

Change in Callous-Unemotional Behaviors in Children with Attention-Deficit/Hyperactivity Disorder (ADHD) and Disruptive Behavior Disorders: Impact of the Summer Treatment Program for Pre-Kindergarteners (STP-PreK)



Melissa L. Hernandez, M.S., Madeline Curzon, M.S., Eva Goldhagen, M.S., Leanett Reinoso,
Margaret Johansson, Anthony Dick, PhD & Paulo A. Graziano, Ph.D
Florida International University



INTRO

- Young children with attention-deficit/hyperactivity disorder (ADHD) and disruptive behavior disorders (DBD) face significant difficulties, which are worsened by the presence of callous-unemotional (CU) behaviors.
- Although multimodal treatments like the Summer Treatment Program (STP) are effective for ADHD and DBDs, their impact on CU remains unclear.
- This study explores how the STP-PreK, an adaptation of the STP for younger children transitioning into kindergarten, can reduce CU behaviors in children with ADHD and DBDs relative to typically developing (TD) peers.

METHODS

Participants

323 children (68.7% boys; Mean age = 5.47 yrs. $SD = 1.45$ yrs, 81.4% Latinx)

- TD ($n = 148$), ADHD only ($n = 46$), and ADHD + DBD ($n = 129$)

Measures

Inventory of Callous-Unemotional Traits (ICU-12; Frick, 2004). A composite score was used to measure CU based on 12 items, per parent and teacher report, on a four-point Likert scale ranging from 0 (not at all) to 3 (very much).

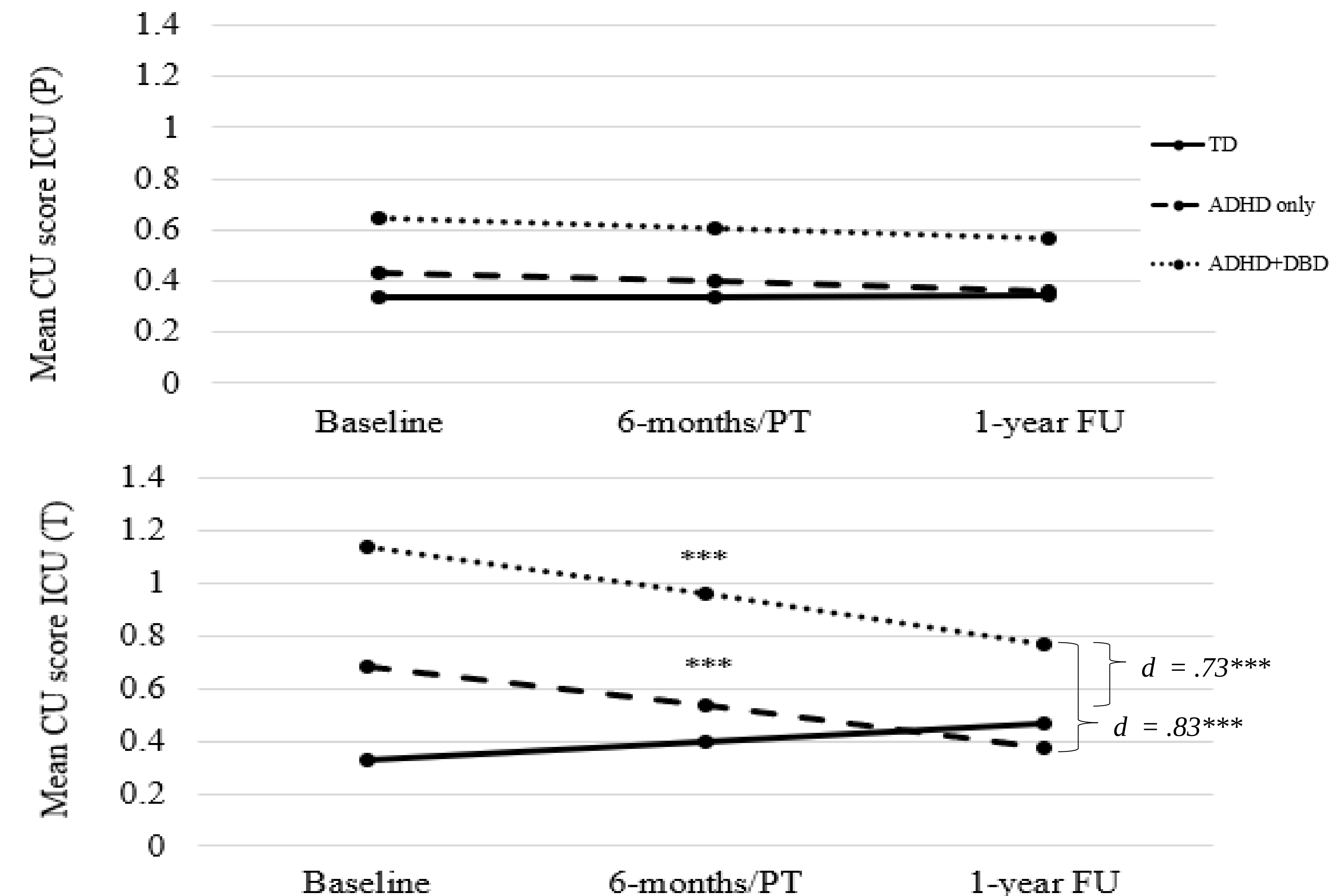
Intervention

Summer Treatment Program for pre-kindergarteners (STP-PreK). Only families of children with ADHD participated in a 7- to 8-week summer program. The STP-PreK is a multimodal intervention including a school readiness class, which consists of a *behavior modification* program as well as an *academic* and *social-emotional* curriculum, along with a *parenting* program (Graziano et al., 2014).

RESULTS

Children with ADHD, with and without comorbid DBDs, who participated in the STP-PreK showed **reduced levels of CU behaviors** immediately after treatment and up to **one year later**.

Figure 1. Change in Mean CU Scores



Note. *** ($p < .001$) indicates significant *decreasing* slope from baseline to 1yr follow-up relative to TD group. d = Cohen's d effect size indicates differences between the groups at 1-year follow-up. CU = callous-unemotional traits. ICU = Inventory of Callous-Unemotional Traits. P = parent report. T = teacher report. PT = post treatment. FU = follow-up.

DISCUSSION & IMPLICATIONS

- This marks the first STP related study, to our knowledge, to show improvements in CU behaviors.
- It may be the case that the *social-emotional/self-regulation curriculum* of the STP-PreK (both within the camp and parenting component) is what contributes to its success in reducing early CU behaviors.
- Parents may be continuing to reinforce positive emotion regulation and pro social skills both them *and* their child learned during the program, therefore mitigating the long-term development of more severe CU behaviors.
- Interestingly, we were able to identify improvements in CU behaviors across both the ADHD only and ADHD+DBD groups as reported by teachers, but not parents.
- It may be that teachers are likely to have better knowledge of children's social-emotional functioning including CU behaviors as they can observe peer interactions in school more readily versus parents.

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CONTACT INFORMATION

FIU: Melissa L. Hernandez, M.S.
E-mail: mhern626@fiu.edu
Lab Website: <http://self-regulationlab.fiu.edu>
Instagram: @selfregulationlab

