Title: Young Dual Language Learners with Autism: Does Language in Intervention Matter?

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Introduction: Approximately 30% of the children in Head Start programs and district-funded preschools are dual language learners (DLLs: National Clearing House for English Language Acquisition, 2011). Studies have found that DLLs may initially show smaller vocabulary than monolingual peers as they are simultaneously learning two languages (Hammer et al., 2014). Language development may even be more of a concern for children with autism who have specific language impairments. Many evidence-based interventions, particularly school-based interventions, are implemented in English in the US. The interventions have shown to increase children’s language abilities (Chang et al., 2017; Shire et al., 2017). The current study will examine whether home language status (English or Language other than English) will moderate the effect of treatment on language in children with autism.

Method: Participants. The current study is a secondary data analysis based on a previously published study (Chang et al., 2017). Sixty-six preschool students with autism (ages 3-5) were randomized to receive an 8-week play-based social communication intervention, Joint Attention Symbolic Play Engagement Regulation (JASPER: n=38), or waitlist control (n=28) that was implemented at school by teachers who spoke English. Sixty-one percent of the children were monolingual, English-only, and the rest of the sample, 39% was dual language children, (DLLs), where another language was spoken at home as the primary language. Languages included Spanish, Korean, Mandarin, Japanese, Russian, Armenian, Arabic, and Farsi.

Language Measure. Children and teachers’ 10-minute play interaction was videotaped pre and post intervention. Raters blinded to treatment condition and time coded these videotapes for children’s spontaneous expressive language to request and comment by length of utterance (one-word, two-word, and three or more word utterances).

Results: Language outcomes were modeled using generalized linear mixed models. Children who received the JASPER intervention improved significantly more in all language outcomes from baseline to post treatment (one word utterance: F(1,56)=4.47, p=0.039, two-word utterances: F(1,56)=7.90, p=0.007, three or more word utterances: F(1,56)=7.84, p=0.007) compared to children in the waitlist group, as previously reported in Chang et al. (2017). Home language status (English as primary language or not) did not moderate the effect of treatment on any of language outcomes for these children (p’s>.05) from baseline to post treatment.

Discussion: It is promising that children with autism, both monolingual and DLLs, benefitted from the social communication intervention. Even though studies have shown that DLLs are at a disadvantage in acquiring language, these findings indicate that evidence-based interventions specifically targeting core challenges in social communication for children with autism can be just as beneficial to DLLs with autism as children who are native English speakers. Joint engagement in play creates the opportunity for all children to engage in conversation, which may have enhanced their English. Future studies should continue to examine this growing population of children with disabilities who are DLLs and monitor their language development in both English and their primary home language.

References/Citations: