ABSTRACT

TITLE:	Investigation of a Functional Overhead Squat in Predicting Athletic Injury in Division II Basketball Players
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ABSTRACT: This prospective cohort study was performed to analyze the use of the functional overhead squat (OS) in predicting athletic injury in division II basketball players. A total of 26 basketball players participated in the study and were examined while performing a functional OS. Using the video analysis software Spark Motion by Spark Motion LLC, anterior and lateral views of the squat were analyzed. A Receiver Operating Characteristic (ROC) curve was done comparing lower extremity injury with range of motion of the ankle, knee, and hip individually. The results indicated that the areas under the curve were 0.559 for the ankle, 0.448 for the knee, and 0.451 for the hip. This study showed that the OS was not effective in predicting athletic injury for basketball players, nor for male and female players individually. Analyzing the range of motion (ROM) of the OS alone is not effective in predicting injury, thus, the study's hypothesis is rejected.