ABSTRACT

**Background:** The Functional Movement Screen (FMS™) has been suggested for use in predicting injury risk in active populations, but time constraints may limit use of the screening test battery. Identifying one component of the FMS™ that can predict which individuals may perform poorly on the entire test, and therefore should undergo the full group of screening maneuvers, may reduce time constraints and increase pre-participation screening utilization.

**Purpose:** The purpose of this study was to determine if performance on the FMS™ overhead deep squat test (DS) could predict performance on the entire FMS™.

**Study Design:** Cohort study.

**Methods:** One hundred and three collegiate athletes underwent offseason FMS™ testing. The DS and adjusted FMS™ composite scores were dichotomized into low performance and high performance groups with athletes scoring below 2 on the DS categorized as low performance, and athletes with adjusted FMS™ composite scores below 12 categorized as low performance. Scores of 2 or above and 12 or above were considered high performances for the DS test and adjusted FMS™ composite score respectively, and therefore low risk for movement dysfunction and potentially, injury.

**Results:** Individuals categorized as low performance as a result of the DS test had lower adjusted FMS™ composite scores (p < 0.001). DS scores were positively correlated with adjusted FMS™ composite scores (ρ = 0.50, p < 0.001). Binomial logistic regression identified an odds ratio of 3.56 (95% CI: 1.24, 10.23, p = 0.018) between DS and FMS™ performance categories.

**Conclusions:** Performance on the DS test may predict performance on the FMS™ and help identify individuals who require further musculoskeletal assessment. Further research is needed to determine if DS performance can predict asymmetries during the FMS™.

**Level of Evidence:** Level 3

**Keywords:** Injury risk assessment, injury prevention, pre-participation examination, screening