

Psychological Models of Sporting Injuries: János Selye Revisited

A recent model, the Cumulative Stress and Training Continuum Model, emphasizes the complex interactions between psychological, social and physical factors. Such an approach helps to explain how apparently non-significant factors can exert disproportionate effects on injury risk in high stress states. This presentation synthesises psychological models of injury into the same framework and explains some of the processes leading to sport injuries and syndromes characterised by unexplained underperformance. Injury in sport is something of an occupational hazard, with a reported annual incidence among athletes of 30% – 70%. Many injuries are due to human error and/or overload of performance capacities, and are therefore preventable. Most of the models draw directly or indirectly on Selye's General Adaptation Theory, although the lax use of terminology frequently obscures this. The unique contribution of the present synthesis is that, being inclusive and holistic, it provides a unifying paradigm for research and application. To address the high incidence of injuries among athletes at the Queensland Academy of Sport, a Cognitive-Behavioural Stress Management program has been developed and is being tested. The program teaches stress management skills, including breathing optimisation, muscular relaxation, cognitive restructuring, plus recovery-related and performance-related imagery. The program is introduced over a two-week period and is also provided on MP3 players for daily utilisation. Athletes are monitored over a 10-week period using salivary cortisol and psychometric measures of perceived stress, life events, mood, and stress recovery. Injury characteristics and time lost from planned training is recorded. Pilot results will be presented.