LIMITED ACCESS TO SPECIAL EDUCATION SERVICES

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A child with a disability includes:

(B) Child aged 3 through 9 – The term “child with a disability” for a child aged birth through 9 (or any subset of that age range, including ages 3 through 5), may, at the discretion of the State and the local education agency, include a child –

(i) experiencing developmental delays, as defined by the State and as measured by appropriate diagnostic instruments and procedures, in one or more of the following areas: physical development, cognitive development, communication development, emotional development, or adaptive development; and

(ii) who, by reason thereof, needs special education and related services

(Individuals with Disabilities Education Improvement Act, 2004)
Oregon Eligibility

Early Intervention

Applies to children birth through age two

1. Two standard deviations or more below the mean in one or more of the developmental areas, or 1.5 standard deviations below the mean in two or more of the developmental areas; and

2. As a result of the disability the child needs EI services.

Early Childhood Special Education Eligibility

Applies to children age three through age of eligibility for public school

1. 1.5 standard deviations or more below the mean in two or more of the developmental areas;

2. The child's disability has an adverse impact on the child's developmental progress; and

3. The child needs special education services as a result of the disability.
### Primary Disability Categories

<table>
<thead>
<tr>
<th>Autism</th>
<th>Other health impairment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deaf-blindness</td>
<td>Specific learning disability</td>
</tr>
<tr>
<td>Deafness</td>
<td>Speech or language impairment</td>
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<tr>
<td>Emotional disturbance</td>
<td>Traumatic brain injury</td>
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<tr>
<td>Hearing impairment</td>
<td>Visual impairment</td>
</tr>
<tr>
<td>Intellectual disability</td>
<td></td>
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<tr>
<td>Multiple disabilities</td>
<td></td>
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<tr>
<td>Orthopedic impairment</td>
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</table>

(Danaher, J., 2011)
Transitions into Early Education

Considered a sensitive period in life

What is successful transition?

What might this look like and how might it be different for a child with a developmental delay?

(Ensminger & Slusarcick, 1992; Entwisle & Hayduk, 1988; Gutman et al., 2003)
Interruption has Negative Impact

Negatively impacted by even a month’s gap
Progress made may be lost
Catch up to peers

(Dawson et al., 2010; Kasari, Freeman, & Paparella, 2006; Kasari, Gulsrud, Wong, Kwon, & Locke, 2010; Vismara, Colombi, & Rogers, 2009)
Objective

Describe enrollment in school based special education services for children who received early intervention or early childhood special education services under a primary diagnosis of developmental delay from birth to five years of age.
Specific Aim

Among children diagnosed with developmental delay: Is the timing of a change in primary disability diagnosis associated with enrollment in special education at grade three?
Study design

Research Design
• Retrospective cohort
• Oregon Department of Education database
• 2009 – 2015
• N = 7,664
Birth – 5 Years

Disability diagnosis of developmental delay

N = 7,664

5 Years

Change in diagnosis before age of five

8 Years

Special education enrollment

No special education enrollment

Special education enrollment

No special education enrollment

Change in diagnosis after age of five

Ineligible: No change in diagnosis

N = 7,664
Definition of Developmental Delay

Domains: cognitive, physical, communication, social/emotional and adaptive development

Three specific criteria

1. 1.5 standard deviations or more below the mean in two or more developmental areas of a norm-referenced test OR 2.0 standard deviations or more below the mean in one or more developmental areas of a norm-referenced test.
2. Adversely impact the child’s developmental progress
3. Need early childhood special education services

Background Objective Approach Findings Discussion
Outcome of Interest

Enrollment in school based services

• Using unique identifier
• Subset of children who we had follow up data in third grade
• Third grade cut point
## Descriptive Characteristics

<table>
<thead>
<tr>
<th>Eligibility age</th>
<th>Change in disability diagnosis before age five</th>
<th>Change in disability diagnosis after age five</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N=4,627</td>
<td>N=449</td>
</tr>
<tr>
<td></td>
<td>%</td>
<td>%</td>
</tr>
<tr>
<td>0-6 months</td>
<td>180</td>
<td>12</td>
</tr>
<tr>
<td></td>
<td>03.89</td>
<td>02.67</td>
</tr>
<tr>
<td>6-12 months</td>
<td>216</td>
<td>11</td>
</tr>
<tr>
<td></td>
<td>04.67</td>
<td>02.45</td>
</tr>
<tr>
<td>12-18 months</td>
<td>238</td>
<td>16</td>
</tr>
<tr>
<td></td>
<td>05.14</td>
<td>03.56</td>
</tr>
<tr>
<td>18-24 months</td>
<td>411</td>
<td>21</td>
</tr>
<tr>
<td></td>
<td>08.88</td>
<td>04.68</td>
</tr>
<tr>
<td>24-30 months</td>
<td>641</td>
<td>40</td>
</tr>
<tr>
<td></td>
<td>13.85</td>
<td>08.91</td>
</tr>
<tr>
<td>30-36 months</td>
<td>746</td>
<td>68</td>
</tr>
<tr>
<td></td>
<td>16.12</td>
<td>15.14</td>
</tr>
<tr>
<td>&gt;36 months</td>
<td><strong>2,195</strong></td>
<td><strong>281</strong></td>
</tr>
<tr>
<td></td>
<td><strong>47.44</strong></td>
<td><strong>62.58</strong></td>
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</tbody>
</table>
### Descriptive Characteristics

<table>
<thead>
<tr>
<th></th>
<th>Change in disability diagnosis before age five</th>
<th>Change in disability diagnosis after age five</th>
<th>( P^a )</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N=4,627</td>
<td>N=449</td>
<td></td>
</tr>
<tr>
<td><strong>Gender</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>3,390</td>
<td>323</td>
<td>0.544</td>
</tr>
<tr>
<td><strong>Grade 3 Special</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Education</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Enrolled</td>
<td>1,804</td>
<td>281</td>
<td>0.000</td>
</tr>
<tr>
<td>Not enrolled</td>
<td>2,823</td>
<td>168</td>
<td>0.000</td>
</tr>
</tbody>
</table>

\( a^{\text{Pearson Chi-squared p-value}} \)
### Predictive Probabilities of Enrollment in Special Education in Third Grade

<table>
<thead>
<tr>
<th></th>
<th>Change in disability diagnosis before age 5 (95% CI)&lt;sup&gt;a&lt;/sup&gt;</th>
<th>Change in disability diagnosis after age 5 (95% CI)&lt;sup&gt;a&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Probability</td>
<td>0.393 (.380 - .407)</td>
<td>.585 (.541 - .628)</td>
</tr>
<tr>
<td>Relative Risk</td>
<td>-</td>
<td>1.486 (1.42 – 1.54)</td>
</tr>
</tbody>
</table>

<sup>a</sup>adjusted for age of initial eligibility (0-6, 6-12, 12-18, 18-24, 24-30, 30-36, >36 months)
Limitations

Assumed accurate and equivalent reporting across the state

When children re-enroll there is potential for misclassification

Small sample sizes in subgroups (agency, enrollment setting)
Conclusions

Change in disability diagnosis after the age of five associated with greater likelihood of enrollment in special education in third grade

Children with gap in receipt of services likely to remain in special education services

Restrictive age policy limits access to needed services

Influence later in life

(Aron & Loprest, 2012; Hibel, Farkas, & Morgan, 2010)
(Hebbeler et al., 2011)
The MORE that you READ,  
The MORE things you will KNOW.  
The MORE that you LEARN,  
The more PLACES you’ll GO.  

-Dr. Seuss
References


