Pilot randomized controlled trial (RCT): Integrating mindfulness into an evidence-based preventive intervention for children and their parents: Optimization of effects

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Background:
Aggressive children have deficits in self-regulatory processes (attentional, cognitive, emotional). Parents often experience the same deficits, as well as harsh parenting and negative discipline. Studies indicate two types of childhood aggression – proactive (PA; instrumental, goal-directed) and reactive (emotional, ‘hot blooded). Studies indicate that mindfulness has positive effects on these same self-regulatory processes.

Coping Power (CP) is an evidence-based, preventive intervention for children at high-risk for substance use and delinquency. Eight RCTs show effects in preventing substance use, aggression, and delinquency, including substance use at 4 years, and decreasing harsh parenting and negative discipline. Yet, compared to PA, RA is resistant to change; in one trial, effects sizes for PA were three times greater than for RA. Further, the pathway between aggression and adolescent substance use differs for RA and PA. We optimized CP by integrating mindfulness to develop Mindful Coping Power (MCP).

Methods
Child groups included 25 sessions (delivered at school); parent groups included 10 sessions. For cohort 1, the sample included 5th grade students who screened high on teacher-rated RA and their parents. Our first cohort included 44 child/family dyads who were randomized into CP or MCP (63.7% male; 90.9% African American; 9.1% Caucasian; Hispanic < 1%). We examined change before and after the intervention. Given the small sample, effects sizes of .4 or greater are reported.

Results
Preliminary findings indicated that MCP led to increased child-reported self-regulation and self-compassion, and parent-reported children’s social skills, adaptive behavior, and attention. Parent attendance was also higher. Some effects favored CP: teacher ratings of internalizing problems and child ratings physiological arousal during stressful peer situations. Correlation analyses examined possible processes underlying reductions in RA. Decreased child-reported RA (at trend level or higher) was related to: increased child ratings of dysregulation, mindfulness, breath awareness and self-compassion, and parent ratings of child inhibitory control.

Conclusions:
Preliminary results are promising and show that optimizing an evidence-based, preventive intervention by integrating mindfulness offers added benefits on a constellation of processes underlying effects of RA. Adolescent substance use may be best prevented by impacting both types of aggression. Future analyses will be conducted on cohort 2.