Predictors and Moderators of Parent Engagement in Early Interventions for Behaviorally Inhibited Preschool Age Children

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Background/Rationale: Behavioral inhibition (BI) is a dispositional construct characterized by heightened fear in response to novelty that has been found to be a risk factor for the development of later anxiety (Chronis-Tuscano et al., 2009). Although researchers have indicated that early interventions for inhibited children are efficacious (Chronis-Tuscano et al., 2018), the success of such interventions depends on parent engagement (PE). However, researchers have yet to examine parent-, child-, or treatment-level predictors of PE in *early* interventions for BI.

Hypotheses: The current study is part of an NIMH-funded trial examining two interventions for inhibited preschoolers: the 8-session Turtle Program ("Turtle"; Chronis-Tuscano et al., 2015), an adaptation of Parent-Child Interaction Therapy and Social Skills Facilitated Play (simultaneous parent and child groups); and Cool Little Kids (CLK; Rapee et al., 2005), a 6-session parent psycho-educational group. We hypothesized that greater child and primary parent (PP) anxiety and randomization to Turtle would predict greater PE (PP attendance, PP-reported homework completion and treatment satisfaction). We hypothesized that anxious PPs of anxious children would engage more when randomized to Turtle. We also explored the interaction between child, PP, and co-parent anxiety predicting co-parent attendance.

Methods: The sample comprised 151 mothers and fathers and their 45-64-month-old inhibited children, who were block randomized into Turtle or CLK. Child and parent anxiety comprised the sum of the clinician severity ratings across anxiety disorders using the Anxiety and Related Disorders Interview Schedule for DSM-5 – Parent and Lifetime versions, respectively.

Results: Multigroup analysis was used to model child and PP anxiety and their interaction as predictors of PP attendance, homework completion, and satisfaction as a function of treatment. There was a significant difference in average PP attendance between groups, $\Delta x^2 (1) = 13.834$, $p < .001$, with greater PP attendance in Turtle. In Turtle, greater child anxiety significantly predicted greater PP attendance ($b = .959$, $SE = .296$, $\beta = .395$. $p = .001$).

There was a significant difference in average homework completion between groups, $\Delta x^2 (1) = 5.545$, $p = .018$, with CLK PPs completing slightly more homework on average than Turtle PPs. For both groups, greater child anxiety predicted greater homework completion ($b = .250$, $SE = .099$, $\beta = .200$, $p = .012$).

There was no group difference in satisfaction. In Turtle, PP depression significantly predicted lower satisfaction ($b = -.234$, $SE = .102$, $\beta = -.293$, $p = .023$). In CLK, the interaction between child and PP anxiety significantly predicted satisfaction ($b = -.325$, $SE = .119$, $\beta = -.350$, $p = .006$). Specifically, the association between child anxiety and satisfaction was positive at low PP anxiety (-1 SD; $b = .636$, $z = 3.681$, $p < .001$). Across treatments, greater co-parent anxiety predicted greater co-parent attendance ($b = .992$, $SE = .495$, $\beta = .222$, $p = .045$).

Discussion/Implications: These results suggest that child anxiety may motivate parent engagement, particularly if children are receiving concurrent treatment and/or in-vivo coaching. However, intensive treatment may be too burdensome for depressed parents, whereas less intensive treatments may be more acceptable to non-anxious parents of anxious children**.** These findings can inform approaches to improve PE in early interventions targeting BI.