The role of inhibition in the relationship between emotion regulation and aggression in children with ADHD

Emotion regulation deficits are related to aggressive behavior in children with ADHD (Shaw et al., 2014). However, it is unclear how deficits in inhibition, a key component of self-control that is also implicated in children with ADHD (Ahmed et al., 2015; Bunford et al., 2018; Nigg & Casey, 2005), contributes to aggressive behavior. In this study, we investigated the relationships between emotion dysregulation, inhibition deficits, and aggression in a sample of children aged 8-12 years with and without ADHD. We hypothesize that inhibition deficits will mediate the relationship between emotion dysregulation and aggression, and that this association will be greater in children with ADHD compared to those without. To test this, we investigated relationships between parent-report of child emotion dysregulation, inhibition deficits, and aggressive behavior. We conducted mediation analyses to test whether inhibition deficits mediate the relationship between emotion dysregulation and aggression in children with and without ADHD.

We found that emotion dysregulation was significantly related to both aggression and inhibition, and this relationship was stronger in the children with ADHD. However, inhibition deficits did not significantly mediate the relationship between emotion dysregulation and aggression, which suggests that inhibition in non-emotional contexts may not be as relevant to aggression. Overall, this work contributes to our understanding of how inhibition deficits and emotion dysregulation contribute to aggression and could suggest that interventions aimed at decreasing aggressive behavior should perhaps include skills targeted to improve inhibition in emotional contexts, like emotion regulation, rather than inhibition in non-emotional contexts.