ABSTRACT

TITLE:	Validation of Perfectphorm: A Motion Analysis Study
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ABSTRACT: PerfectPhorm is a recently released motion tracking system that needs to be validated before its implementation in any field of study, specifically medicine and sports. The purpose of this study was to see if PerfectPhorm is a valid tool for measuring joint angles when compared to a current gold standard, the Vicon System. Both the PerfectPhorm and Vicon System measured lower-extremity joint angles in 21 subjects during the performance of a squat, lunge, and vertical jump. The collected data was then analyzed via paired t-tests to compare the maximum and minimum joint angles of the ankle, knee and hip from the three movements. The research showed that PerfectPhrorm was not completely accurate valid tool for motion tracking. Although our study showed that PerfectPhorm is not a valid tool for lower body motion tracking, more research is needed to analyze its validity in tracking the upper body as well as more complex movements.