A Comparison of Social Interaction Skills in Children With and Without a Disability

Samantha Townsend  
OTS

Amanda Baum  
OTS

Lou Ann Griswold  
PhD, OTR/L, FAOTA

University of New Hampshire

Background

- For most children, the most meaningful occupation they engage in is play, and a major component of play is social interaction.
- Children with disabilities often experience difficulties interacting with their peers.
- Therapists often provide intervention to support social skills despite the lack of an evaluation tool from which to plan intervention or measure progress.
- The Evaluation of Social Interaction (ESI) provides a standardized tool to assess social interaction in a natural context with typical social partners.

Evaluation of Social Interaction

Allows therapists to:
- Evaluate social interaction skills of individuals of all ages
- Observe clients in a natural context
- Obtain a measure of social interaction performance

Primary Research Question:

Is the ESI able to differentiate social interaction performance between children who are experiencing a disability from those who are not?

Participants

48 Children matched for:
- Age
- Gender
  - Range: 2-12 years
  - Mean: 7 years
  - Boys: 34
  - Girls: 14

Group 1: Without a Disability 24
Group 2: With a Disability 24
- Mild Disability 15
- Developmental Disability 7
- Psychiatric Disorder 2

Methods

Each child was observed 2+ times in a social interaction
- With different intended purposes
- With different social partners
- In different environments

Intended Purposes:
- Collaborating/Producing 51%
  - Playing a game with a friend
  - Working on a group project with peers
- Conversing Socially 22%
  - Talking with peers while eating a meal
  - Talking with a sibling while playing
- Gathering Information 13%
  - Receiving assistance from a teacher
  - Learning how to operate a kiln
- Sharing Information 8%
  - Teaching a fellow student how to complete a project
  - Tattling on a sibling
- Problem Solving/Decision Making 4%
  - Working through a disagreement with peers
  - Planning the rules for a game of hide and seek
- Acquiring Goods/Services 2%
  - Buying an ice-cream

Analysis

Rasch analysis
Converts ordinal data to interval data
Provides a performance measure based on hierarchy of:
- Intended purpose
- Social interaction skills

Independent T-test
Compares the mean social interaction measure between the two groups
- Children with a disability
- Children without a disability

Results

<table>
<thead>
<tr>
<th>Child with a Disability</th>
<th>Child without a Disability</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>5</td>
</tr>
<tr>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>9</td>
<td>8</td>
</tr>
<tr>
<td>8</td>
<td>7</td>
</tr>
<tr>
<td>10</td>
<td>9</td>
</tr>
</tbody>
</table>

Mean Social Interaction Ability Measure for Children With and Without a Known Disability

<table>
<thead>
<tr>
<th>Measurement</th>
<th>Mean</th>
<th>SD</th>
<th>Mean Difference</th>
<th>t</th>
<th>df</th>
<th>p</th>
<th>se</th>
</tr>
</thead>
<tbody>
<tr>
<td>Children Without a Disability</td>
<td>0.0796</td>
<td>0.589</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Children With a Disability</td>
<td>-0.4238</td>
<td>0.6151</td>
<td>0.5033</td>
<td>2.895</td>
<td>45.914</td>
<td>0.006</td>
<td>0.17384</td>
</tr>
</tbody>
</table>

Conclusion

The t-test revealed a significant difference between children with a disability and without a disability supporting the sensitivity of the ESI.