Measuring Joint Hypermobility using the Beighton Scale in Children with Intellectual Disability: A Study of Reliability

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Hypermobility relates to excessive joint motion caused by laxity of surrounding tissue, thus allowing joints to move beyond the expected normal range. The 9-point Beighton Hypermobility Score (9-BHS) is the most widely used system for diagnosis of joint hypermobility in children without disabilities. However, it is not known if the 9-BHS, which involves 9 maneuvers, can be performed correctly by youth with intellectual disabilities (ID). The purpose of this study was to determine the reliability of using the 9-BHS for youth with ID. Twenty-five (14 male, 11 female; Age = 13.3±2.9 yrs) participants were assessed on two different days with 3-4 weeks between evaluations. Percent (%) agreement between tests was determined by Cohen's kappa coefficient. Kappa scores indicated moderate (.41-.60, 3 maneuvers), substantial (.61-.80, 5 maneuvers), and perfect (1.0, 1 maneuver) agreement. These results indicate that the 9-BHS has similar reliability when used to diagnose hypermobility in youth without disabilities.