What’s New in Pediatric Assessment?

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MOTA Conference

Overview

- Assessment Basics
- Assessments:
  - Miller Function and Participation Scales (MFUN)
  - Sensory Processing Measure (SPM)
  - Sensory Processing Measure - Preschool (SPM-P)
  - Test of Handwriting Skills Revised (THS)
  - Educational Assessment of School Youth for Occupational Therapists (EASY-OT)

Overview

- Break
- Break-out time to review assessments
- Question/answer

Assessment Basics

- Standardized vs. non-standardized
  - Norm referenced tests
  - Criterion referenced tests
- Descriptive Statistics
  - Standard deviation or Z-score
  - T-score
  - Percentile score
  - Age equivalent score

Reliability
- Test-retest
- Inter-rater
- Internal Consistency
- Standard Error of Measurement

Validity
- Construct related validity
- Content related validity
- Criterion related validity

Miller Function and Participation Scales (2006)
- Author – Lucy Jane Miller
- Purpose – “Developmental tool for occupational therapists, physical therapists, and early childhood interventionists interested in determining how a child's motor competency affects his or her ability to engage in home and school activities and to participate socially in his or her world” (p.1)
Miller Function and Participation Scales

- Performance component – workbook activities to tap visual motor abilities and play activities that measure fine and gross motor abilities
- Participation component – observations checklist to rate participation at home and school environments
- Gathers information on self care activities, functional use of tools, functional mobility, purposeful eye-hand coordination, and participation in home and school activities


- Normative Scaled Scores for:
  - Visual motor, fine motor, and gross motor
  - Each subtest is followed by a behavior rating

M-Fun Performance Assessment

- Test-Retest Reliability – Considered moderately high (.77 for visual motor and gross motor to .82 for fine motor)
- Internal Consistency – reliability coefficients for all age groups in participation and performance components ranged from 0.67 to 0.98.
- Interrater Reliability for 3 motor areas ranged from 0.91 to 0.93

M-FUN Participation Assessment

- Home observations checklist
- School observations checklist
- Test observations checklist

Validity

"M-FUN-PS is highly sensitive to the motor difficulties of children identified as having motor delays. Diagnostic validity statistics reveal excellent sensitivity and specificity when testing a referral population; this tool is strongly supported as demonstrating clinical utility" (Asher, 2007, p. 317)

Source and Cost

Psychological Corporation
19500 Bulverde Road
San Antonio, TX 78259
Tel: 800-211-8378
www.harcourtassessment.com

$393.00 (9/21/10)

Let's take a look!

- Materials
- Test Books
- Scoring Books

Sensory Processing Measure (SPM) (2007)

"The SPM is intended to support the identification and treatment of children with sensory processing difficulties" (Sensory Processing Measure (2007), p. 4)

Main Classroom and School Environments Forms
- Kuhaneck, H., Henry, D.A., & Glennon, T.J.

Home Form
- Parham, L.D. & Ecker, C.
"An integrated system of rating scales that enables assessment of sensory processing issues, praxis, and social participation in elementary school-aged children" (Sensory Processing Measure (2007) p. 3).

Three Forms:
- Home Form
- Main Classroom Form
- School Environments Form

The SPM is “anchored” in Sensory Integration Theory


Age Range – Ages 5-12 or Kindergarten through 6th grade
Scoring - items are rated on a 4 Pt. Likert-type scale
- Never, occasionally, frequently and always
Home Form – 75 items completed by the child’s parent or home based care provider (10-15 minutes to complete)
Main Classroom Form – 62 items completed by the primary classroom teacher (10 – 15 minutes to complete)
Final Scores - 5-10 minutes to be scored by examiner


Eight norm referenced standard scores
- Social Participation (SOC)
- Vision (VIS)
- Hearing (HEA)
- Touch (TOU)
- Body Awareness (BOD)
- Balance and Motion (BAL)
- Planning and Ideas (PLA)
- Total Sensory System (TOT)

Standard score for each scale allows for classification into
- Typical
- Some Problems
- Definite Dysfunction

SPM School Environments Form

- Completed by teachers and other staff members outside of main classroom setting
  - Art Class (ART)
  - Music Class (MUS)
  - Physical Education Class (PHY)
  - Recess/Playground (REC)
  - Cafeteria (CAF)
  - School Bus (BUS)
- School Environment Form must be used together with the Main Classroom Form to provide a complete picture.
- School Environments Form is provided on a CD


SPM - Reliability

- Internal Consistency – Alpha ≥ .75 for all scales
- Two week Test-Retest ≥ .95 for all scales


SPM - Validity

“SPM scales correlated significantly in the expected direction with content-similar scales from the Sensory Profile (Dunn, 1999). SPM scales distinguished between a normative sample and a sample of clinic-referred children.” (Asher, 2006, p 440)
Let's Take a Look

- Scoring Forms
  - Classroom
  - Home
  - School Environment

Source and Cost

Western Psychological Service
12031 Wilshire Blvd.
Los Angeles, CA 90025-1251
Phone: (800) 648-8857 (U.S. and Canada only)
(310) 478-2061
Cost - Comprehensive Kit $155.00

Sensory Processing Measure - Preschool (SPM-P) 2010

“The SPM-P is designed to assess children of preschool age (ages 2 through 5).” (Sensory Processing Measure - Preschool, 2010, p. 3)

Main Classroom and School Environments Forms
- Kuhaneck, H., Henry, D.A., & Glennon, T.J.

Home Form
- Parham, L.D. & Ecker, C.

SPM-P Reliability

- Internal Consistency
  - Across the entire standardization sample all coefficients are greater than .70
  - 5 of 8 Home Scales are .80 or better
  - 4 of 8 School Scales are .80 or better

- Test-Retest Reliability
  - 2-week time frame - all scores were correlated (rs ≥ 90)
Source and Cost

Western Psychological Service
12031 Wilshire Blvd.
Los Angeles, CA 90025-1251
Phone: (800) 648-8857 (U.S. and Canada only)
(310) 478-2061
Cost - Comprehensive Kit $125.00


Authors: Kressler, K. & Kenmotsu, S.
E.A.S.Y. – collection of summary forms, informal checklists, and resource materials for guiding OT evaluations, documenting results, and planning interventions.

There are no norms associated with the EASY-OT – designed to gather relevant information into one place.

Four versions of the form based on age or functional ability
  - Pre-kindergarten through 2nd grade
  - 3rd through 8th grade
  - 9th through 12th grade
  - Low functioning (severe and profound, autistic, physically disabled)


- Each version looks at:
  - Fine motor
  - Gross motor
  - Visual perceptual
  - Visual motor
  - Self-help skills
  - Classroom observation
- Also included:
  - Sensory processing addendum
  - Vocational and life skills addendum
  - Screening Form
  - Annual Report


E.A.S.Y.

- Forms can be completed either by hand or on the computer – All forms are provided on a CD.
- Templates
  - 14 templates to use to look at different skills
  - Cutting skills, visual discrimination-colors, visual discrimination-shapes, figure ground

E.A.S.Y.

- Addendums
  - Standardized tests – allows therapist to customize their report to a standardized assessment
  - Sensory Processing Skills – includes auditory, visual, tactile, vestibular, proprioception, behavior and social skills
  - Vocational and Life Skills
    - Worksheet to help you analyze and solve work issues
    - Check list to assess life skills including: community, domestic/meal planning, health, job skills, and leisure

- Assessment Forms – All versions follow the same format
- Screening Form – designed as an observation tool, not a checklist
- Annual Report – Used to help document a student’s progress on annual goals

Let’s take a Look

- Forms
- Manual
- CD

Source and Cost

Western Psychological Service
12031 Wilshire Blvd.
Los Angeles, CA 90025-1251
Phone: (800) 648-8857 (U.S. and Canada only)
(310) 478-2061
Cost – Kit $330.00
Author: Michael Milone, PhD

THS-R is an untimed assessment of manuscript and cursive handwriting. “The primary purpose of the THS-R is to assess neurosensory integration ability as evidenced by manuscript or cursive writing. The THS-R is not a classroom penmanship test.” (Test of Handwriting Skills, 2007, p. 6.)

Age Range is 6 years 0 months to 18 years

Time to administer – 10 minutes
Time to score – 15 minutes


Writing Tasks

- Writing spontaneously from memory upper and lower case alphabet in order
- Writing from dictation the upper and lower case letter of the alphabet out of order
- Writing from dictation single digit numbers out of order
- Copying selected letters of the alphabet
- Copying selected words
- Copying selected sentences
- Writing from dictation selected words

Scores

- Normative data for children 5 years 11 months through 18 years 11 months
- Standard scores
- Scaled scores
- Percentile rank
- Stanines


Internal Consistency

- Coefficient alpha and Spearman-Brown reliability coefficients were computed by age group
  - Moderate to high for various age groups with medians of 0.61 to 0.85 across all ages for manuscript
  - 0.65 to 0.92 for cursive
  - Most reliability coefficients in both formats exceeded 0.80.
THS-R Reliability

- Test-Retest (14 days by the same examiner)
- Test – Retest correlation is 0.82 for the total test score and 0.49 to 0.82 for individual subtests.
- Interrater Reliability – Agreement among raters was 0.59 to 1.00, typical correspondence was in the range of 0.75 to 0.90


Let’s Take a Look

- Manual
- Manuscript workbook
- Cursive workbook
- Scoring CD
- Activity Books


Source and Cost

Pro-Ed
8700 Shoal Creek Blvd.
Austin, TX 78757
Tel: 800-897-3202
www.proedinc.com

- Cost: $145.00