NIH Toolbox - Early Childhood Motor Battery

Event Category:	Time-Based
Event:	60M
Administration:	N/A
Instrument Target:	Child
Instrument Respondent:	Data Collector
Domain:	Physical Measures
Document Category:	Scored Assessment
Mode (for this instrument*):	In-Person, CAI
OMB Approved Modes:	In-Person, CAI; In-Person, PAPI; Phone, CAI Phone, PAPI; Web-Based, CAI
Method:	Data Collector Administered
Estimated Administration Time:	17 minutes
Multiple Child/Sibling Consideration:	Per Child
Special Considerations:	N/A
Version:	1.0
Release:	4.0
Publisher:	NIH Toolbox
NCS Contact:	Westat - 301-251-1500

*This instrument is OMB-approved for multi-mode administration but this version of the instrument is designed for administration in this/these mode(s) only.

9-Hole Pegboard Dexterity Test

This simple test of manual dexterity records the time required for the participant to accurately place and remove 9 plastic pegs into a plastic pegboard. The protocol includes 1 practice and 1 timed trial with each hand. Raw scores are recorded as time in seconds that it takes the participant to complete the task with each hand (a separate score for each).

The test takes approximately 4 minutes to administer and is recommended for ages 3-85. Scores are recorded for each hand.

Physical Measures Endurance 2-Minute Walk Test

This test is adapted from the 4-meter walk test in the Short Physical Performance Battery. Participants are asked to walk a short distance (4 meters) at their usual pace. Participants complete one practice and then two timed trials. Raw scores are recorded as the time in seconds required to walk 4 meters on each of the two trials, with the better trial used for scoring.

The test takes approximately 3 minutes to administer (including instructions and practice). This test is recommended for ages 7-85.

Physical Measures Grip Strength Test

This protocol is adapted from the grip strength testing protocol of the American Society of Hand Therapy.

Participants are seated in a chair with their feet touching the ground. With the elbow bent to 90 degrees and the arm against the trunk, wrist at neutral, participants squeeze the Jamar Plus Digital dynamometer as hard as they can for a count of three. The dynamometer provides a digital reading of force in pounds. A practice trial at less than full force and 1 test trial are completed with each hand.

The test takes approximately 3 minutes to administer and is recommended for ages 3-85.

Physical Measures Standing Balance Test

The Standing Balance Test is a measure developed to assess static standing balance. It involves the participant assuming and maintaining up to 5 poses for 50 seconds each. The sequence of poses is: eyes open while standing on a solid surface, eyes closed while standing on solid surface, eyes open while standing on foam surface, eyes closed while standing on foam surface, eyes open while standing in tandem stance.

Detailed stopping rules are in place to ensure participant safety with these progressively demanding poses. Postural sway is recorded for each pose using an accelerometer that the participant wears at waist level.

This test takes approximately 7 minutes to administer and is recommended for ages 3-85.