Age-Related Effects on Response Inhibition in Youth at Familial Risk for Bipolar Disorder

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**BACKGROUND**
- Impulsivity: core feature of Bipolar Disorder (BD)¹
- Possible cognitive endophenotype for BD²
- Impulsivity measured via Response Inhibition (RI) in context of emotionally salient information
- Adults with BD exhibit altered RI in context of emotionally salient information
- More studies needed to determine extent RI in emotionally salient context is altered
- Cambridge Neuropsychological Test Automated Battery (CANTAB), Affective Go/No-Go Task (AGN) commission errors

**Hypothesis:** In comparison to controls, and other at-risk groups, at-risk BD youth exhibit altered RI via commission errors on AGN task

**METHODS**
- **32 BO (BD Offspring): offspring of parents with BD**
- **28 NBO (Non BD Offspring): offspring of parents with non-BD diagnoses**
- **23 HC (Healthy Controls): psychiatrically healthy offspring of psychiatrically healthy parents**

**Variables of interest**
- Omission errors: no response for target word
- Commission errors: response for distractor word
- Reaction time (RT) of correct responses

**RESULTS**
- **Commission Errors:** significant group by age interaction (F (2,77)=5.76, p=.005). Negative association between age and errors of commission for BO participants (r=-.68), but not in NBO (r=-.15) or HC (r=-.05). (Fisher’s test p=.01, p=.007).
- **Impulsivity:** measured via Response Inhibition score in emotionally salient context

**REFERENCES**