

SPORTS / EXERCISE / FITNESS

## Oriental Medicine Integrated Within Sports Psychology: Anxiety and Athletic Performance

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Competitive stress and its effects upon an athlete's coping skills have become a critical issue that significantly affects the athlete's well-being and performance. There are many athletes who have great talents within their specific sport; however, during competition, some of these athletes are unable to achieve their peak performance, due to these stressors that affect their psychological state of preparedness. One of the most significant characteristics of Olympic-level athletes is their ability to cope and stay focused in spite of the pressures of competition and associated anxiety. Unfortunately, many current training methods used for these athletes focus upon their physical training and not their psychological training. By integrating Oriental medicine (delivered by licensed acupuncturists) with sports performance, we can provide valuable insight and coping skills for competitive stress that relate to the athlete's psychological and physiological performance excitement levels, and that can enhance athletic performance.

Psychological hurdles affect performance arousal levels (the integration of psychological and physiological components that refer to the athlete's intensity levels of motivation at particular moments). The psychological hurdles include mental/emotional dynamics and the athletic environment that affect mental focus and concentration levels. These mental/emotional states and competitive environment stressors affecting the mental focus and concentration aspects of the athlete translate into the athlete's performance. Athletic environment stressors include performing in a new environment, travel length, performing in front of a large audience, the opponent's high performance skills, and the coach's expectations and pressures. Mental/emotional stressors include decreased self-confidence, fear of losing, superstition (favorite clothing, necklace, etc., among other items always taken into competition or ritual before competition), decreased confidence level in one's abilities, previous failures, losing control of the situation, and family shame if one loses. These athletes have not lost their technical skills, strategic knowledge or physical abilities in competition. Their competitive edge diminished due to the athlete's coping skills in dealing with these distractions. Most elite levels of competition are based purely on the athlete's ability to maintain focus, concentration, and the ability to zone into "tunnel vision" (mental anxiety/control) before and during the competition.

Mechanics of Psychological Hurdles Emotion and thoughts affect the athlete by changing the physiological responses that increase heart rate, respiration and muscle tension, muscle coordination, timing, task-diminished relevant cues, muscle fatigue and tightness. Competitive athletic environments affect the athlete's emotional state and thoughts that include attention shifts, lack of concentration due to the reactions of the coach/referee, background noise, brain stimulus that sends improper commands during performance, diminished coordination, and deteriorated performance.

The majority of the athlete's training is spent on physiological abilities as techniques, skill, coordination, and strategy. However, mental training requires the same commitment to practice and required time dedication as the physiological aspect. Exercising the mind to flip cues to

counterbalance and prevent breaks in focus, concentration and tunnel vision before and during competition can incorporate many techniques used within Oriental medicine.

Essentially, the goal is to provide optimal stimulation levels in order to achieve peak performance before and during competition. This includes the release of appropriate brain chemicals, relaxed concentration, relaxed muscles, a focused mind, and cued muscle coordination - all referred to as being "on ten" in the moment. Many elite athletes "psych up" before competition. This translates into talking to oneself in order to stimulate a positive competitive edge and mental state. Visual imagery is used to practice the task in which the athlete is competing (like a gymnast or ice skater doing a routine, or an Olympic weightlifter/high jumper/triple jumper/sprinter, etc., visualizing steps and techniques of a particular event).

Team sports such as soccer focus on developing a plan of strategy. This technique enables mental practice that enhances skill development, focus, anxiety control and relaxed concentration. As with anything, practice makes perfect! Another tool available is implementing Oriental medicine in order to prevent stress and anxiety before and during competition. Traditional Chinese medical philosophy can be a very valuable tool to provide greater concentration levels, focus and tunnel vision to make adjustments to the athlete's performance arousal level.

## Eastern Perspective

In traditional Chinese medicine, this type of performance arousal level can be related to conditions of excess, deficiency and stagnation. The excess category represents fire in combination with Heart/Stomach/Liver organs which stem from hectic lifestyle, rushed and suppressed emotions. Deficiency creates Kidney/Heart qi deficiency, Spleen blood deficiency and Heart/Kidney yin deficiency, usually a result of overwork, stress, irregular eating habits, lack of sleep, and improper rest/recovery between training sessions. The stagnation category reflects in Heart/Liver qi stagnation, creating Liver yang rising, and may also accumulate into phlegm. This is mostly the result of emotional stress.

Elite athletes (competitive for 10+ years) end up with either fire and/or yin deficiency due to their demanding year-round training schedules, years of competitions, and everyday life, which created other pre-existing conditions that developed into either fire or yin deficiency.

Since there is little time during competition to treat athletes with acupuncture, other Oriental medicine modalities effective for this environment include massage (*tui na*), EMS units, auricular stimulation and/or magnets (to sedate, use R14, HT8, P6, and R24) and massage (to tonify, treat K6, SP6 and D20). Auricular therapy includes stimulating certain points on the ear, bleeding technique on the ear apex, and EAS or seeds on the following ear points (Heart, Liver, anxious point, nervous subcortex and occiput). Herbal formulas are also quite effective. However, at world championship events and/or the Olympics, athletes will not take anything just in case they may test positive if they are drug tested as a medal contender. Another possible disqualifier is anything that touches the ground or floor, which translates into magnets and/or ear seeds that can fall off during competition. Therefore, it is very important that the acupuncturist working with the sports medicine team understands the rules for each sporting venue in which the sports medicine team is engaged.

## Conclusion:

Integrating traditional Chinese medicine can assist in the goal of providing optimal performance arousal levels in order to achieve peak performance before and during competition. Using *tui na* (massage), EMS point stimulators, auricular therapy and/or magnets can greatly influence these

psychological hurdles involved in arousal levels that affect athletic performance. Thus, understanding the dynamics of that athlete's psychological hurdles that affect optimal athletic arousal levels, and integrating acupuncturists as part of the sports performance and medicine team, is valuable to peak athletic performance. This also provides a different perspective to accomplish the goal-practicing mental mindsets for competition.

A word of caution to those of you who are not acupuncturists or studying within Oriental medicine: There is a specific traditional Chinese medicine diagnostic methodology involved that is to be used in order to be effective. This article is not to be used as a "cookbook" protocol method. Each athlete is different, and TCM treatment strategies constantly vary among individual athletes from day to day. To try and create a protocol for use not only is not effective, but may cost the athlete from qualifying for competition, a medal, and/or a specific ranking needed to progress forward due to misinformation and misinterpretation of this medical specialty, which is rooted in Eastern philosophy rather than Western philosophy. Integration of both philosophies can have a profound impact on athletic performance on a multitude of levels. The key is being educated in both Eastern and Western academic and diagnostic philosophies.

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