Title: Temporal Associations Between Child-Parent Behaviors During Play for Children with ASD and Typical Development

Authors: Andrew Dakopolos¹, Laudan Jahromi², & Katie Kirkman¹

Introduction: The play behaviors of children with Autism Spectrum Disorder (ASD) have been described as exhibiting less investment and playfulness than those of typically-developing (TD) children (Hobson, Lee, & Hobson, 2009). Although findings are mixed regarding the utility of parental directiveness to facilitate play for children with developmental disabilities, less is known about how parents change their use of such behaviors in response to children’s play. The current study investigated whether the play behaviors of children with ASD and TD were temporally associated with subsequent changes in parent directiveness during a free play session.

Method: Participants included 39 preschoolers, 19 children with ASD (Mage = 58.95 months, SD = 11.50) and 20 typically developing children (Mage = 50.20 months, SD = 11.12), matched on gender and expressive language age. Micro-observational coding of a 5-minute free play interaction was conducted in 10-second intervals to assess parent directiveness (ICC = 0.88), child interest/investment in play (ICC = 0.84), child-driven play (ICC = 0.94), and child responsivity (ICC = 0.91). Contingency analyses identified lag-1 associations between child behavior and subsequent changes in parent directiveness. A Yule’s Q (odds ratio) was calculated, indicating the strength of contingency (from -1 to +1) between child and parent behaviors while controlling for base rates (Bakeman & Gottman, 1997).

Results: Findings revealed that intervals with low child interest/investment were significantly more likely to be followed by decreases in parental directiveness, t(13) = 3.58, p = .003, M = 0.32, SD = 0.34. Child-driven play intervals were significantly less likely to be associated with decreases in parent directiveness, t(24) = -5.70, p < .001, M = -0.38, SD = 0.33. Finally, intervals with high child interest/investment were marginally less likely to be temporally associated with decreases in parental directiveness, t(20) = -1.95, p = .06, M = -0.16, SD = 0.37. Regression models were fit to examine interactions of group by child behaviors on Yule’s Q scores. When children showed higher rates of child-driven play across the entire session, parents of children with ASD were less likely to decrease their directiveness in response to their children’s interest/investment, and parents of children with TD, were more likely to decrease their directiveness, (F(1,17) = 7.35, p = .014). On the other hand, when children showed higher rates of interest/investment throughout the session, parents of children with ASD were more likely to follow child-driven play intervals with decreases in directiveness, while parents of children with TD were less likely to decrease their directiveness, (F(1,21) = 7.62, p = .011).

Discussion: On average, children with ASD in our sample exhibited less child-driven play than their typical peers, but no significant difference in their interest/investment. For children with ASD, parents’ use of directiveness in the context of play may be related to their child’s overall pleasure (versus fleeting interest) in the activity; directiveness decreased in response to child-driven play when children’s overall interest was high throughout the session. In contrast, during periods of overall high interest, parents of children with ASD may have increased their directiveness in order to maintain the child’s play skills. These parents may anticipate the need to work harder to maintain children’s engagement without evidence of consistent or stable interest.

References:


¹ Teachers College, Columbia University

² Loyola Marymount University