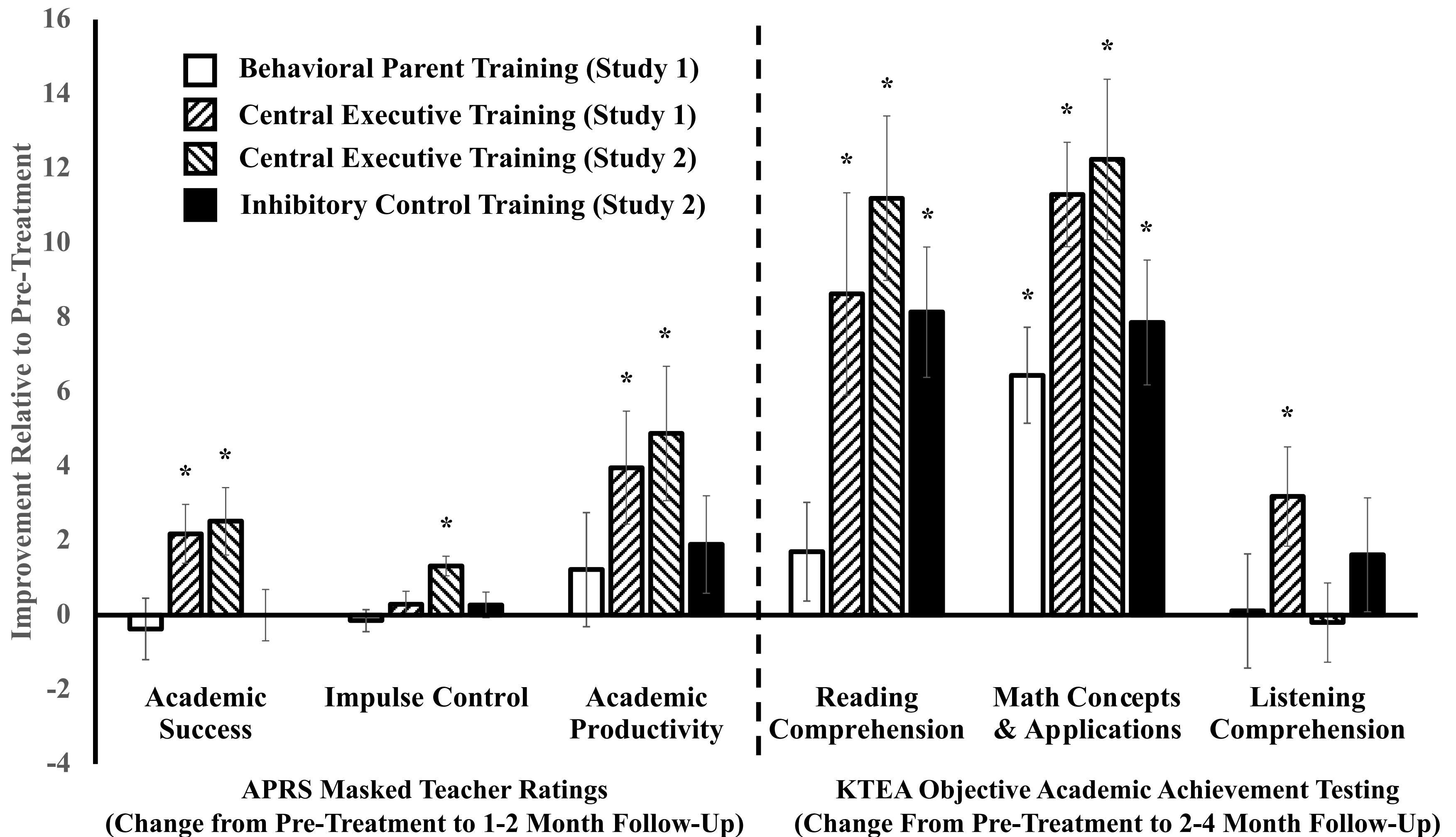
**Supplementary Materials (Online Only)**

**Figure S1.** Treatment-related improvements in subjective and objective academic outcomes, separated by Study 1 vs. Study 2. * = significant improvement at follow-up relative to pre-treatment ($p$<.05 and $BF_{10}$>3.00).



**Supplementary Table S1.** Number needed to treat (NNT) estimates for central executive training vs. behavioral parent training (Study 1) and inhibitory control training (Study 2).

| | Study 1 | CET Number Needed to Treat (NNT) Based On: | | | Study 2 | CET Number Needed to Treat (NNT) Based On: | | |
|---|---|---|---|---|---|---|---|---|
| | Kraemer | Furukawa | Zakzanis RCI | J&T RCI | Kraemer | Furukawa | Zakzanis RCI | J&T RCI |
| Teacher-reported academic performance | | | | | | | | |
| Academic success | **3** | **4** | **3** | **5** | **3** | **4** | **3** | **5** |
| Impulse control | 7 | 9 | **3** | 6 | **3** | **4** | **2** | **5** |
| Academic productivity | **5** | 7 | **4** | 6 | **5** | 7 | 7 | **5** |
| Objectively-assessed academic achievement | | | | | | | | |
| Reading comprehension | **3** | **4** | **5** | **4** | **5** | 7 | **4** | **4** |
| Math concepts & applications | **2** | **4** | **5** | **4** | **4** | **5** | **4** | **5** |
| Listening comprehension | **4** | 6 | **3** | -- | 7 | 9 | -4 | -4 |

*Note:* Number needed to treat (NNT) refers to the number of patients who need to be treated to get one more patient better than would have improved without the treatment; 1/NNT estimates the probability that any given patient will benefit from the treatment (Wang et al., 2000). Smaller values suggest more effective treatments. Biederman et al. (2019) considered NNTs ≤ 10 to be indicative of effective treatment for ADHD given the high cost of illness and functional impairments/consequences associated with ADHD; a more general rule-of-thumb based on Chong et al. (2006) suggests that NNT ≤ 5 indicates an effective treatment that should be 'ruled in' by clinicians whereas NNT > 15 suggests small/minimal treatment benefits that should be 'ruled out' by clinicians. NNTs ≤ 5 based on the current clinical trials are bolded; boxes reflect outcomes where CET showed significant benefits that replicated across Study 1 and Study 2 (these outcomes also showed low NNTs suggestive of clinically significant benefits). Kraemer = Kraemer & Kupfer (2006) method for computing NNT from the treatment x time Cohen's *d* effect sizes based on area under the receiver operating characteristics curve (AUC). Furukawa = Furukawa & Leucht (2011) method for computing NNT from the treatment x time Cohen's *d* effect sizes and estimates of control group response rates, defined conservatively as the percentage of control participants who showed a positive gain. NNTs based on Kraemer and Furukawa were computed using the R package dmetar (Harrer et al., 2019; http://dmetar.protectlab.org). Zakzanis RCI = NNT computed based on the Zakzanis 'percent non-overlap' method, which estimates the percentage of participants in each group whose post-treatment/follow-up scores fell outside of the pre-treatment range of scores (based on the pre-post/follow-up Cohen's *d* main effects of time for each group). J&T RCI = NNT computed based on the Jacobson & Truax (1991) reliable change method, which estimates the number of children in each group who showed reliable improvements, defined as pre-post/follow up change scores that reliably exceeded chance at $p<.05$ (computed using each measure's reported test-retest reliability and the *SD* of the standardization sample). NNTs were not computed for Study 1 listening comprehension based on J&T RCI because the ratio of reliably improved to not improved cases was the same for the CET and control groups (1 case per group). NNTs are for Study 2 listening comprehension are negative based on both RCI methods because the ICT group had a higher estimated reliable change rate based on these methods. We are thankful to Dr. Kristina Breaux and team at Pearson for providing additional data needed to compute the J&T RCI for the KTEA.