic identity, feelings of isolation, and pressures to return to sport can increase anxiety and negatively impact performance *(Podlog et al, 2013; Ruddock et al, 2013; Walker & Thatcher, 2011; Walker, 2006; Clement, Arvinen-Barrow, & Fetty, 2015)*

Factors affecting Confidence

(Vealey, 2005)

- Achievement
 - Prior success, demonstrating ability compared to others, achieving goals
- Preparation
 - Problem-focused vs emotionally focused, process vs outcome approach
 - Activity engagement, developing well-practiced strategies, mental preparation, knowing you are prepared for the situation
- Self-regulation
 - Developing and using skills to maintain focus and manage emotions, thoughts, and behaviors
- Models
 - Seeing others perform successfully, using imagery to view oneself performing better/perfectly
- Feedback/encouragement
 - Receiving useful feedback, support, and encouragement from loved ones
- Environmental comfort
 - Feeling comfortable with others and people, establish healthy arousal levels
- Physical self-presentation
 - Feeling that you look good in your appearance and physical self (i.e. hygiene, appearance)
- Situational favorableness
 - Feeling that the breaks or momentum of the situation are in your favor

Personal Resources for Coping with Stress

- People with more natural energy are able to cope with stressors more effectively
- Positive but realistic expectations
- Problem-solving skills, multiple resources/skills to improve coping
- Feel in control of their environment (i.e. internal locus of control)
- Hardiness
 - Confidence, positive attitude, ability to use active coping and social support
 - Believe they can have a positive influence on their surroundings and outcomes
 - Have a sense of commitment and purpose
 - Take a learning approach to positive and negative events

Elite Athletes and Recovering after Injury

- Hardier than lower level athletes and general population
- Respond to adversity in a more calm, positive, and confident manner
- Problem-focused vs emotion-focused, and proactive coping

Successful Performance after Injury

- People need to understand when and where to focus their attention when they are performing
 - An individual's ability to block out factors typically leads to more successful performance. These factors that need be blocked out include:
 - Uncontrollable factors, which may include environmental stimuli, certain physiological sensations
 - Outcome of the event
 - Increased emotionality or anxiety
 - An individual's ability to focus on what's important to them typically leads to more successful performance as well. These factors that a person should try and concentrate on include:
 - Their strategies
 - Execution of routine and tasks during the course of activity
 - Being completely engaged in the task
- Essentially helping individuals become more process vs outcome oriented after injury

Interventions

- Multidisciplinary team
 - Promotes communication and recognition of when an athlete is experiencing difficulties
- Development of routine/plan
- Cognitive Behavioral Therapy Interventions
 - Healthy Lifestyle Behaviors
 - Cognitive Restructuring and altering self-talk
 - Attentional focus retraining
- Behavioral Relaxation Techniques
 - Mindfulness-Based Techniques
 - Deep Diaphragmatic Breathing
 - Guided Imagery

Considerations for Managing High Expectations

- Player
 - Harness intensity to a more manageable level that promotes optimizing performance
 - Emphasize process vs outcome approach
 - Self-monitor emotional responses and employ more practical strategies
- Coach
 - Implement appropriate coaching techniques that foster an athlete's return to sport vs expectations of pre-injury level of performance
 - Look out for warning signs or symptoms of anxiety & stress
 - Collaborate with mental health professional to institute mental health screening before the season

Summary

- Performance anxiety is healthy, but can either promote or hinder an athlete's sport performance
- Managing anxiety and expectations after injury is crucial to assisting the return to sport and prevention of re-injury
- Taking a multidisciplinary approach is important to optimize the athlete's performance, recognize any mental health concerns, and promote their well-being

Thank you!

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