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Abstract

Reproducibility of Wall Drop Punt Kick and Catch Test over a period of two weeks.

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This study sought to assess the reliability of a manipulative eye–segmental (hand and foot) coordination task, known as the Wall Drop Punt Kick and Catch test (WDPK&C), over a period of two weeks. A total of forty-one children and adolescents, comprising 18 boys and 23 girls, with an average age of 10.2 years (SD = 1.62), were recruited for the assessment. Participants were given 30 seconds to execute as many ball impacts as possible on a wall located two meters away, following a drop punt kick, wall rebound, and catch sequence. The Intraclass Correlation Coefficient (ICC = 0.896) for individual

measurements, Cronbach Alpha ($\alpha = 0.945$), and Lin's Concordance Correlation Coefficient (CCC = 0.896) provide robust evidence of reliability when considering two successive measurements. These findings further reinforce the reliability of the WDPK&C test within a sample of Portuguese children and adolescents. Consequently, the WDPK&C test is deemed suitable for application to Portuguese children and adolescents. Future studies should extend the assessment of this test's reliability to diverse age groups, as it is intended to serve as a test suitable for a wide range of ages.

Keywords: coordination; assessment; development; children; fundamental motor skills; object control