

## ORIGINAL RESEARCH

## THE ADOLESCENT MEASURE OF CONFIDENCE AND MUSCULOSKELETAL PERFORMANCE (AMCaMP): DEVELOPMENT AND INITIAL VALIDATION

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## ABSTRACT

**Background:** Although the relationship of self-efficacy to sports performance is well established, little attention has been paid to self-efficacy in the movements or actions that are required to perform daily activities and prepare the individual to resume sports participation following an injury and associated period of rehabilitation. There are no instruments to measure self-confidence in movement validated in an adolescent population.

**Purpose:** The purpose of this paper is to report on the development of the AMCaMP, a self-report measure of confidence in movement and provide some initial evidence to support its use as a measure of confidence in movement.

**Methods:** The AMCaMP was adapted from OPTIMAL, a self-report instrument that measures confidence in movement, which had been previously designed and validated in an adult population. Data were collected from 1,115 adolescent athletes from 12 outpatient physical therapy clinics in a single healthcare system.

**Results:** Exploratory factor analysis of the 22 items of the AMCaMP using a test sample revealed a three factor structure (trunk, lower body, upper body). Confirmatory factor analysis using a validation sample demonstrated a similar model fit with the data. Reliability of scores on each of three clusters of items identified by factor analysis was assessed with coefficient alpha (range = 0.82 to 0.94), Standard Error of Measurement (1.38 to 2.74), and Minimum Detectable Change (3.83 to 7.6).

**Conclusions:** AMCaMP has acceptable psychometric properties for use in adolescents (ages 11 to 18) as a patient-centric outcome measure of confidence in movement abilities after rehabilitation.

**Level of Evidence:** IV

**Keywords:** Adolescents, confidence, movement, rehabilitation, self-efficacy

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