Best Practices in Developmental Screening and Assessment of Infants & Toddlers

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Agenda

• Overview of Tests and Measures
• Developmental Screening Practice
• Developmental Assessment Tools
• Linking assessment to intervention
• Frequently Asked Questions
Methods of Assessment

• Norm-Referenced Tests
  - Standardized norm-referenced tools
  - Criterion-referenced tools

• Alternative Assessment
  - Observations
  - Interviews
  - Play-based
  - Curriculum-based
Age Scores

• The use of age scores has significant drawbacks
  - Norming of age scores results in differing scores depending on assessment used
  - Simply the median raw score for a particular age level
Standard Scores

• Use of standard scores is preferable, they are far more consistent across assessments
  - Standard scores are a more accurate representation of an examinee’s ability
  - Based not only on the mean at a given age level but also on the distribution of scores
Determining Eligibility

• In Florida the cut-off score is 1.5 standard deviations below the mean in one or more domains of development or informed clinical opinion

• Test with mean of 100 and SD of 15
  • 1.5 SD = 22.5 points
  • Cut score = 100 - 22.5 = 78 or below
Informed Clinical Opinion

- Based on judgment by specifically trained professionals
- Team decision, not individual
- Quantitative information, such as sub-domain scaled score discrepancies
- Qualitative information, such as background, culture, specific needs not assessed by evaluation instrument
Purposes of Assessment

- Generating a diagnosis
- Initial eligibility for services
- Ongoing eligibility for services
- Goal setting
- Intervention planning
- Progress monitoring
Assessment Questions

• Families
  - What is wrong with my child?
  - Will my child grow out of this?
  - What resources are available to help my child?
  - What can I do to help?

• Professionals
  - Diagnosis
    • Etiology
    • Clinical manifestations
    • Role of context and culture
  - Prognosis
  - Treatment
    • Referral
    • Follow-up care
Evaluator's Top 10 List

1. There's no place like home
2. First things first
3. Plan to be spontaneous
4. Let sleeping dogs lie
5. Variety is the spice of life
6. Out of sight, out of mind
7. Finders keepers, losers weepers
8. Perfect practice makes perfect
9. Experience is the best teacher
10. Fail to prepare = prepare to fail
Basics of Developmental Screening

- Early identification of problems
- Should be part of pediatric well-child exam for every child
- Required by Head Start, Healthy Start, etc.
- Should assess how child learns, speaks, plays, moves, and behaves
- Tools utilized should meet technical standards
Screening Pitfalls

- Waiting until problem is observable
- Ignoring screening results
- Relying on informal methods
- Using tools that are not sensitive and specific enough to detect delays
- Not screening because services are limited or not available
- Screening too infrequently
- Failing to follow directions for administration and scoring
How Information is Obtained

- Parent/Caregiver Report
  - Questionnaires
  - Behavior ratings

- Observational & Structured Tasks
  - Elicit skills through simple commands, play with developmentally appropriate items

- Numeric scores or cutoff scores yielded
Approved Screening Tools

- **ASQ**...Ages & Stages Questionnaires
- **BDI-2**...Battelle Developmental Inventory Screener, 2\textsuperscript{nd} Edition
- **ELAP**...Early Learning Accomplishment Profile
- Birth to Three Screener, 2\textsuperscript{nd} Edition

Recommended Screening Tools for ASD

- **CARS**...Childhood Autism Rating Scale (3+)
- **M-CHAT**...Modified Checklist for Autism in Toddlers (16-30 months)
Sample Clip of BDI-2 Screening
Approved Developmental Assessment Tools

• **BDI-2**...Battelle Developmental Inventory – 2nd Edition

• **HELP**...Hawaii Early Learning Profile

• **AEPS**...Assessment, Evaluation, and Programming Systems for Infants & Children

• **ELAP**...Early Learning Accomplishment Profile

Recommended Screening Tools for ASD

• **ADOS**...Autism Diagnostic Observation Schedule
BDI-2 Features

• The BDI-2 is a standardized assessment of key developmental skills in young children
• Item types
  - Structured
  - Observation
  - Interview
• May be used to assess children from 1 month to 7 years-11 months
• Initial cost: $1,175
BDI-2 Administration & Scoring

- Use age to determine start point (basal)
- Adjust backwards for basal if needed
- May begin with any domain
- Within domains, administer items in order that they appear
- Basal: Score of 2 on 3 consecutive, lowest-numbered items administered
- Ceiling: Score of 0 on 3 consecutive highest-numbered items administered
BDI-2 Descriptors

- 130-155: Accelerated development
- 120-129: Advanced development
- 110-119: High average
- 90-109: Average
- 80-89: Low average
- 70-79: Mild developmental delay
- 45-69: Significant developmental delay
**BDI-2 Summary**

**Strengths**
- Contemporary norms
- Engaging toys and pictures
- Useful throughout early childhood period
- Technology options
- Spanish version

**Weaknesses**
- Cumbersome administration & scoring
- Learning curve for examiners
- Construction of materials
- Portability
- Lack of Spanish norms
**ADOS Features**

- Appropriate for toddlers to adults
- Primary purpose is to identify and quantify behavioral characteristics related to autism spectrum disorders
- Initial cost - $1,480
- Computer scoring software-$465
ADOS Administration and Scoring

- Semi-structured assessment
- Standardized behavioral observation coding system for social and communication behaviors
- 4 modules, each 30-45 minutes
- Each individual only given one module depending on skills and behaviors
  - Module 1-Children not using functional speech
  - Module 2-Children not fluently using speech
  - Module 3-Children fluently using speech
  - Module 4-Fluent adolescents and adults
ADOS Summary

• Strengths
  - Direct observation
  - Standardized coding
  - Broad spectrum
  - Computerized scoring
  - Effective even for children with limited verbal skills

• Weaknesses
  - Expensive
  - Large kit, bulky
  - Requires extensive training and experience
  - Children must have some verbal communication skills
Linking Assessment to Intervention

- Present levels of functioning
- Preferences and reinforcers
- Response behaviors
- Physical and social environments
- Selecting goals and objectives
- Monitoring progress
Preferences and Reinforcers

- Activities, events, and materials that motivate child
- Embed into activity or lesson
- Provide within everyday settings and routines
- Keep in mind preferred sensory modalities
Selecting Goals and Objectives

- Data from assessment tools with present level of functioning
- Complete individualized profile of child's competencies, functional skills, and developmental abilities
- Develop goals and objectives based upon individual needs of child within social context that can support development
- Monitor progress to evaluate effectiveness of interventions
Thank You!

For more information, please contact:

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