An international collaboration for identifying cross-cultural differences in motor development of young preschoolers

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Introduction: Screening tools to identify motor development and delay are needed for young preschoolers, but instruments developed in one country may not be psychometrically sound when used in other cultures. This study aimed to collaboratively develop the Little Developmental Coordination Disorder Questionnaire (LDCDQ) (a screening instrument for motor difficulties in young preschoolers) between several countries, while ensuring numerous psychometrically sound, comparable versions of the tool.

Objectives: To enable analysis and comparison of different patterns of motor development and/or delay in different cultures.

Methods: Based on a similar instrument for older children, the Little DCDQ was developed in Hebrew and psychometrically tested. After generating an English Little DCDQ (following recommended guidelines), 27 researchers from 20 international sites adapted and psychometrically tested the instrument with their local cultures/languages. Thereafter, each collaborator assessed 40 children aged 3-4.11 (20 typically developing; 20 with suspected motor difficulties) following the same protocol, and data was compared.

Results: The first phase of this collaboration will be briefly described and cross-cultural comparative results of typically developing children will be explored. Within most countries, significant differences in motor performance between referred and non-referred children were found. When comparing between countries, significant cultural differences were more noticeable for non-referred than referred children; trends in high- and low-scoring means will be discussed.

Conclusion: This is the first attempt to develop an instrument with the aim of facilitating cross-cultural comparison of motor development and delay in young preschoolers, which will enable a unified language for researchers and clinicians working in this field.