TACSM Abstract

Early Identification of Developmental Coordination Disorder: Gender Differences in Performance of the Movement Assessment Battery in Preschool-age Children

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ABSTRACT

Developmental coordination disorder (DCD) is a neurodevelopmental disorder often highlighted by a severe lack of motor coordination that interferes with activities of daily living. The prevalence of DCD in children ranges from 2 to 20% in the United States. Early identification and early intervention can help mitigate potential long term negative effects. The movement assessment battery for children (MABC-2) is a commonly used tool used to identify DCD. **PURPOSE**: This study examined gender differences in performance on the MABC-2 between preschool-age children. **METHODS**: 45 preschool-age children (26 girls and 19 boys, M_{age} = 4.0) were assessed using the MABC-2. The MABC-2 is comprised of 8 items across three subdomains (aiming and catching, manual dexterity, and balance). An independent samples t-test was conducted to observe the differences in each of the 3 sub domains of the MABC between boys and girls and by age. **RESULTS**: Overall, 39 of children were not at-risk for DCD, and 4 children were at-risk for DCD. The results show a significant difference in the balance domain with girls demonstrating more proficiency (p =0.03) than the boys. There were no significant differences found in manual dexterity (p = .76), aiming and catching (p =0.60), and overall test score (p = 0.18). There were no significant differences based on age across any of the domains. **CONCLUSION**: Early assessment of young children may be important as potential gender differences already exist by preschool-age. Separate norms may be necessary for boys and girls in this age band as several studies have consistently identified gender differences in the MABC-2. Further exploration of why these differences may exist at such an early age should be explored.