

Psychological Responses Prior to a Strenuous Task Involving an Injured Joint

Balles AK, Gaines SA, Fiddler RE, Hearon CM

Human Performance Laboratory; Department of Health & Kinesiology; Texas A&M University-Kingsville; Kingsville, TX

Category: Undergraduate

Advisor / Mentor: Gaines, Stacey (stacey.gaines@tamuk.edu)

ABSTRACT

Injuries are an inherent risk of sport participation. Roughly 68% of athletes experience an athletic injury during their college career, with over half being injuries to the lower extremity (Hootman, Dick & Agel, 2007). While much attention has been given to the physical effects of an injury, the psychological ramifications can also affect an athlete's recovery from injury. According to Quinn & Fallon (2008), an athlete can physically recover from an injury however they may not attain a complete psychological recovery. An athlete's performance can be affected negatively if they return to sport participation without recovering psychologically from their injury, which can also lead to a risk of re-injury or receiving additional injuries (Quinn & Fallon, 2008). Two variables related to psychological recovery include re-establishment of confidence and a decrease in fear of re-injury (Magyar & Duda, 2000; Walker & Heaney, 2013). Additionally, an athlete may feel reluctance to perform skills that require the site of injury to be used which affects subsequent performance. An athlete's fear of re-injury can negatively affect athletes' performance by undermining an athlete's confidence in obtaining their pre-injury sport performance (Arden, Taylor, Feller & Webster, 2012). The purpose of this study was to determine how psychological responses to injury, namely sport resumption confidence, fear of re-injury, and injury perception change throughout the rehabilitation process. These variables were examined in relation to performing a strenuous isokinetic dynamometer task on an injured joint (e.g., knee, ankle). Participants ($N=21$; 62% female) completed psychometrically sound measures designed to assess confidence, fear and injury perception across three groups of athletes: healthy ($n = 9$), injured ($n = 6$), and rehabilitated ($n = 6$). All subjects were told they would be completing a maximal isokinetic contraction task on the lower extremity that had been injured before completing the survey. Only healthy and rehabilitated athletes actually performed the task at the completion of the survey. ANOVA was utilized to compare group differences on study variables. There was a significant difference between groups with regard to fear (healthy= 1.62 ± 0.03 ; injured= 4.09 ± 0.10 ; rehabilitated= 3.17 ± 0.61 ; $p < .05$) and confidence (healthy= 5.82 ± 0.68 ; injured= 2.99 ± 0.06 ; rehabilitated= 4.06 ± 0.58 ; $p < .01$) where healthy athletes reported the highest confidence and lowest fear across groups. Additionally, injured athletes reported the lowest confidence and highest fear across groups. There were no group differences found with regard to injury perception (healthy= 0.00 ± 0.00 ; injured= 1.01 ± 0.41 ; rehabilitated= 0.07 ± 0.09). This study extends the current sport injury research base by identifying changes in key psychological variables across the healthy-injured-rehabilitated continuum of the collegiate sport experience.