Title: Measuring Change in Peer Engagement with Toddlers who have Autism

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Introduction: Sharing play interactions with others and coordinating attention between a partner and a shared activity is a core challenge for young children with autism (Adamson, Bakeman, Suma, & Robins, 2017). Although preschoolers are often the target of peer interaction studies, less intervention literature focuses on toddlers. This poster will examine: (1) toddlers’ engagement with peers over an 11-week intervention captured through supported interactions with teaching assistants (TAs), unsupported peer observations, and local supervisor’s ratings of children’s peer engagement, and (2) whether peer engagement outcomes differ between 1:1 adult-child intervention and the intervention adapted to include a peer.

Method: Forty-eight TAs, and 113 toddlers (mean age=32.28 months) with autism (n=1 with Down Syndrome) across 4 classrooms were randomized to 1:1 JASPER (Joint Attention, Symbolic Play, Engagement, Regulation) waitlist or JASPER with a peer (jasPEER). Both interventions were delivered for 30-minutes daily for 11 weeks. All but two TAs, and two children were members of an ethnic minority group. Eight Group Leaders (GLs) including allied health providers supervised the sessions.

Three measures were conducted at entry and exit. Ten-minute video recorded TA-child interactions were coded for children’s joint engagement (JE) with TAs (JASPER) and TAs plus peer (jasPEER only). Five-minute unsupported peer-play interactions between two children were recorded and also coded for JE. Finally, GLs completed a 7-point Clinical Global Impression scale of the child’s severity of challenges interacting with peers (1=typical, 7=severe impairment).

Results: Toddlers in jasPEER demonstrated a significant increase (entry to exit) in time engaged with a peer or a peer plus TA (f(1,246)=6.86, p=0.009). A peer was not available in 1:1 JASPER so a comparison between groups could not be made. On the CGI, GLs endorsed significant reduction in severity of peer engagement challenges from entry to exit for children in jasPEER (χ2(1)=8.76, p=0.003) compared to children in the JASPER group. Last, in completely unsupported peer observations, children did not demonstrate significant change.

Discussion: The three measures provide mixed findings in peer engagement for a heterogenous community sample of toddlers. Change was captured in TA supported interactions and GL ratings, but not unsupported peer interactions. For 2-year-old children of varying developmental levels, unstructured interaction is a high bar to meet. These peer observations were coded using 30-second intervals requiring children to sustain periods of peer engagement to receive credit. This standard may be too great to capture small but meaningful changes in children’s interactions. GL endorsement of change may be a reflection of bias toward children who received peer intervention, or may reflect global changes in peer engagement beyond the challenging context of an unsupported interaction. To explore this question, future work will explore CGI reliability with independent evaluators, and shifts in interval length for engagement coding.

References/Citations: