

# Little Steps, Big Progress: Developmental Assessments

Ashley Arnold, MA, LSSP, NCSP  
WPS Assessment Consultant

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## Ashley Arnold

MA, LSSP, NCSP



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- Over 20 years of experience as a school psychologist
- Past President of the Texas Association of School Psychologists
- Current Texas delegate to the National Association of School Psychologists
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**Assessment Consultant** *I am an assessment consultant with Western Psychological Services. I am a salaried employee and have no additional relevant financial interests or conflicts of interest related to this presentation.*

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## Learning Objectives

- Learners will recognize different stages of developmental milestones to enhance the interpretation of evaluation results.
- Participants will learn how to provide a detailed account of a child's developmental strengths and weaknesses to make individualized, student specific recommendations and interventions for school-based teams.
- Participants will define the new Texas eligibility criteria of Developmental Delay and how to identify it.



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## NASP Practice Model



The diagram illustrates the NASP Practice Model, centered on the NASP Practice Model (National Association of School Psychologists). It is surrounded by 10 domains:

- Domain 1: Data-Based Decision Making and Accountability
- Domain 2: Assessment and Evaluation
- Domain 3: Intervention, Prevention, and Consultation
- Domain 4: Professional Collaboration and Leadership
- Domain 5: Professional Development and Self-Efficacy
- Domain 6: Professional Ethics and Legal Practice
- Domain 7: Family-School Collaboration Services
- Domain 8: Diversity in Development and Learning
- Domain 9: Research, Practice, and Policy
- Domain 10: Legal, Ethical, and Professional Practice

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## Development Basics

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## Development Basics

- The most important reason for monitoring a child's development is to determine if their development is progressing as expected.<sup>1</sup>
- Children with developmental problems are at increased risk for poor outcomes in many areas important to health, well-being, and success in life.<sup>2</sup>
- High quality early intervention services can change a child's developmental trajectory and improve outcomes for both the child and the family.<sup>3</sup>
- Intervention is likely to be more effective and less costly when it is provided earlier in life rather than later.<sup>4</sup>

<sup>1</sup> <http://www.westernpsychologicalservices.com/developmental-basics>  
<sup>2</sup> Center on the Developing Child at Harvard University. Cited in: <http://www.westernpsychologicalservices.com/developmental-basics>  
<sup>3</sup> <http://www.westernpsychologicalservices.com/developmental-basics>  
<sup>4</sup> <http://www.westernpsychologicalservices.com/developmental-basics>

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## Developmental Basics (Cont.)



- Globally, at least one in six children experience a developmental difficulty.<sup>1</sup>
- Globally, only about 60% of developmental difficulties are detected early enough for children to benefit from interventions, if they are available.<sup>2</sup>
- Although about 1 in 6 children has a developmental disability, less than half of these children are identified as having a problem before starting school.<sup>3</sup>

<sup>1</sup> Results of WHO's MCA virtual meeting from 9–10 June 2020. *Morbidity, Mortality, Child and Adolescent Health and Aging (MCA)*.  
<https://www.who.int/news-room/feature-stories/2020/06/10/developmental-disabilities>  
<sup>2</sup> CDC report by: <https://www.cdc.gov/ncbddd/actdis/2014/developmental-disabilities.html>  
<sup>3</sup> CDC report by: <https://www.cdc.gov/ncbddd/actdis/2014/developmental-disabilities.html>

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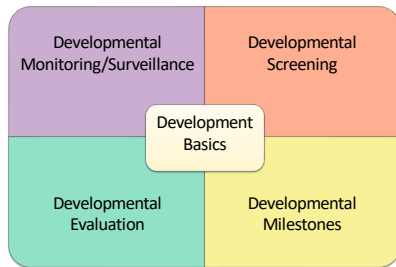
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## Development Basics



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## Monitoring/Surveillance

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## Developmental Monitoring/Surveillance

- Physicians, other health care providers, and early childhood educators are among those who might use developmental monitoring and surveillance to consider whether children are meeting developmental milestones.
- Developmental monitoring/surveillance does not include formal evaluation tools, but observations of the child should include an understanding of basic developmental milestones and expected developmental progress.

<https://sites.ed.gov/sites/files/2015/04/Early-Learning-Monitoring-Faqs-04-15-15.pdf>

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## Developmental Monitoring/Surveillance

- American Academy of Pediatrics (AAP) recommends that surveillance should occur during every health supervision visit.
- Six components of developmental surveillance:
  - Eliciting parent's concerns
  - Obtaining a developmental history
  - Observing the child
  - Identifying risks, strengths, and protective factors
  - Maintaining a record
  - Sharing opinions and findings

<https://www.aap.org/en/patient-care/developmental-surveillance-and-screening-patient-care/>

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## Screening

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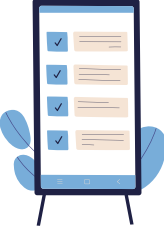
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## Developmental Screening

- Developmental screening can supplement ongoing developmental surveillance to identify subtle risks for developmental delays that parents and pediatricians may not recognize during routine interactions.<sup>1</sup>
  - Often includes a healthcare provider asking a caregiver to respond to a questionnaire or checklist designed to determine if a child is developing within an age expected range.



**Example:** Modified Checklist for Autism in Toddlers, Revised/Follow (MCHAT-R/F)<sup>2</sup>

<sup>1</sup> <https://www.peds.org/for-parents/developmental-surveillance-and-screening-parent-care/>  
<sup>2</sup> M-CHAT-R/F © Robins, Fein, & Barton, 2009. <http://www.mchatscreening.com/>

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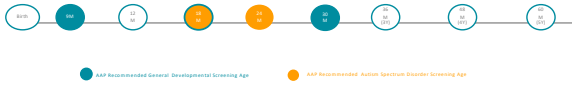
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## Developmental Screening



**The American Academy of Pediatrics (AAP)** recommends that developmental screening be a regular part of well-child visits for all children at 9, 18, and 30 months of age, with autism specific screening at 18 and 24 months. If there is a developmental concern, screening can occur more frequently.

<https://www.aapublicaffairs.org/public-developmental-surveillance-and-screening-parent-care/>  
<https://www.aapublicaffairs.org/public-developmental-surveillance-and-screening-parent-care/#:~:text=Developmental%20screening,https://www.aapublicaffairs.org/public-developmental-surveillance-and-screening-parent-care/>  
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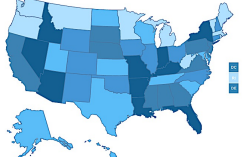
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## Developmental Screening (cont.)



**Developmental Screening**

Percentage of children ages 0-20 months whose parent completed a standardized developmental screening tool in the past 12 months (2-year average)



Data from National Survey of Children's Health, U.S. Department of Health and Human Services, Health Resources and Services Administration (HRSA), National and Child Health Survey (NCHS), National and Child Health Survey (NCHS), 2020-2021

Overall, during the survey period, the percentage was 34.8% for the USA

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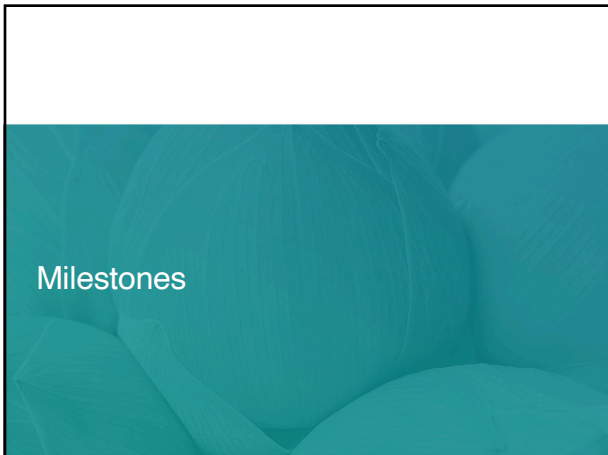
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### Developmental Milestones

- Things most children (75% or more) can do by a certain age.
- The Centers for Disease Control and Prevention (CDC) has outlined general expectations for stages of child development (milestones) between 2 months and 5 years of age.
- While each child is different, and develops at their own pace, early child development typically follows a predictable progression.
- Milestones fall into developmental domains.

<https://www.cdc.gov/ncbddd/earlychildhooddevelopment/2020/03/2020-3-2020-3.html>

<https://www.children.com/blog/the-importance-of-early-childhood-development-on-the-road-to-school/>

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### Examples of Milestone Domains Descriptions

<p style="text-align: center;"><b>CDC</b></p> <p><b>Social/Emotional Domain:</b> How children interact with others and show emotion.</p> <p><b>Language/Communication Domain:</b> How children express their needs and share what they are thinking, as well as understand what is said to them.</p> <p><b>Cognitive Domain</b> (learning, thinking, problem-solving): How children learn new things and solve problems. It includes how children explore their environment to figure things out. This domain also includes "academic" skills like counting and learning letters and numbers.</p> <p><b>Movement/Physical Development Domain:</b> How children use their bodies.</p> <p><a href="https://www.cdc.gov/ncbddd/earlychildhooddevelopment/2020/03/2020-3-2020-3.html">https://www.cdc.gov/ncbddd/earlychildhooddevelopment/2020/03/2020-3-2020-3.html</a> pages 14-18</p>	<p style="text-align: center;"><b>Community Medical Centers</b> Fresno, California</p> <p><b>Social Interaction Domain:</b> making friends, playing with others</p> <p><b>Cognition Domain:</b> problem-solving, reasoning, and understanding</p> <p><b>Motor Domain:</b> bending, jumping, stooping, catch and throw, hopping, stacking</p> <p><b>Adaptive Domain:</b> dressing, eating, bathing</p> <p><a href="https://www.children.com/blog/the-importance-of-early-childhood-development-on-the-road-to-school/">https://www.children.com/blog/the-importance-of-early-childhood-development-on-the-road-to-school/</a> page 1</p> <p style="text-align: right; font-size: small;">Western Psychological Services   wpspublish.com</p>
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## Developmental Milestones Resources

ACT Program Child Development Fact Sheets

- [Cognitive and Social Skills to Expect From 0-18 Months](#)
- [Cognitive and Social Skills to Expect From 18-36 Months](#)
- [Cognitive and Social Skills to Expect From 3-5 Years](#)
- [Cognitive and Social Skills to Expect From 6-10 Years](#)



<https://www.wps.org/act/resources/fact-sheets>

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## Developmental Milestones Resources, (cont.)

- <https://childmind.org/guide/developmental-milestones/>
- <https://letstalkcambridge.org/tips-resources/>
  - *Let's Talk available in: Amharic, Arabic, Bengali, Chinese, Haitian Creole, Portuguese, Somali, Spanish*
- <https://earlylearningprogressions.fpg.unc.edu/>

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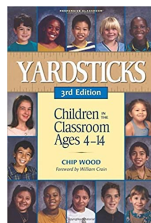
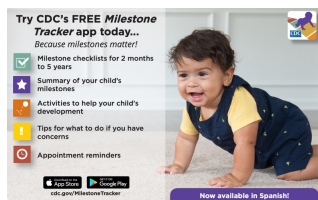
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## Developmental Milestones Resources, (cont.)



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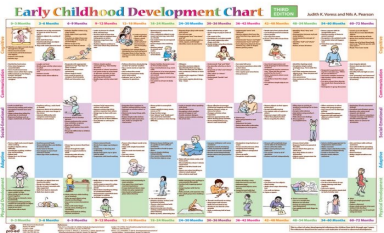
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## Developmental Milestones Resources, (cont.)



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# Evaluation

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## Developmental Evaluation

An evaluation that is a more in-depth look at a child's development than is done with a screener. The results of this formal evaluation can be used to determine whether a child needs special treatments or early intervention services or both.

Developmental Monitoring	Developmental Screening	Developmental Evaluation
<b>WHO:</b> You — parents, grandparents, other caregivers <b>WHAT:</b> Look for developmental milestones <b>WHEN:</b> From birth to 5 years	<b>WHO:</b> Healthcare provider, early childhood teacher, or other trained provider <b>WHAT:</b> Look for developmental milestones <b>WHEN:</b> <ul style="list-style-type: none"> <li>• Developmental Screening at 9, 18, 30 months of age</li> <li>• Autism Screening at 18 and 24 months of age</li> </ul>	<b>WHO:</b> Developmental pediatrician, child psychologist, or other trained provider <b>WHAT:</b> Identify and diagnose developmental delays and conditions <b>WHEN:</b> Whenever there is a concern

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## Developmental Evaluation

- Developmental assessments are usually done because of a concern that the child may have a developmental delay or disorder. Such assessments can:
  - help identify possible developmental problems and the need for further diagnostic evaluation
  - provide an objective description of the child's abilities and deficits determine eligibility for programs (such as early intervention programs)
  - aid in planning for appropriate interventions

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## Developmental Evaluation (Cont.)



- It is important that the developmental assessment be individualized to the child by:
  - using age-appropriate testing and scoring methods
  - focusing on the child's presenting problems (such as suspected delays or deviations in development or behavioral problems)
  - assessing specific areas of strength and weakness, including specific discrepancies in functioning across and within developmental domains

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## Developmental History

- Why is the information collected in an evaluation?
- What is the standard for comparison?
  - Typically developing (i.e., 12 months "firsts")
- Do language and cultural backgrounds influence expectations? (i.e., signed language, ELL)
- What influence (if any) does the social environment in the home have on a child's development?
- Is the evaluator only looking for deficits?

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## Cultural Differences

- Developmental milestone expectations
- Eye contact
- Approaches to pretend play
- Public displays of emotion
- Extent to which children (males) play with dolls
- Communicative gestures



Hsu Y, Ingal O. Functional communication profiles of children and youth with autism: a roadmap to therapeutic and educational interventions. *Child Phoenix* (2021, 7), 205-221. <https://doi.org/10.1007/s12129-021-10000-0>

Casperstein, K., Smith, L., & Nickerl, R. (2008). The preference for pointing with the hand is not universal. *Cognitive Science*, 32(6), 1175-1180. <https://doi.org/10.1080/03640260802312220>

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## Cultural Differences (Cont.)



- China: avoiding eye contact with adults is considered a mark of social respect<sup>1</sup>
- Ethiopia: social greetings are a matter of tradition<sup>2</sup>
- India: "Enjoys social occasions" and does not understand "the point of a joke" do not predict autism as accurately<sup>3</sup>
- Japan: a person's response to uncertainty and spontaneity don't always predict autism<sup>3</sup>
- Pointing and other communicative gestures aren't universally carried out with the hands<sup>4</sup>
- Imaginative or fantasy play is less common in some parts of the world than it is in the West<sup>5</sup>

1 Hsu, Y., & Ingal, O. (2021). Challenges surrounding the diagnosis of autism in children. *Neuropsychiatric Disease and Treatment*, 17, 3559-3525. <https://doi.org/10.2197/ndt.2021.173559>

2 Smith, L., & Nickerl, R. (2008). The preference for pointing with the hand is not universal. *Cognitive Science*, 32(6), 1175-1180. <https://doi.org/10.1080/03640260802312220>

3 Ingal, O., & Hsu, Y. (2021). The path to an autism spectrum disorder diagnosis in Ethiopia: Parent perspectives. *The American Journal of Orthopsychiatry*, 91(2), 114-122. <https://doi.org/10.1002/ajop.12310>

4 Ingal, O., & Hsu, Y. (2021). The path to an autism spectrum disorder diagnosis in Ethiopia: Parent perspectives. *The American Journal of Orthopsychiatry*, 91(2), 114-122. <https://doi.org/10.1002/ajop.12310>

5 Ingal, O., & Hsu, Y. (2021). The path to an autism spectrum disorder diagnosis in Ethiopia: Parent perspectives. *The American Journal of Orthopsychiatry*, 91(2), 114-122. <https://doi.org/10.1002/ajop.12310>

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## Over- & Under-Identification

- Black and Latinx children more likely to be misidentified, identified significantly later, and poorer access to evaluation and services than Whites
- Black children receive a co-morbid condition of Intellectual Disability at twice rate of White children
- Black children identified as having Autism Spectrum Disorder (ASD) on average 3 years later
- Latinx children vastly under identified for ASD compared to White and Black peers
- Asian/Pacific Islander overidentified for ASD compared to White peers

Autism 2022, Aug 20(16):1433-1445. doi: 10.1177/106342692211050466. Epub 2021 Oct 8. doi: 10.1177/106342692211050466. <https://doi.org/10.1177/106342692211050466>

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## Norm- versus Criteria-Referenced Assessments

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### Norm-Referenced Assessments

- Provide data on examinees relative to one another
- Are standardized on a clearly defined normative group
- Are scaled so that each resulting score represents a rank within the normative group
- Allow for inferences about a person's ability based on the performance of a similar group of people

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### Criteria-Referenced Assessments

- Provide information on an examinee's specific skillset
- Are constructed to assess instructional objectives or developmental milestones
- Valuate a person's ability based on the specified criteria, not on the performance of others

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### So, which should we use?

Per IDEA:

“...a variety of assessment tools and strategies are to be used to “gather relevant functional, developmental and academic information, including information provided by the parent” to determine and assist in designing the most appropriate educational program for students with disabilities.”

- Records
- Interviews
- Observations
- Direct Assessments
- Rating Scales
- Informal Measures
- Clinical Judgement

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### Test Selection Considerations

- Address the referral question(s) you want to answer
- Be consistent and use measures of the *functions* to be assessed
- Ensure relevance to and appropriateness for the case
- Check that psychometric data is consistent with evaluation goals
- Rely on state specifications/recommendations

**Remember:** Assessment and diagnosis are only of value when they provide access to delivery of appropriate intervention and educational services.

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### Score Interpretation

- Test scores provide an estimate of one’s performance in a particular area of behavioral functioning, compared to a specific reference group, at a given point in time
- Results must be analyzed across a broader context and from a range of sources; relate to previous levels of function and/or coordinate explanations with other team members when possible
- Rule out possible alternative explanations
- Use caution when administering Spanish translation forms
- Remember, behaviors are highly dependent on cultural factors! Know the family to best understand the data

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Individuals with Disabilities Education Act (IDEA)

Recommended Evaluation Practice

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### IDEA Part C vs Part B

Part C	Part B
Early intervention (EI) services for eligible children ages birth to 3	Special education services for eligible children ages 3-21
Services provided in "natural environments" (e.g., child's home or child care setting)	Services provided in "Least Restrictive Environment" (e.g., classroom or clinic setting)
Coordination of care and services provided by EI Service Coordinator	Coordination of educational and related services provided by Special Education Case Manager
Eligibility for services based on developmental delay	Eligibility for services based on a current adverse educational impact
Individualized Family Service Plan (IFSP): Outlines family-centered goals, services, and outcomes based on how child participates in family life and daily routines	Individual Educational Program (IEP): Outlines goals and objectives to address child's individual needs in an educational setting, along with additional supports, services, and accommodations (if eligible)
Services generally reviewed every 6 months	Services generally reviewed once a year

Adapted from <https://www.westernpsychological.com/resources/ideapartc-vs-ideapartb/> Western Psychological Services | wpspubsh.com

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### Individuals with Disabilities Education Act (IDEA)-Part C

- Promotes the development of infants and toddlers with delays or disabilities
- Enhances the capacity of families to meet the developmental needs of their infants and toddlers
- Minimizes the need for special education and related services when children enter school and enhances children's long-term outcomes.

<https://www.westernpsychological.com/resources/ideapartc/> Western Psychological Services | wpspubsh.com

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### Recommended Practice: Initial Part C Evaluation

- 3 key components recommended:
  - Use of a variety of tools and measures
  - Completing the initial evaluation in a natural setting
  - Use of a transdisciplinary team approach
- Must utilize:
  - Variety of assessment tools and strategies
  - Include parent or caregiver reports

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 Part C: Initial Part C Evaluation, Form WPS-100-01-0001-0001 | © 2014 Western Psychological Services  
 Initial Evaluation Protocol to Identify Young Children with Delay and Disability: [Getting Started](#) | [Getting Started](#)  
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### Recommended Practice: Initial Part C Evaluation (Cont.)



- Once a child is determined to be a Part C eligible infant or toddler, the early intervention system must provide a multidisciplinary assessment of the unique strengths and needs of the child and identify the services appropriate to meet those needs.
- The assessment of each infant or toddler with a disability must be conducted by qualified personnel who can identify both the child's needs and the appropriate early intervention services to meet those needs.

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### Recommended Practice: Initial Part C Evaluation (Cont.)



- In addition to the assessment of the child, the early intervention system requires a family-directed assessment of the resources, priorities, and concerns of each child's family and identification of the supports and services necessary to enhance the family's abilities to meet the developmental needs of their infant or toddler with a disability.

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### Child and Family Assessment

Assessment of the child must include:

- a review of the results of the evaluation conducted to determine the child's eligibility for EI services;
- personal observations of the child; and
- the identification of the child's needs in each of five developmental areas.<sup>37</sup>

Family-directed assessment must:

- be voluntary on the part of each family member participating in the assessment;
- be based on information obtained through an assessment tool and also through an interview with those family members who choose to participate in the assessment; and
- include the family's description of its resources, priorities, and concerns related to enhancing the child's development.



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## Evaluation and Assessment of Prematurely Born Children

- How premature does an infant need to be to qualify for age correction?
  - Age correct for an infant born at less than 37 weeks gestational age.
- At what chronological age does age correction stop?
  - Once a child reaches 24 months chronological age, do not correct for prematurity. This is in alignment with recommendations by the American Academy of Pediatrics.

American Academy of Pediatrics and American College of Obstetricians and Gynecologists. (2002). Guidelines for Perinatal Care. 6th ed. Washington, DC: American College of Obstetricians and Gynecologists.

Washington State Department of Children, Youth, and Families June, 2020: <https://www.dcyf.wa.gov/developmental/learning-of-the-early-childhood-program/developmental>

University of Nebraska Medical Center. Understanding Corrected Age. <https://www.unmc.edu/health-services/developmental-behavioral-pediatrics/developmental-behavioral-pediatrics>

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## Definitions

- Gestational age: Time elapsed from the first day of the last menstrual period to the day of birth, measured in full weeks, rounded down. For example, an infant born at 36 weeks and 6 days is considered to have a gestational age of 36 weeks.
- Chronological age: Time elapsed since birth, measured in years, months and days. Also called "actual age."
- Corrected age: Chronological age, minus the number of weeks the infant was born before the time when the infant would have reached 40 weeks gestational age.
- Adjusted age: Synonymous with corrected age
- Premature birth: Birth at less than 37 weeks gestational age.
- Term birth: Birth at equal to or more than 37 weeks gestational age.

American Academy of Pediatrics and American College of Obstetricians and Gynecologists. (2002). Guidelines for Perinatal Care. 6th ed. Washington, DC: American College of Obstetricians and Gynecologists.

Washington State Department of Children, Youth, and Families June, 2020: <https://www.dcyf.wa.gov/developmental/learning-of-the-early-childhood-program/developmental>

University of Nebraska Medical Center. Understanding Corrected Age. <https://www.unmc.edu/health-services/developmental-behavioral-pediatrics/developmental-behavioral-pediatrics>

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## How to Calculate Corrected Age

- Chronological Age minus (40 weeks – Gestational Age at birth) = Corrected Age

**Example:**  
 16-month-old toddler who was born at 28 weeks gestation

- 16 months Chronological Age – (40 weeks - 28 weeks Gestational Age at birth) = Corrected Age
- 16 months – 3 months = **13 months Corrected Age**

American Academy of Pediatrics and American College of Obstetricians and Gynecologists. (2012). Guidelines for Perinatal Care. 4th ed. Washington, DC: American College of Obstetricians and Gynecologists.  
 Washington State Department of Children, Youth, and Families Care. (2013). <http://www.dcyf.wa.gov/childcare/developmental/understanding-corrected-age>  
 University of Nebraska Medical Center. Understanding Corrected Age. <https://peds.ortho.umc.edu/developmental/understanding-corrected-age/>  
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## Texas Part C Eligibility Criteria

- Medically Diagnosed Condition
  - Low Birth Weight, Very Low Birth Weight, Small for Gestational Age
  - Prenatal Exposure to Substances
- Deaf/Hard of Hearing or Blind/Visually Impaired\*\*
  - FAPE services start at birth
  - IFSP birth to 3, IEP 3-22
- Developmental Delay



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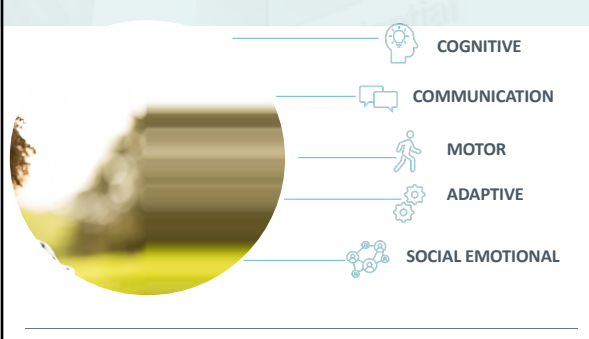
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## 5 Areas of Focus under Part C



- COGNITIVE
- COMMUNICATION
- MOTOR
- ADAPTIVE
- SOCIAL EMOTIONAL

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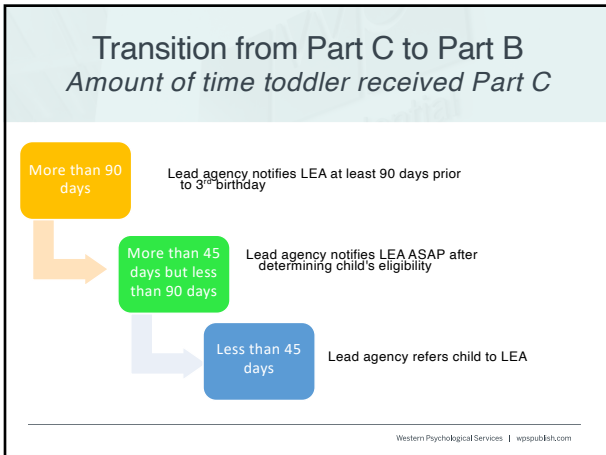
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### Part C vs Part B Eligibility Criteria

<p><b>Part C</b></p> <ul style="list-style-type: none"> <li>▪ Cognitive</li> <li>▪ Communication</li> <li>▪ Motor</li> <li>▪ Adaptive</li> <li>▪ Social Emotional</li> </ul>	<p><b>Part B</b></p> <ul style="list-style-type: none"> <li>▪ Autism</li> <li>▪ Deaf</li> <li>▪ Deaf/Blind</li> <li>▪ Emotional Disturbance</li> <li>▪ Intellectual Disability</li> <li>▪ Non-Categorical Early Childhood/Developmental Delay</li> <li>▪ Other Health Impairment</li> <li>▪ Orthopedic Impairment</li> <li>▪ Speech Impaired</li> <li>▪ Specific Learning Disability</li> <li>▪ Traumatic Brain Injury</li> <li>▪ Visual Impairment</li> </ul>
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- ### Non-Categorical Early Childhood (NCEC)
- Ages 3-5
  - Category must be removed on or before 6<sup>th</sup> birthday
  - Eligible IF student meets eligibility criteria of:
    - Autism
    - Emotional Disturbance
    - Intellectual Disability
    - Specific Learning Disability
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July 30**

## Texas New Category: Developmental Delay

- Between the ages of 3-9
- Evaluated by a multidisciplinary team for at least 1 of the other 12 disability categories and
- Whose evaluation data indicates a need for special education and related services and
- Shows evidence of, but does not clearly confirm, the presence of the suspected disability or disabilities due to the child's young age.



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## Developmental Delay, (cont.)

- An ARD committee may determine that data supports identification of developmental delay in one or more of the following areas:
  - Physical development
  - Cognitive development
  - Communication development
  - Social or emotional development or
  - Adaptive development

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## Developmental Delay, (cont.)

- Multiple sources of data must converge to indicate the student has a developmental delay as described by **one** of the following:
  - (A) performance on appropriate norm-referenced measures, including developmental measures, indicate that the student is at least 2 standard deviations below the mean or at the 2nd percentile of performance, when taking into account the standard error of measurement (SEM), in one area of development as listed in this paragraph, along with additional convergent evidence such as interviews and observation data that supports the delay in that area;

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**Say What? Method A**

Norm- Referenced Developmental Measure

Convergent Evidence  
(e.g., interviews, observations, checklist, CBM)

Just 1 Area:

- Physical
- Cognitive
- Communication
- Social/Emotional
- Adaptive

**DEVELOPMENTAL DELAY**

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**Developmental Delay, (cont.)**

- (B) performance on appropriate norm-referenced measures, including developmental measures, indicate that the student is at least 1.5 standard deviations below the mean or at the 7th percentile of performance, when taking into account the SEM, in at least two areas of development as listed in this paragraph, along with additional convergent evidence such as interviews and observation data that supports the delays in those areas;

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**Say What? Method B**

Norm- Referenced Developmental Measure

Convergent Evidence  
(e.g., interviews, observations, checklist, CBM)

Must be 2 Areas:

- Physical
- Cognitive
- Communication
- Social/Emotional
- Adaptive

**DEVELOPMENTAL DELAY**

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### Developmental Delay, (cont.)



- (C) a body of evidence from multiple direct and indirect sources, such as play-based assessments, information from the student's parent, interviews, observations, work samples, checklists, and other informal and formal measures of development, that clearly document a history and pattern of atypical development that is significantly impeding the student's performance and progress across settings when compared to age-appropriate expectations and developmental milestones in one or more areas of development as listed in this paragraph.

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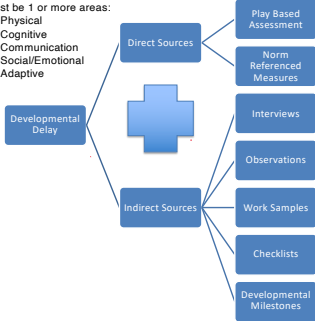
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### Say What? Method C



- Must be 1 or more areas:
- Physical
  - Cognitive
  - Communication
  - Social/Emotional
  - Adaptive



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### Developmental Delay, (cont)



- No school district will be required to use the eligibility category of developmental delay; however, if a district chooses to use this eligibility category, it must use the definition and criteria described [above]
- If a school district chooses to use the eligibility category described [above], it may do so beginning with the 2024-2025 school year.
- The eligibility category of noncategorical... must no longer be used by any school district beginning with the 2025-2026 school year.
- Any eligible student who begins the 2025-2026 school year already identified [as NCEC] may maintain this eligibility category, if determined appropriate by the student's ARD committee, until the required re-evaluation before the age of six.

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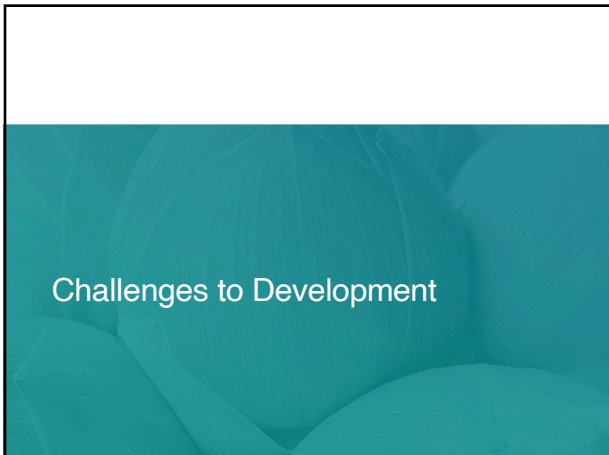
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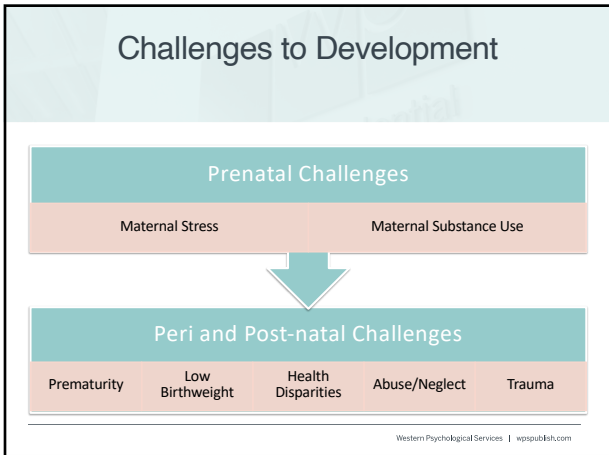
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## Maternal Stress

- Dennis et al., 2018 reported that between 18.2% and 24.6% of women have reported elevated anxiety symptoms during pregnancy, with higher symptom severity in the third trimester.<sup>1</sup>
- Van den Bergh et al., 2020 reported that prenatal exposure to maternal stress can affect the unborn child via structural and functional changes in several brain regions.<sup>2</sup>

<sup>1</sup>Dennis C.L., Falah-Hassani K., Shirk R. (2018). Prevalence of antenatal and postnatal anxiety: systematic review and meta-analysis. *British Journal of Psychiatry*, 212(5), 315-323. <https://doi.org/10.1192/bjp.2017.204>

<sup>2</sup>Van den Bergh R. G. M., van den Heuvel M. J., Lathouwers M., Raaijmakers M., de Rooij L. R., Alvingh A., Mayes S., Kerkhofs T., Alkhalaf A., King L., Schoen M. (2020). Prenatal developmental origins of behavior and mental health: The influence of maternal stress in pregnancy. *Neuroscience & Biobehavioral Reviews*, 113, 26-44. <https://doi.org/10.1016/j.neubi.2020.04.004>

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### Maternal Substance Use During Pregnancy: Alcohol

- 8 studies that included over 10,000 children 6 months to 14 years, any binge drinking during pregnancy resulted in the child exhibiting problems with cognition.<sup>1</sup>
- 3 studies that included 11,900 children ages 9 months to 5 years, moderate drinking during pregnancy resulted in the child exhibiting problems with behavior.<sup>2</sup>
- Alcohol use during pregnancy can cause miscarriage, stillbirth, and a range of lifelong physical, behavioral, and intellectual disabilities, collectively known as fetal alcohol spectrum disorders (FASDs).<sup>3</sup>

1. J Alcohol Clin Exp Res. 2014 Jun;38(1):214-26. doi: 10.1111/acer.12214. Epub 2013 Aug 5. The association of mild, moderate, and binge prenatal alcohol exposure and child neurobehavioral outcomes: a meta-analysis. <https://doi.org/10.1111/acer.12214>

2. CDC. Alcohol use during Pregnancy. [https://www.cdc.gov/ncjdd/2k10/topic\\_overview.html#topic\\_1010](https://www.cdc.gov/ncjdd/2k10/topic_overview.html#topic_1010)

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### Maternal Substance Use During Pregnancy: Opioids

- Linked to:
  - poor fetal growth
  - preterm birth
  - stillbirth
  - specific birth defects
  - neonatal abstinence syndrome (NAS) or neonatal opioid withdrawal syndrome (NOWS)

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4249448/>

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### Maternal Substance Use During Pregnancy: Cigarettes

- Increases the risk of health problems for developing babies:
  - preterm birth
  - low birth weight
  - birth defects of the mouth and lip
- Increases the risk of sudden infant death syndrome (SIDS)

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4249448/>

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## Maternal Substance Use During Pregnancy: Polysubstance

- A 2020 study found that about 10% of pregnant women reported current alcohol use, and among them, use of other substances was common—about 40% reported current use of one or more other substances.<sup>1</sup>
- A study published in 2020 found that among women who continued marijuana use before and during pregnancy, 74% also smoked cigarettes during pregnancy.<sup>2</sup>
- According to the CDC, the effects of polysubstance use on infants is not well known, mainly due to data collection limitations with the studies conducted to date.<sup>3</sup>

<sup>1</sup>England LJ, Bennett C, Denny CH, et al. Alcohol use and co-use of other substances among pregnant females aged 12–44 years – United States, 2015–2018. *MMWR Morb Mortal Wkly Rep* 2020; 69(33): 2559–2564.  
<sup>2</sup>Ho JY, Coy KC, Haight SC, et al. Characteristics of marijuana use during pregnancy – eight states, Pregnancy Risk Assessment Monitoring System, 2017. *MMWR Morb Mortal Wkly Rep* 2020; 69(32): 2558–2563.

<sup>3</sup> <https://www.cdc.gov/ncjrs/ctip/infantsandchildren/infantsandchildren.html#BAMR/article>

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## Prematurity

- Preterm infants are at higher risk of adverse neurodevelopmental outcomes when compared to their full-term counterparts.
  - Increased risk for language, cognitive, sensory and motor deficits.
- Inferior neurodevelopment is multifactorial and is likely a consequence of an immature brain, perinatal risk factors, and environmental exposures.

<https://doi.org/10.1016/j.peds.2019.07.014> PMID: 31478226  
<https://doi.org/10.1016/j.peds.2019.07.014> PMID: 31478226

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## Prematurity, (cont.)



- One in 10 births are preterm
- National average for preterm births (2020): 10.1%
- Preterm birth rates were significantly higher than the national average for
  - Black (14.4 percent)
  - American Indian/Alaska Native (11.4 percent)
  - Native Hawaiian (11.3 percent)
  - Multiple race (10.5 percent)

Chung E. H., Chou J. & Brown K. A. (2020). Neurodevelopmental outcomes of preterm infants: A recent literature review. *Translational Pediatrics*, 9(Suppl 1), S3–S8. <https://doi.org/10.21037/tp.2019.06.10>

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### Prematurity, (cont.)

- Factors that can contribute to prematurity range from multiple gestations or physical characteristics of the uterus, little or no prenatal care, chronic medical conditions, poor nutrition and substance use.
- Premature babies are at higher risk of such developmental issues as
  - cerebral palsy
  - language and cognitive deficits
  - learning disabilities

Chung E. H., Chou J. & Brown K. A. (2020). Neurodevelopmental outcomes of preterm infants: A recent literature review. *Translational Pediatrics*, 9(Suppl 1), S3-S8. <https://doi.org/10.21037/tp.2019.06.51>

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### Prematurity, (cont.)

- Use of chronological age to compare children born prematurely may underestimate true abilities by comparing their performance to older, more developed children.
- Alternatively, corrected age may overestimate performance and mask a delay, which could ultimately affect timing of diagnosis and service.

Published online 2021 Sep 2. doi: [10.1177/10634269211025294](https://doi.org/10.1177/10634269211025294)

PMCID: PMC8412365

PMID: 34452781

Gouk, P., Roberts, R.M., Collins, C.T., Makiulis, M. Consequences of using chronological age versus corrected age when testing cognitive and motor development in infancy and intelligence quotient at school age for children born preterm.

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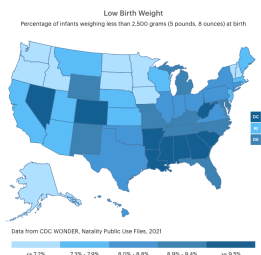
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### Low Birthweight

- Low birth weight infants (weighing less than 5.5 pounds at birth) are at increased risk of complications. <sup>1</sup>
- Low birth weight and preterm birth are leading causes of infant mortality. <sup>2</sup>



<sup>1,2</sup> Child and Adolescent Health Measurement Initiative, National Survey of Children's Health, Data Resource Center for Child and Adolescent Health. U.S. and U.S.A., Maternal and Child Health Bureau (MCHB), Child and Adolescent Health Measurement Initiative (CAHMI), National Survey of Children's Health Indicator Data Set, Data Resource Center for Child and Adolescent Health. <sup>1</sup> National Survey of Children's Health. U.S. Department of Health and Human Services, Health Resources and Services Administration (HRSA), Maternal and Child Health Bureau (MCHB)

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### Low Birthweight, (cont.)

- Risk factors for low birthweight can include
  - chronic health conditions
  - infections during pregnancy
  - use of such substances as alcohol or tobacco
  - multiple gestations
  - exposure to unhealthy environmental conditions

Chung E. H., Chou J., & Brown K. A. (2020). Neurodevelopmental outcomes of preterm infants: A recent literature review. *Translational Pediatrics*, 9(Suppl 1), S3-S8. <https://doi.org/10.21037/tp.2019.09.10>  
 Cleveland Clinic (2021, May 12). Low birth weight. <https://my.clevelandclinic.org/health/diseases/21085/low-birth-weight>

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### Low Birthweight, (cont.)

- Newborns with low birth weight may have difficulty eating, gaining weight and fighting infection.
- The lower the baby's birth weight, the higher their risk for complications. These may include immediate problems, including:
  - Low oxygen levels at birth
  - Infections
  - Jaundice
  - Breathing issues, including infant respiratory distress syndrome
  - Nervous system issues, including bleeding inside the brain
  - Digestive system issues, including inflammation of the intestines

Cleveland Clinic (2021, May 12). Low birth weight. <https://my.clevelandclinic.org/health/diseases/21085/low-birth-weight>

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### Low Birthweight (Cont.)

- Newborns with low birth weight may have a higher risk of developing long-term issues, such as:
  - Delayed motor and social development
  - Learning differences
  - Health conditions as adults
    - High blood pressure
    - Heart disease
    - Obesity
    - Diabetes

Cleveland Clinic (2021, May 12). Low birth weight. <https://my.clevelandclinic.org/health/diseases/21085/low-birth-weight>

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## Health Disparities

**Healthy People: US Department of Health and Human Services**

"Health differences that are closely linked with social, economic and/or environmental disadvantage. Health disparities adversely affect groups of people who have systematically experienced greater obstacles to health based on their racial or ethnic group; religion; socioeconomic status; gender; age; mental health; cognitive, sensory, or physical disability; sexual orientation or gender identity; geographic location; or other characteristics historically linked to discrimination or exclusion."

Healthy People 2030. (2023 January). How does Healthy People 2030 define health disparities and health equity? <https://healthdisparities.gov/health-disparities-healthy-people-2030/>  
<https://www.healthdisparities.gov/health-disparities-healthy-people-2030/>

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## Health Disparities (Cont.)

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- Maternal mortality is measured as the number of maternal deaths per 100,000 live births.
- In 2015-2019, the US national maternal mortality rate was 19.9 per 100,000 live births.
- Since 2005-2009, the racial gap in maternal mortality rates has widened, with Black mothers facing both a disproportionately higher rate of mortality and increasing rates over time.

**Maternal Mortality**  
by Race and Ethnicity, 2015-2019

Race and Ethnicity	Number of Deaths per 100,000 Live Births
Black	43.9
American Indian/ Alaska Native	33.9
White	17.2
Pacific Islander	13.1
Hispanic	12.7

Number of Deaths per 100,000 Live Births

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## Health Disparities (Cont.)

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Nationally, 18.6 percent of children lived in households with incomes below the federal poverty level in the years between 2015–2019.

**Poverty Rates**  
by Subpopulation, 2015-2019

Subpopulation	Poverty Rate
Hispanic	22.0%
American Indian/ Alaska Native	21.5%
Black	19.6%
Hispanic	19.1%
Hispanic	18.6%
Hispanic	18.2%
Hispanic	18.1%
Hispanic	17.8%
Hispanic	17.7%
Hispanic	17.6%
Hispanic	17.5%
Hispanic	17.4%
Hispanic	17.3%
Hispanic	17.2%
Hispanic	17.1%
Hispanic	17.0%
Hispanic	16.9%
Hispanic	16.8%
Hispanic	16.7%
Hispanic	16.6%
Hispanic	16.5%
Hispanic	16.4%
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## Abuse/Neglect

Examples of childhood abuse can include:

- **Neglect.** When caregivers don't meet a child's physical, emotional, and social needs. Failing to ensure a safe and healthy upbringing.
- **Physical Abuse.** Non-accidental physical harm caused by hitting, punching, kicking, shaking, beating, burning, or throwing.
- **Emotional Abuse.** Causing intentional emotional pain and distress through threats, insults, humiliation, rejection, and inciting fear.
- **Sexual Abuse.** Any sexual contact with a child, such as inappropriate touch, sexual acts, or rape.

<https://images.pexels.com/photos/1047610/pexels-photo-1047610.jpeg>

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## Abuse/Neglect (Cont.)



- Child maltreatment and other types of adverse childhood experiences (ACEs) can have a variety of negative effects on the structure of—and activity within—children's brains.
- The changes in brain structure and chemical activity caused by child maltreatment can have a wide variety of effects on children's behavioral, social, and emotional functioning.

<https://www.westernpsychologicalservices.com/wordpress/wp-content/uploads/2018/02/ACEs-Infographic-2018.pdf>

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## Abuse/Neglect (Cont.)



- **Delays in Developmental Milestones.** Children who experience abuse often reach developmental milestones later, including those related to motor skills and language ability.
- **Low Self-Worth and Self-Esteem.** Children often blame themselves for abuse. This self-blame may lead to ongoing feelings of shame and guilt.
- **Development of Mental Health Disorders.** There's a significant link between child abuse and the development of mental health disorders. Common disorders associated with abuse include social anxiety, depression, and post-traumatic stress disorder.
- **Unresponsive to Positive Feedback.** Child abuse can lead to difficulty with reward processing. This response can interfere with motivation.
- **Altered Sensory Experiences.** Physical and sexual abuse can alter physical sensations and perceptions. Can also cause changes in pain threshold, particularly in areas of the body affected by abuse.

<https://www.westernpsychologicalservices.com/wordpress/wp-content/uploads/2018/02/ACEs-Infographic-2018.pdf>

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### Abuse/Neglect (Cont.)



- **Hyperarousal and Hypervigilance.** Being unable to relax. Always alert, no matter what the situation.
- **Excessive and Constant Fear.** Struggling to differentiate between danger and safety. Constantly on the lookout for potential threats. More emotionally reactive, even to seemingly harmless situations.
- **Challenged by Social Situations.** Difficulties relating to other people and reading social cues.
- **Attachment Difficulties.** Inability to form healthy relationships. Struggling to trust other people or becoming too dependent on others' approval.
- **Learning Difficulties.** Abuse can lead to diminished executive functioning. Poor memory and cognitive flexibility can reduce academic and professional performance.

<https://www.westernpsychological.com/behavioral-therapy/trauma-therapy/>

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### Abuse/Neglect, (cont.)



- **Sensitized Stress Response.** Brain may adapt to become overly sensitized to stressful situations. Their threat detection systems are on hyperalert, and they may see a threat in a nonthreatening situation.
- **Diminished executive functioning and self-regulation.** The trauma of maltreatment can create deficits in all areas of executive functioning and self-regulation

Perry, B. D., Griffin, G., Zandi, G., Perry, J. A., & Perry, B. D. (2018). The impact of neglect, trauma, and maltreatment on neurodevelopment: implications for juvenile justice practice, programs, and policy. In A. R. Beach, A. J. Carter, R. E. Mann, & P. Robinson (Eds.), *The Wiley Blackwell handbook of forensic neuroscience* (pp. 811-830).  
 Koenigs, M. C., D'Esposito, M., & Miller, E. A. (2007). Neurocognitive deficits in children and adolescents following maltreatment: Neurodevelopmental consequences and neurobiological implications of traumatic stress. *Applied Neuropsychology*, 18(4), 47-74.  
<https://doi.org/10.1080/08980100600547754>

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### Abuse/Neglect (Cont.)



#### Adverse Childhood Experiences (ACES)

- The original 10 item ACE questionnaire included questions regarding
  - household dysfunction: parental separation, incidents of domestic violence, substance abuse, mental illness, and criminal behavior
  - abuse: psychological, physical, and emotional
  - neglect: physical and emotional

Finkelhor, D., & Browne, K. B. (1985). The traumatic impact of child sexual abuse: A conceptualization. *Psychological Review*, 92(1), 53-69.  
 Felitti, V. A., & Anda, D. P. (2002). Relationship of childhood abuse and household dysfunction to many of the leading causes of death in adults: The adverse childhood experiences (ACE) study. *Am J Prev Med*, 18(4), 245-268. doi: 10.1053/ajpm.2002.39340

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### Adverse Childhood Experiences

The Philadelphia Urban ACE Survey identified several additional factors that contribute to adverse childhood experiences.

Morelli, M. A., Crutchfield, P., Davis, M., Demery, L., Fain, L., Kuykendall, S.A., Wade, R. (2013). Findings from the Philadelphia Urban ACE Survey. Institute for Public Health. <http://www.phila.gov/ace-survey>

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#### Significant Adversity Impairs Development in the First Three Years

**Children with Developmental Delays**

**Number of Risk Factors**

The more adverse experiences in childhood, the greater the likelihood of developmental delays. There is a cumulative effect of multiple risk factors.

As the number of adverse early childhood experiences mounts, so does the risk of developmental delays. Source: Barth et al (2008). Credit: Center on the Developing Child.

<https://developingchild.harvard.edu/resources/impact-of-early-adversity-on-child-redevelopment/>

Barth, R. P., et al. (2008). Developmental status and early intervention service needs of maltreated children. Washington, DC: U.S. Department of Health and Human Services, Office of the Assistant Secretary for Planning and Evaluation. <http://aspe.hhs.gov/hsp/08/development/07.html>

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#### Neglect Is the Most Prevalent Form of Child Maltreatment

**Neglect**

**Physical Abuse**

**Other**

**Sexual Abuse**

**Psychological Maltreatment**

**Medical Neglect**

20% 40% 60% 80%

Source: U.S. Department of Health and Human Services (2010)

Center on the Developing Child | HARVARD UNIVERSITY | [www.developingchild.harvard.edu](http://www.developingchild.harvard.edu)

<https://developingchild.harvard.edu/resources/impact-of-early-adversity-on-child-redevelopment/>

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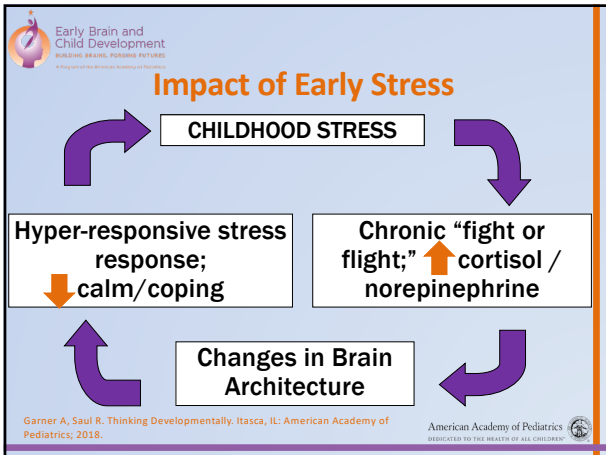
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### Trauma

- When a child experiences trauma during a critical period of brain development, the results might include:
  - disrupted attachments
  - a change in self-regard or self-identity
  - alexithymia, or trouble recognizing or naming emotions
  - a change in emotional control, such as numbing or lower tolerance for frustration
  - loss of a sense of safety or security

**QOTD**  
"Behavior is the language of trauma. Children will show you before they tell you that they are in distress."  
—MICHEREE KEELS

Cruz, D., Lichten, M., Berg, K., & George, F. (2022). Developmental trauma: Conceptual framework, associated risks and comorbidities, and evaluation and treatment. *Frontiers in Psychology*, 13, 800687. <https://doi.org/10.3389/fpsyg.2022.800687>

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### Common Assessment Tools

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### DP-4 Overview

All 5 Areas

- **Benefit:** Rating Scale that quickly identifies developmental strengths and weaknesses in 5 key areas and offers suggested activities for remediation
- **Scoring:** Standard scores, percentiles, age equivalents, descriptive ranges, and growth scores
- **Administration Time:** 20 to 40 minutes
- **Ages:** Birth to 21-11 years
- **Publication Date:** 2020
- **Format:** Print and Online; English and Spanish
  - Parent/Caregiver Checklist
  - Parent/Caregiver Interview
  - Teacher Checklist
  - Clinician Checklist

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### Growth Scores

- Clinician form only gives growth scores
- Used to facilitate measuring change in performance over time
- Compares the student against their own performance from the previous administration
- A positive value indicates improvement, while a negative value indicates regression

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### Physical Scale

- Measures the following:
  - Large and small muscle coordination
  - Strength
  - Stamina
  - Flexibility
  - Sequential motor skills



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### Adaptive Behavior Scale

- Measures the following:
  - Competence in activities of daily living
  - Ability to perform tasks such as eating, dressing, self-care, functioning independently, and utilizing modern technology



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### Social-Emotional Scale

- Measures the following:
  - Interpersonal relationships
  - Social and emotional understanding
  - Functional performance in social situations
  - The manner in which an individual relates to friends, relatives, and unrelated adults



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## Cognitive Scale

- Measures the following:
  - An individual's level of cognitive functioning as rated by the parent, teacher, or clinician
  - At younger ages, it measures skills that are prerequisite to scholastic functioning in academic areas such as reading, writing, arithmetic, computer use, and logic
  - At preschool and older ages, the skills measured are more directly tied to actual school curriculum



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## Communication Scale

- Measures the following:
  - Expressive and receptive communication skills, as indicated through both verbal and nonverbal language
  - Understanding of spoken, written, and gestural language
  - Ability to effectively use communication devices (e.g., phone, computer)



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## Intervention

- Item-level analysis serves as the basis of intervention to help the individual master developmental milestones
- The WPS Online Evaluation System will automatically generate a report with suggested intervention activities based on the results of each rating
- The manual also offers intervention activities in Appendix G for practitioners who are using the hand-score option



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# Developmental Assessment of Young Children, Second Edition (DAYC-2)

Judith K. Voress      Taddy Maddox

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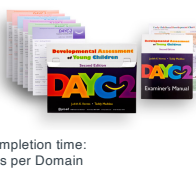
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## DAYC-2 Overview

All 5 Areas

- **Benefit:** Gives clinicians a baseline assessment of development delay and deficits
- **Ages:** Birth to 5-11 years
- **Publication Date:** 2012
- **Format:** Print; English only
  - Cognition
  - Communication
  - Social-Emotional Development
  - Physical Development
  - Adaptive Behavior



Estimated Completion time:  
10-20 minutes per Domain

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## DAYC-2 Administration & Scores Print Option

<p><b>Administration Methods</b></p> <ul style="list-style-type: none"> <li>▪ Observation</li> <li>▪ Interview</li> <li>▪ Direct Assessment           <ul style="list-style-type: none"> <li>▪ Manipulatives not included</li> </ul> </li> </ul>	<p><b>Scores</b></p> <ul style="list-style-type: none"> <li>▪ Standard Score</li> <li>▪ Percentile Rank</li> <li>▪ Age Equivalent</li> <li>▪ Descriptive Term</li> </ul>
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Is a **norm-referenced** tool  
Is **NOT** a **standardized** tool

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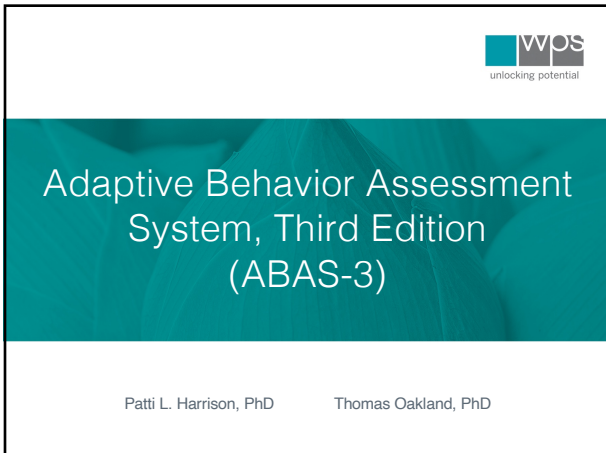
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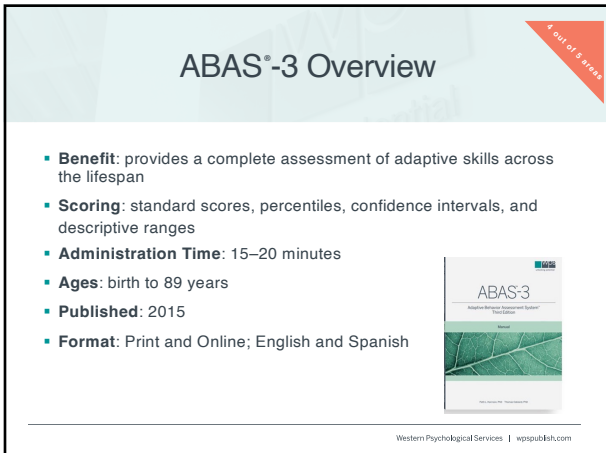
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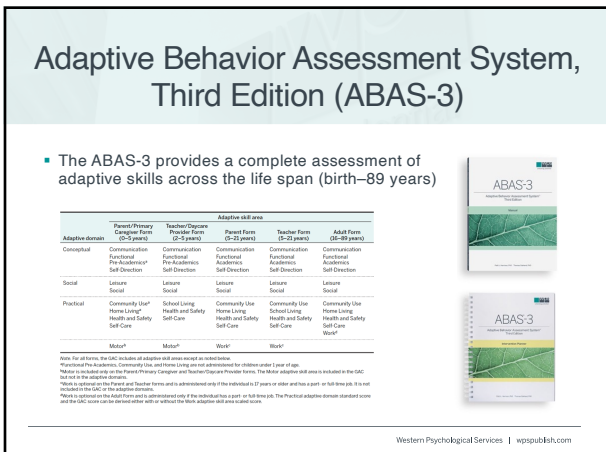
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### ABAS-3 Forms

Rating Form	Ages	Setting	Respondents
Parent/Primary Caregiver	0-5	Home and community	Parents or others responsible for the child's primary care
Teacher/Daycare Provider	2-5	School or daycare	Teachers, teacher's aides, preschool instructors, daycare or other childcare providers
Parent	5-21	Home and community	Parents or others responsible for the child's primary care
Teacher	5-21	School	Teachers, teachers' aides or other school professionals
Adult	16-89	Home and community	Family members, professional caregivers, supervisors or the individual

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### ABAS-3 Scales and Domains

General Adaptive Composite		
Conceptual	Social	Practical
<ul style="list-style-type: none"> <li>- Communication</li> <li>- Functional Academics</li> <li>- Self-direction</li> </ul>	<ul style="list-style-type: none"> <li>- Leisure</li> <li>- Social</li> </ul>	<ul style="list-style-type: none"> <li>- Community Use</li> <li>- Home / school living</li> <li>- Self-care</li> <li>- Health and Safety</li> <li>- [Work]</li> </ul>
Specific Skill Areas	*Motor in GAC only (young children)	

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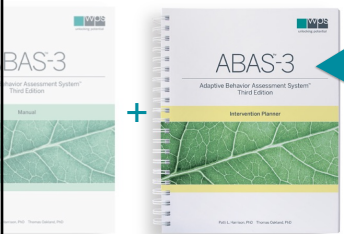
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### ABAS-3 Intervention Planner



A companion resource that links specific interventions to the deficits assessed in the ABAS-3 items.

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### Sample Intervention Items

ABAS-3 item number	ABAS-3 Item	Intervention Activity
<b>Communication</b>		
1	Says the names of other people (for example, "Mama," "Daddy," or names of friends).	Point to and/or show the child pictures of family members, friends, teachers, daycare providers, or other people he/she knows. Say their names and ask him/her to repeat their names after you. Encourage him/her to use the names of these people when he/she sees them (for example, "Hi, Daddy" or "There's Suzy").
2	Shakes head or says "yes" or "No" in response to a simple question (for example, "Do you want something to drink?").	When someone asks you a question while the child is near, or if he/she asks you a question, if appropriate, respond by nodding or shaking your head while saying "yes, I do" or "No, I don't." Overemphasize your words and actions to make them more noticeable. Encourage the child to let you know his/her wants or needs by nodding or saying "yes" or shaking his/her head or saying "no" when responding to questions.
3	Says "Hello" and "Good-bye" to others.	Say "hello" or "hi" when someone enters the room or when you see people when you are out (for example, at the playground or on the bus). Say "good-bye" when you or they leave. Encourage the child to do the same, prompting or cueing him/her by saying, for example, "Now you tell Mama good-bye."

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## Woodcock Johnson IV Tests of Early Cognitive and Academic Development, (ECAD)

Frederick A. Schrank, Kevin McGrew, and Nancy Mather

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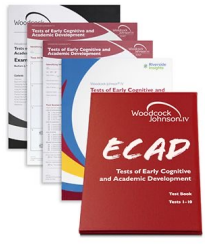
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### ECAD Overview

Cognitive



- Measures of general intellectual ability, early academic skills, and expressive language skills in young children
- Age range 2 years 6 months to 7 years 11 months
- Can be used with children with cognitive developmental delays through age 9 years, 11 months
- Flexible administration (choose which of the 10 tests to administer)
- Generates an overall Intellectual Ability (GIA) composite
- Administration time: About 5 minutes per section, 60-90 minutes for entire test.
- Paper, with scoring via Partner Portal
- Reports in English and Spanish

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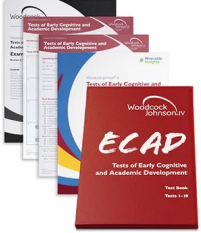
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## ECAD Components



- Manual
- Test Book
- Record Forms
- Response Forms
- Partner Portal Information (scoring)

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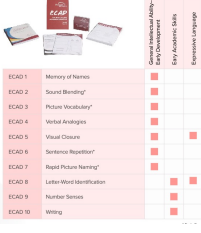
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## ECAD Administration



- Individual administration
- Variable test selection

ECAD Test	General Intellectual Ability	Early Academic Skills	Expressive Language
ECAD 1: Memory of Names	■		
ECAD 2: Sound Blending	■		
ECAD 3: Picture Vocabulary	■		
ECAD 4: Verbal Analogies	■		
ECAD 5: Visual Closure			■
ECAD 6: Sentence Repetition	■		
ECAD 7: Sound Picture Naming	■		
ECAD 8: Letter Word Identification	■		
ECAD 9: Number Names		■	
ECAD 10: Writing			■

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## ECAD Scores & Reports

### Scores

- Standard scores
- Percentile rank
- Discrepancy scores
- Relative Proficiency Index
- Age equivalents
- Percent delay
- Standard deviation delay
- Months delay

### Reports

REPORT TYPES	SUMMARY
Examinee Data Record	Provides raw data results for the selected examinee
Parent (Available in Spanish & English)	Describes the clusters or tests administered and provides a profile of the examinee's performance compared to same age peers
Profile	Provides a graphic of the examinee's performance using the standard score confidence band and percentile scale
Score	A customizable report that provides data tables (including selected scores (e.g., standard score, discrepancy scores, percentile rank, age-equivalent, relative proficiency index, etc.))

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# Early Sociocognitive Battery (ESB)

Dr. Penny Roy Dr. Shula Chiat Jennifer Warwick

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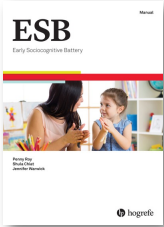
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## ESB Overview



- **Benefit:** quick measure of developing social communication skills
- **Scoring:** scaled scores, standard scores and descriptive ranges
- **Administration Time:** 15 minutes
- **Ages:** 1:6 to 4:11 years
- **Published:** 2024 (US norms)
- **Format:** Print

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### ESB Overview, (cont.)

- Assesses three early developing sociocognitive skills:
  - Social Responsiveness
  - Joint Attention
  - Symbolic Comprehension
- Does not require a verbal response
- Skills known to be:
  - Key in early language development
  - Impaired in children with social communication difficulties and autism spectrum disorders (ASD)



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### ESB Components



Step 1: Get Organized  
Step 2: Get Ready  
Step 3: Get Moving

- Case
- Manual
- Record Forms
- Quick Start Guide
- 60 Manipulative Objects
- Cloth bags to hold the manipulative objects

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### ESB Administration & Scores

#### Scores

- Subscales – Scaled Scores
- Total ESB – Standard Score
- Percentile Rank
- Confidence Intervals
- Categorical Scores
  - Low
  - Borderline
  - Normal

#### Administration

- Assign values of 1, 2, or 3 per item (instructions on record form)

 Administration Time: Approximately 15 minutes

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## Peabody Developmental Motor Scales, Third Edition (PDMS-3)

M. Rhonda Folio and Rebecca R. Fewell

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## PDMS-3 Overview

- **Benefit:** complete early childhood motor development program that includes assessment and remediation
- **Scoring:** scaled scores, standard scores and descriptive ranges
- **Administration Time:** 45-60 minutes
- **Ages:** Birth to 5:11 years
- **Published:** 2023
- **Format:** Print\*
  - \*Scoring is only online



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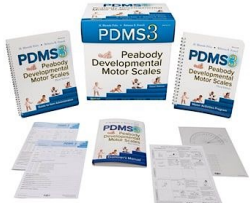
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## PDMS-3 Components



- Examiner's Manual
- Examiner Record Booklet
- Supplemental Subtest Booklet:
  - Physical Fitness
  - Guide to Item Administration
  - Motor Activities Program
  - Peabody Motor Development Chart
  - Test Manipulatives
- PDMS-3 Scoring Transparency
- PDMS-3 Online Scoring and Report System (available through publisher)

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## Functional Implications/Impact Statements

More than just testing

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**Bracken Basic Concept Scale:  
Receptive 4<sup>th</sup> Edition (BBCS-4: R)**

**Bracken School Readiness  
Assessment 4<sup>th</sup> Edition (BSRA-4)**

Bruce A. Bracken, PhD

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**Overview of BBCS-4:R and BSRA-4**

- Individually administered receptive measures of comprehension of foundational academic and social-emotional concepts
- Assess educationally relevant concepts in preparation for early formal education
- Guide clinicians, educators, and parents/caregivers in developing strategies for teaching these vital concepts for later academic success



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**Components**

- Manual
- Stimulus Book
- Record Form
  - English and Spanish
- Concept Development Guide
  - English and Spanish



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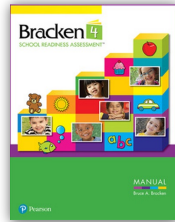
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### Bracken School Readiness Assessment Fourth Edition (BSRA-4)

- Ages 3 years, 0 months – 7 years, 11 months
- Assessment of 134 foundational school readiness concepts in six conceptual categories
- Inclusion of 64 concepts frequently associated with science, technology, engineering, arts, and math curricula
- Six Subtests
- Administration time: 10-17 minutes



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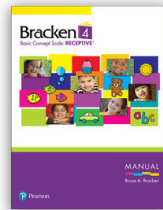
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### Bracken Basic Concepts Scale Fourth Edition, Receptive (BBCS-4:R)

- Ages 3 years, 0 months – 7 years, 11 months
- Assessment of 320 foundational, functionally, and educationally relevant concepts in ten conceptual categories
- Inclusion of 159 concepts frequently associated with science, technology, engineering, arts, and math curricula
- Ten Subtests
- Administration time: 23-28 minutes



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### Scores

Subtests
Color
Letters
Numbers/Counting
Sizes/Comparison
Shapes
Self-/Social Awareness
<b>School Readiness Composite (SRC)</b>

- Scores:
  - Subtest scaled score for subtests 1-6 (School Readiness Subtest [SRS])
  - Percentile ranks
  - Age equivalents
  - Growth scale values
  - Descriptive classifications

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## School Readiness Composite

- Represents conceptual knowledge closely aligned with early childhood educational experiences and curricula
- Good descriptor of children’s school-related concept development
- Good indicator of the academic preparation a child has received before beginning formal schooling
- Shown to predict school readiness and school success

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## Scores

Subtests	
Color	Direction/Position
Letters	Texture/Material
Numbers/Counting	Quantity
Sizes/Comparison	Time/Sequence
Shapes	
Self-/Social Awareness	
<b>Receptive Total Composite (Receptive TRC)</b>	

- Scores:
  - Subtest scaled score for subtests 1-10
  - Percentile ranks
  - Age equivalents
  - Growth scale values
  - Descriptive classifications

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## Phonological and Print Awareness Scale (PPA Scale™)

Kathleen T. Williams

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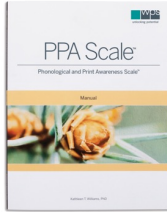
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### PPA Scale Overview



- A measure of early literacy skills in children between the ages of 3 years, 6 months to 8 years, 11 months
- The receptive, multiple-choice format does not require verbal responses; the format does not rely on vocabulary knowledge, or memory
- Includes six tasks measuring phonological and print awareness skills that have a demonstrated relationship with later measures of reading and writing
- Includes three parallel forms that can be used to measure skill development progress over time
- Available formats: Print, or Digital (WPS OES)

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### PPA Scale Components



- Carrying Bag
- Manual
- Record forms A,B,C
- Stimulus Easels
- Building Early Literacy Skills Intervention recommendations book
- Items available in Print or Digital formats
- Items can be ordered separately

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### PPA Scale Administration

#### Individual Task Areas

- Rhyming
- Print Knowledge
- Initial Sound Matching
- Final Sound Matching
- Sound-Symbol
- Phonemic Awareness



Total Administration Time: 10 to 15 minutes

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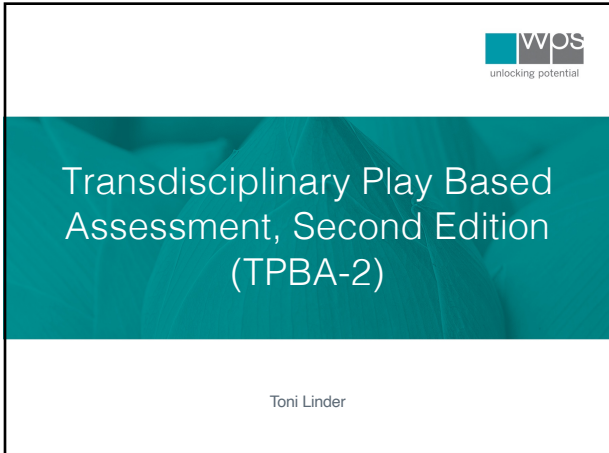
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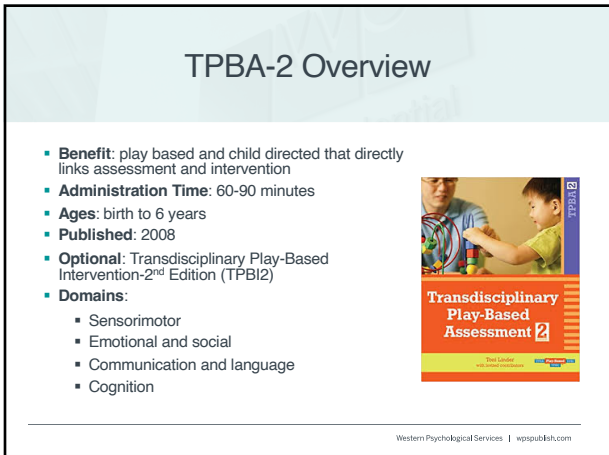
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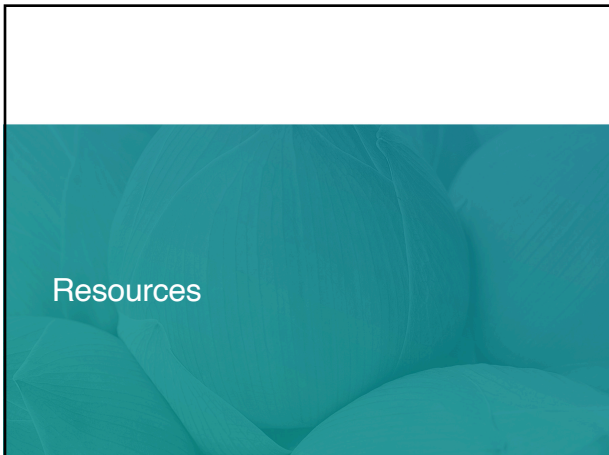
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**Resources, (cont.)**

- ["Learn the Signs. Act Early."](#)  
This CDC program offers free milestone checklists to help parents and professionals track children's milestones, support development, share concerns, and take action to support developmental delays.
- [Birth to 5: Watch Me Thrive!](#)  
Birth to 5: Watch Me Thrive! is a coordinated federal effort to encourage healthy child development, universal developmental and behavioral screening for children, and support for the families and providers who care for them.
- [Overview of Early Intervention](#)  
Learn more about early intervention services from the Center for Parent Information and Resources.
- [Bright Futures](#)  
Bright Futures materials for families are available on a wide range of mental, physical, and emotional health issues in children from before birth through 21 years of age.

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**Questions?**



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