Attention and Sociability in Preschoolers With and Without Developmental Disabilities

Christina A. DiBlasio and Katherine M. Walton, PhD

BACKGROUND

- Early childhood years are critical time for intellectual development, specifically for learning pre-academic and social skills.
- Socialization & attention are essential for learning in a preschool classroom—Children learn through their social interactions.
- Attention is necessary for engagement, ability to learn, and classroom stability.
- Children with developmental disabilities (DD) often have social and/or attention deficits that may hinder their ability to learn and develop at the same pace as their typically developing (TD) peers.
- No previous research investigates how structure of classroom activities influences sociability and attention of children with vs. without developmental disabilities.

PURPOSE OF PILOT STUDY

Explore whether TD preschoolers vs. preschoolers with DD have more attention and sociability in structured vs. unstructured activities.

METHODS

- OSU Nisonger Center’s Early Childhood Education daycare and summer program.
- Participants: Preschoolers ages 2-6 years.
- Developed behavioral coding schemes for attention (on-task v. off-task behavior) and sociability (no social interaction v. social interaction with teacher, peer, or both).
- Collected data on preschooler’s attention and sociability during...structured activities Vs. unstructured activities.

RESULTS:

RESULTS: PEER SOCIAL INTERACTION REGRESSION

Peer Social Interaction explained by Activity Structure Level (controlling for Group and Child ID)

SIGNIFICANT relationship between activity’s level of structure and amount of peer social interaction.

- On average, as the level of structure increases, the amount of peer social interaction decreases.

RESULTS: ANOVA

Regardless of group (i.e. for both DD & TD subjects), there’s a statistically significant interaction between the type of social interaction (adult v. peer) and the structure type (unstructured v. structured).

Social Interaction Type by Setting Type

<table>
<thead>
<tr>
<th>Interaction Type</th>
<th>F</th>
<th>Sig.</th>
<th>Partial Eta Squared (effect size)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adult Social Interaction</td>
<td>7.825</td>
<td>.027</td>
<td>.528</td>
</tr>
<tr>
<td>Peer Social Interaction</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Structure Conditions</th>
<th>Designated activity area</th>
<th>Direct Instruction</th>
<th>Set seating</th>
<th>Specific set materials</th>
<th>Goal-directed</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Group (whether child DD v. TD)</th>
<th>Total Variance Explained</th>
<th>Variance Explained by variable</th>
<th>df</th>
<th>Sig. F Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>DD compared to TD</td>
<td>0.2%</td>
<td>0.2%</td>
<td>1.66</td>
<td>.701</td>
</tr>
<tr>
<td>Activity Structure Level (Unstructured → Structured)</td>
<td>25.2%</td>
<td>25.0%</td>
<td>5.61</td>
<td>.003</td>
</tr>
<tr>
<td>Child ID (each individual participant)</td>
<td>42.0%</td>
<td>16.8%</td>
<td>7.54</td>
<td>.045</td>
</tr>
</tbody>
</table>

Dependent Variable = Peer Social Interaction

REFERENCES

- Early childhood years are critical time for intellectual development, specifically for learning pre-academic and social skills.
- Socialization & attention are essential for learning in a preschool classroom—Children learn through their social interactions.
- Attention is necessary for engagement, ability to learn, and classroom stability.
- Children with developmental disabilities (DD) often have social and/or attention deficits that may hinder their ability to learn and develop at the same pace as their typically developing (TD) peers.
- No previous research investigates how structure of classroom activities influences sociability and attention of children with vs. without developmental disabilities.

ACKNOWLEDGMENTS

We would like to thank the children who participated in this study as well as OSU’s Nisonger Center ECE staff, specifically Angie Alley for all her help throughout the project and ECE teachers for allowing us to observe during class time. Thank you Linkedin for your time and assistance being our 2nd rater. Thank you OSU’s Department of Psychology and Undergraduate Research Office for the URO – Psychology Summer Research Fellowship grant.