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Early Aspects of Self-Regulation as Predictors of Adolescent ADHD Symptoms

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INTRODUCTION

Early individual differences in children's ability for self-regulation have shown to be a powerful predictor of ADHD. However, to date most studies have focused on the role of cognitive control functions in ADHD symptoms and there is a shortage of longitudinal studies examining other aspects of self-regulation in relation to the disorder. In this 9 year longitudinal study, we studied three types of self-regulation processes (cold inhibition, hot inhibition, and emotional regulation) as early predictors of ADHD symptoms in adolescence.

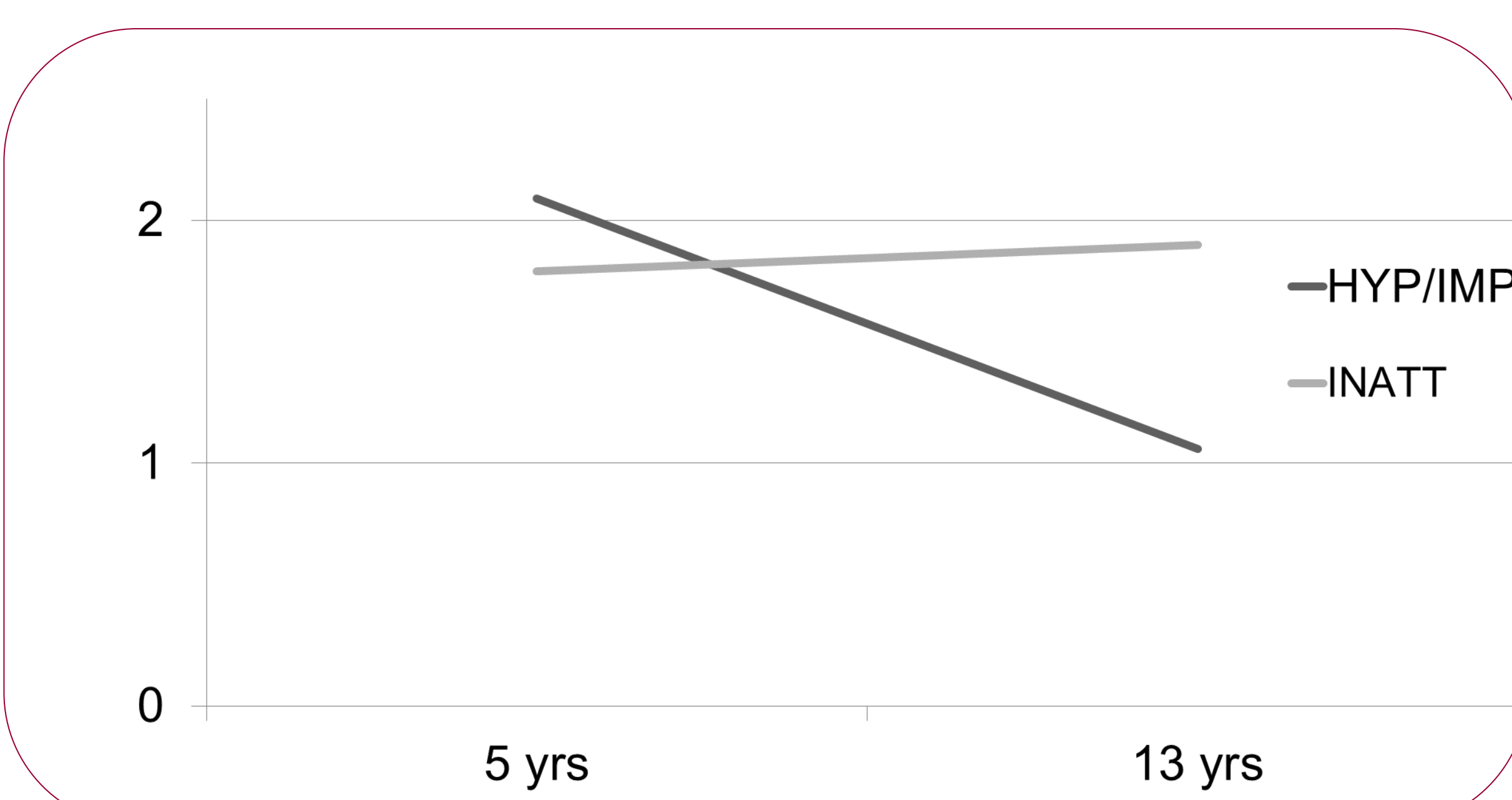
METHOD

Participants

At 5 years (T1) the sample consisted of 72 children with 1/3 being at high risk for developing ADHD. At 13 years (T2) 63 adolescents remained in the study.

Measures

Cold inhibition was measured with a go/no-go task, hot inhibition was measured with a jigsaw cheating task, whereas emotional regulation was measured through parental ratings. At 13 years parents and teachers completed a questionnaire containing items from the DSM-IV criteria for ADHD (APA, 2000), which was also used at 5 years.



RESULTS

Cold inhibition, hot inhibition, and emotional regulation at 5 years predicted ADHD symptoms at 13 years. However, when controlling for initial levels of ADHD symptoms only emotional regulation remained a significant predictor of ADHD symptoms (both inattention and hyperactivity) at T2. This result remained when controlling for emotionality and ODD.

Further analyses showed that of the emotion regulation variables, only regulation of exuberance contributed independently to the explanation of ADHD symptoms at T2 ($\beta = .32, p < .05$).

ADHD symptoms at 5 and 13 years were related ($r = .67$ to $.76$).

Table 1. Pearson's correlations between self-regulatory processes at 5 years and ADHD symptoms at 13 years. Figures within parentheses represent relations adjusted for initial level of ADHD symptoms at 5 years.

	ADHD symptoms at 13 years		
	Combined	Inattention	Hyperactivity
Self-regulation at 5 years			
Cold inhibition	.41** (.00)	.43** (-.11)	.33** (.12)
Hot inhibition	.27* (.15)	.33* (.21)	.16 (.00)
Emotional	.60*** (.35**)	.56*** (.35**)	.55*** (.30**)

* $p < .05$ ** $p < .01$ *** $p < .001$; two-tailed

CONCLUSIONS

The current findings highlight the importance of separating different types of self-regulatory processes in relation to ADHD symptoms. The results indicate that future studies should focus on emotional regulation, particularly regulation of exuberance in relation to ADHD-symptoms across development.

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