


Identifying Young Children at Risk: Top Ten Predictors

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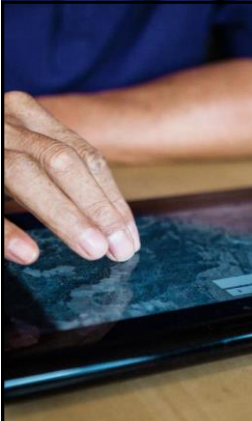
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Identifying Young Children at Risk




Objectives


- List the top ten characteristics of young children that predict learning difficulties
- Describe how to assess risk for developmental delay
- Use sample data to identify needed intervention and supports

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10. _____
9. _____
8. _____
7. _____
6. _____
5. _____
4. _____
3. _____
2. _____
1. _____

Top Ten Predictors



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Young children perform a number of tasks with amazing skill



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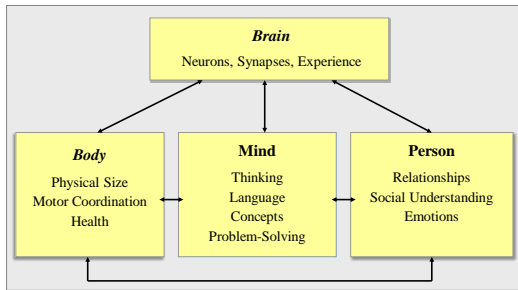
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What are the abilities and skills young children need in order to demonstrate such complex behaviors?

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Growth and Development



(Thompson, 2001)

Domains of Development and Learning



Individuals with Disabilities Education Improvement Act (IDEIA)

Physical Development



- National Education Goals Panel
- National Association for the Education of Young Children
- Head Start

Gross Motor Skills

- Children with many types of disabilities have been shown to exhibit problems with **postural control** (Westcott, Lowes, & Richardson, 1997).
- **Hopping** distinguished between a group of children considered normal and a group considered at-risk for future learning disabilities (Huttenlocher, Levine, Huttenlocher, & Gates, 1990; NASPE, 1990).

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Fine Motor Skills



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Physical Development and Personal Care

Typical preschool-age children are able to perform personal care tasks, such as feeding, dressing, brushing teeth, toileting, and washing hands.



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Social-Emotional Development

How children feel about themselves, how they behave, and how they relate to others are predictors of learning outcomes.



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Behavioral, Emotional, and Social Competence

Across a range of studies, the emotional, social, and behavioral competence of young children predict their academic performance in first grade, over and above their cognitive skills and family backgrounds.

(Raver, & Knitzer, 2002)

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What are the behavioral, emotional, and social competencies that facilitate academic success?

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Facilitative Behaviors

Accurately identify emotions in self and others

Manage feelings of anger, frustration, and distress

Enjoy academic learning and approach it enthusiastically

Relate to peers and teachers in positive ways

Work attentively, independently, and cooperatively in a structured classroom

(Raver, & Knitzer, 2002)



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What behaviors compete with or “block” the acquisition or performance of socially skilled behaviors?



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Competing “Problem” Behaviors

Aggressive behaviors

Impulsive behaviors

Unable to pay attention to tasks or follow directions

Unable to cooperate with others

Oppositional, noncompliant, or defiant behavior

Constantly seek attention from peers or teachers

Ignore peers or teachers

(Raver, & Knitzer, 2002)



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Self-Regulation

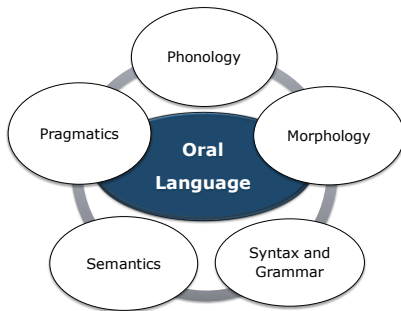
- The internal mechanism that enables mindful, intentional, and thoughtful behaviors.
- Self-regulation involves:
 - the ability to control one's impulses and to **stop** doing something.
 - the capacity to **do** something (e.g., awaiting one's turn).



Cat

(Bodrova & Leong, 2008)

Language Development



Comprehension and Production

Receptive (Comprehension)

Children must understand words and sentences to perceive and process information.



Listening

Expressive (Production)

They must use words to show they can retrieve information from memory.



Speaking

Success in school also depends on pre-academic skills and knowledge.

Pre-Literacy

Vocabulary Size

Complexity of Spoken Language

Understanding of Language Concepts

Familiarity with alphabet and books

Recognizing and Naming Letters

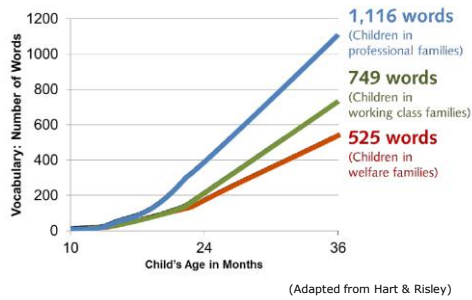
Vocabulary and Conversations

Children learn word meanings through conversations with other people.

- They often hear adults repeat words and use new and interesting words.
- The more words they hear, the more word meanings they learn.

(National Reading Panel Report, 2000)

Differences in Vocabulary Acquisition



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Language and Literacy

Early development of reading depends critically on whether the receptive phonological component of the **aural** system and the expressive phonological component of the **oral** system are developing in an age-appropriate manner (Berninger, 2007).

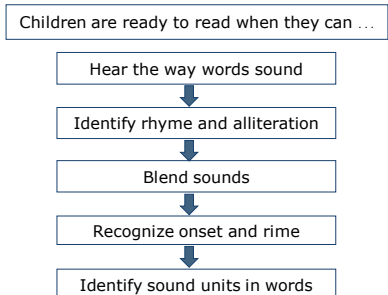


Language → Literacy

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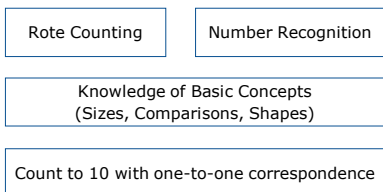
Phonological Awareness



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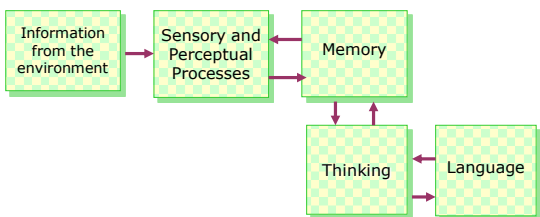
Pre-Numeracy



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Information Processing



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Cognitive, Language, and Pre-Academic Skills

abcdefghijklmnopq
rstuvwxyz

Naming Letters

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Cognitive, Language, and Pre-Academic Skills



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Cognitive, Language, and Pre-Academic Skills



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What are Your Top 10 Predictors of Academic Difficulties?

- | | |
|-----------|----------|
| 10. _____ | 5. _____ |
| 9. _____ | 4. _____ |
| 8. _____ | 3. _____ |
| 7. _____ | 2. _____ |
| 6. _____ | 1. _____ |

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Top 10 Predictors of Academic Difficulties

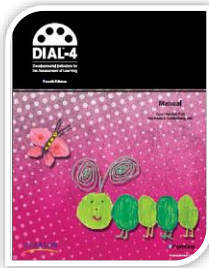
- | | |
|---|---|
| <ol style="list-style-type: none"> 10. Difficulties following directions or routines. 9. Clumsy (gross and/or fine motor skills.) 8. Difficulties interacting with peers. 7. Talked late compared to peers. 6. Slow vocabulary growth. | <ol style="list-style-type: none"> 5. Extremely restless and easily distracted. 4. Poor articulation. 3. Difficulty naming known objects quickly (RAN). 2. Poor phonological awareness skills (phonemic awareness). 1. Poor letter-naming skills.* |
|---|---|

*Based on recent research, math skills were shown to be predictive as well.



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Assessing Risk for Developmental Delay



Developmental Indicators for the Assessment of Learning—Fourth Edition



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Performance-Based Assessment

| Motor | Concepts | Language |
|--------------------|---------------------|----------------------|
| Throwing | Body Parts | Personal Information |
| Stand, Hop, Skip | Colors | Articulation |
| Building | Rapid Object Naming | Objects and Actions |
| Thumbs and Fingers | Rote Counting | Letters and Sounds |
| Cutting | Meaningful Counting | Rhyming and I Spy |
| Copying | Concepts | Problem Solving |
| Writing Name | Shapes | ----- |

Behavioral Observations and Intelligibility



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Parent Questionnaire (PQ)

Self-Help Development
Social-Emotional Development
[Overall Development]



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Teacher Questionnaire (TQ)

Optional
Self-Help Development
Social-Emotional Development
[Overall Development]



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Sample Data

- Is the child at risk for developmental delays and/or school failure?
- What interventions/supports does the child need?



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Age 4 years 6 months

| Performance Areas | | TOTAL SCORE | Decision | | | Percentile Rank | Standard Score | Intelligibility | |
|------------------------------------|---|-------------|----------------|-----------------|----|-----------------|----------------|-----------------|------|
| | | | Level (circle) | Potential Delay | OK | | | Good | Poor |
| Motor | - | 14 | 16% | X | | 3 | 72 | Good | Poor |
| Concepts | + | 11 | 10% | X | | 2 | 69 | Good | Poor |
| Language | + | 6 | 5% | X | | 1 | 65 | Good | Poor |
| DIAL-4 Total | | 31 | 2% | X | | 1 | 65 | | |
| Behavioral Observations (max = 54) | | 12 | 7% | X | | | | | |

| Questionnaires | | TOTAL SCORE | Decision | | | Percentile Rank | Standard Score | Overall Decision (circle) | |
|----------------|------------------|-------------|----------------|-----------------|----|-----------------|----------------|---------------------------|----|
| | | | Level (circle) | Potential Delay | OK | | | Potential Delay | OK |
| Parent | Self-Help | 22 | 16% | X | | 3 | 72 | | |
| | Social-Emotional | 28 | 2% | X | | 2 | 69 | | |
| Teacher | Self-Help | 12 | 16% | X | | 1 | 65 | | |
| | Social-Emotional | 30 | 2% | X | | 2 | 9 | | |

Scoring decision based on:
X DIAL-4 Total
 One or more other scores (specify):

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Reason for Screening

- Susie's parents are concerned that she talks less than her younger brother.
- The Kindergarten teacher referred Susie for developmental screening.
- The testing team administered the DIAL-4.

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Age 5 years 5 months

| Performance Areas | | TOTAL SCORE | Decision | | | Percentile Rank | Standard Score | Intelligibility | |
|------------------------------------|---|-------------|----------------|-----------------|----|-----------------|----------------|-----------------|------|
| | | | Level (circle) | Potential Delay | OK | | | Good | Poor |
| Motor | ↓ | 31 | 16% | X | | 65 | 106 | Good | Poor |
| Concepts | + | 27 | 10% | X | | 41 | 97 | Good | Poor |
| Language | + | 22 | 7% | X | | 22 | 88 | Good | Poor |
| DIAL-4 Total | | 80 | 2% | X | | 42 | 97 | | |
| Behavioral Observations (max = 54) | | 3 | 2% | X | | | | | |

| Questionnaires | | TOTAL SCORE | Decision | | | Percentile Rank | Standard Score | Overall Decision (circle) | |
|----------------|------------------|-------------|----------------|-----------------|----|-----------------|----------------|---------------------------|----|
| | | | Level (circle) | Potential Delay | OK | | | Potential Delay | OK |
| Parent | Self-Help | 38 | 16% | X | | 64 | 105 | | |
| | Social-Emotional | 45 | 2% | X | | 56 | 102 | | |
| Teacher | Self-Help | 19 | 16% | X | | 57 | 103 | | |
| | Social-Emotional | 53 | 2% | X | | 33 | 93 | | |

Scoring decision based on:
X DIAL-4 Total
 One or more other scores (specify):

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Analyzing Language Skills

| Language Area Total Score | | | | | | | | | | | | | | |
|---------------------------|---|----------------|---|------------------|---|------------------|---|----------------|---|----------------|---|----------------|---|------------|
| 5 | + | 4 | + | 3 | + | 3 | + | 3 | + | 2 | + | 2 | = | 22 |
| ITEM 1 | | ITEM 2 | | ITEM 3 - Objects | | ITEM 3 - Actions | | ITEM 4 | | ITEM 5 | | ITEM 6 | | (max = 35) |
| Weighted Score | | Weighted Score | | Weighted Score | | Weighted Score | | Weighted Score | | Weighted Score | | Weighted Score | | |

Item 1 Personal Information
 Item 2 Articulation
 Item 3 Vocabulary (She said I DK for two of the six items for the Expressive task)
 Item 4 Letters and Sounds (Alphabet Song good; Letter-Naming and Letter-Sounds 5/8 correct).
 Item 5 Rhyming and I SPY (phonemic awareness):
 0 correct for I SPY
 Item 6 Problem Solving

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Top 10 Predictors of Academic Difficulties

| | |
|---|---|
| 10. Difficulties following directions or routines. 9. Clumsy (gross and/or fine motor skills.) 8. Difficulties interacting with peers. 7. Talked late compared to peers. 6. Slow vocabulary growth. | 5. Extremely restless and easily distracted. 4. Poor articulation. 3. Difficulty naming known objects quickly (RAN). 2. Poor phonological awareness skills (phonemic awareness). 1. Poor letter-naming skills.* |
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Questions

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