Title: Therapeutic Alliance in Cognitive Behavior Therapy for Children with Autism: Predictors and Relation to Treatment Outcome

Authors: Carly Albaum, Paula Tablon, Flora Roudbarani, Jonathan Weiss

Introduction: Cognitive behavior therapy (CBT) has been shown to be efficacious in reducing emotional and behavioral challenges in children with autism (Simonoff et al., 2008; Weston, Hodgekins & Langdon, 2016). However, not all children who participate in therapy show improvement. The working relationship between therapist and client, known as the therapeutic alliance (TA), may explain a portion of the variance in treatment outcome (McLeod, 2011). Alliance may be influenced by child factors that are present before starting treatment. To date, only one study has examined the relation between pre-treatment factors, TA, and treatment outcome in children with ASD (Kerns, Collier, Lewin & Storch, 2017). This research aims to evaluate the association between child pre-treatment factors and TA, and to determine if TA is a significant predictor of treatment outcome.

Method: Data were collected from 54 children with autism (90.7% male), who participated in a randomized controlled trial of CBT targeting emotion regulation. Children were 8 to 12 years of age ($M = 9.65$, $SD = 1.23$) with at least average IQ ($M = 104.10$, $SD = 14.84$, Range: 79-140). TA was measured using a single-item, rated by the therapist at the end of each session. To capture the dynamic nature of this relationship, early TA and late TA were considered separately by calculating the mean rating across two early and two late sessions. Predictors of TA included parent-report of emotion regulation, behavioural symptomatology and autism symptom severity, through the use of validated measures. Child self-reported emotion regulation and treatment motivation were also included as predictors of TA. Data for TA predictors were collected prior to beginning treatment. Outcome measures included parent-reported emotion regulation, behavioural symptomatology and adaptive skills, and clinician-reported psychopathology and global rating of symptom severity.

Results: Early TA was negatively related to pre-treatment levels of child-reported emotion regulation ($r_s = -.35, p = .01$) and approached significance with parent-rated behavioural symptomatology scores ($r_s = -.26, p = .06$). Late TA was not associated with any pre-treatment child factors. The overall model of child pre-treatment factors accounted for a moderate portion of variance in early TA, $R^2 = .15, F(2, 47) = 4.20, p = .02$, with child emotion dysregulation as a unique predictor, $\beta = -.31, t(47) = -2.22, p = .03$. When controlling for baseline levels, late TA was associated with higher post-treatment adaptive skills ($r_s = .31, p = .03$) and lower parent-rated behavioural symptomatology ($r_s = -.29, p = .04$), but not associated with child- or clinician-reported outcomes. Early TA was not associated with any outcome measures.

Discussion: While early TA was associated with pre-treatment child emotion regulation, it was not associated with any form of treatment change. In contrast, late TA was not associated with pre-treatment characteristics, but was associated with such change. Future research is needed to elucidate these potential variables as mediators and moderators of treatment success.

References/Citations: