Abstract

BACKGROUND: Many clinicians and researchers in Brazil consider the Neurological Developmental Exam (NDE), a valid and reliable assessment for Brazilian school-aged children. However, since its inception, several tests have emerged that, according to some researchers, provide more in-depth evaluation of motor ability and go beyond the detection of general motor status (soft neurological signs). OBJECTIVES: To highlight the limitations of the NDE as a motor skill assessment for first graders. METHODS: Thirty-five children were compared on seven selected items of the NDE, seven of the Bruininks-Oseretsky Test (BOT), and seven of the Visual-Motor Integration test (VMI). Participants received a “pass” or “fail” score for each item, as prescribed by the respective test manual. RESULTS: Chi-square and ANOVA results indicated that the vast majority of children (74%) passed the NDE items, whereas values for the other tests were 29% (BOT) and 20% (VMI). Analysis of specific categories (e.g. visual, fine, and gross motor coordination) revealed a similar outcome. CONCLUSIONS: Our data suggest that while the NDE may be a valid and reliable test for the detection of general motor status, its use as a diagnostic/remedial tool for identifying motor ability is questionable. One of our recommendations is the consideration of a revised NDE in light of the current needs of clinicians and researchers.

Keywords
motor skills; psychomotor performance; child development.