

# Home Environment and Adolescent's ADHD; the Protective Role of Early Cognitive Stimulation



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## Background

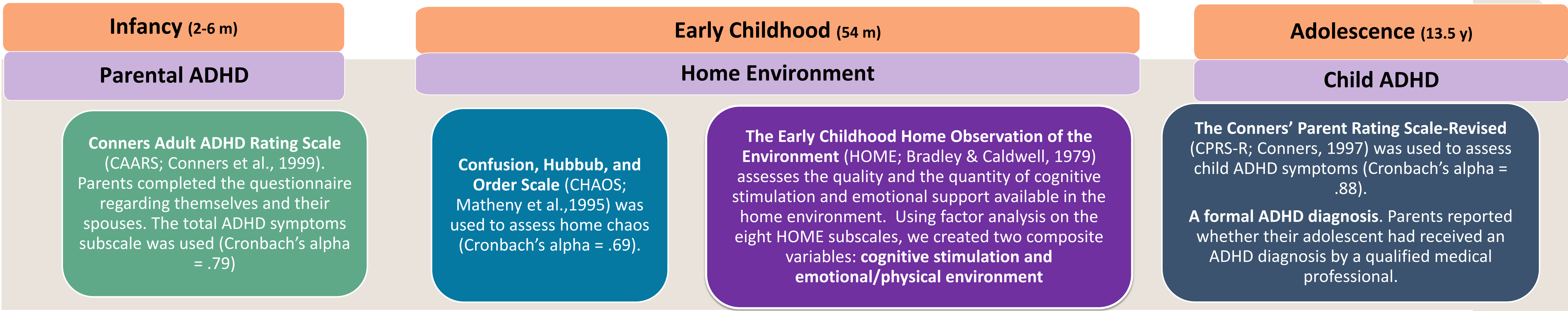
- ❖ ADHD is highly heritable, but an adequate home environment may act as a protective factor that moderates its development (e.g., Mulligan et al., 2011).
- ❖ Within a prospective high-risk longitudinal study, we examined the aspects of early childhood home environment that serve as risk/protective factors in the development of ADHD. Specifically, which aspects differentiated between those participants who were eventually diagnosed with ADHD, and those who were not.

## Method

### Participants

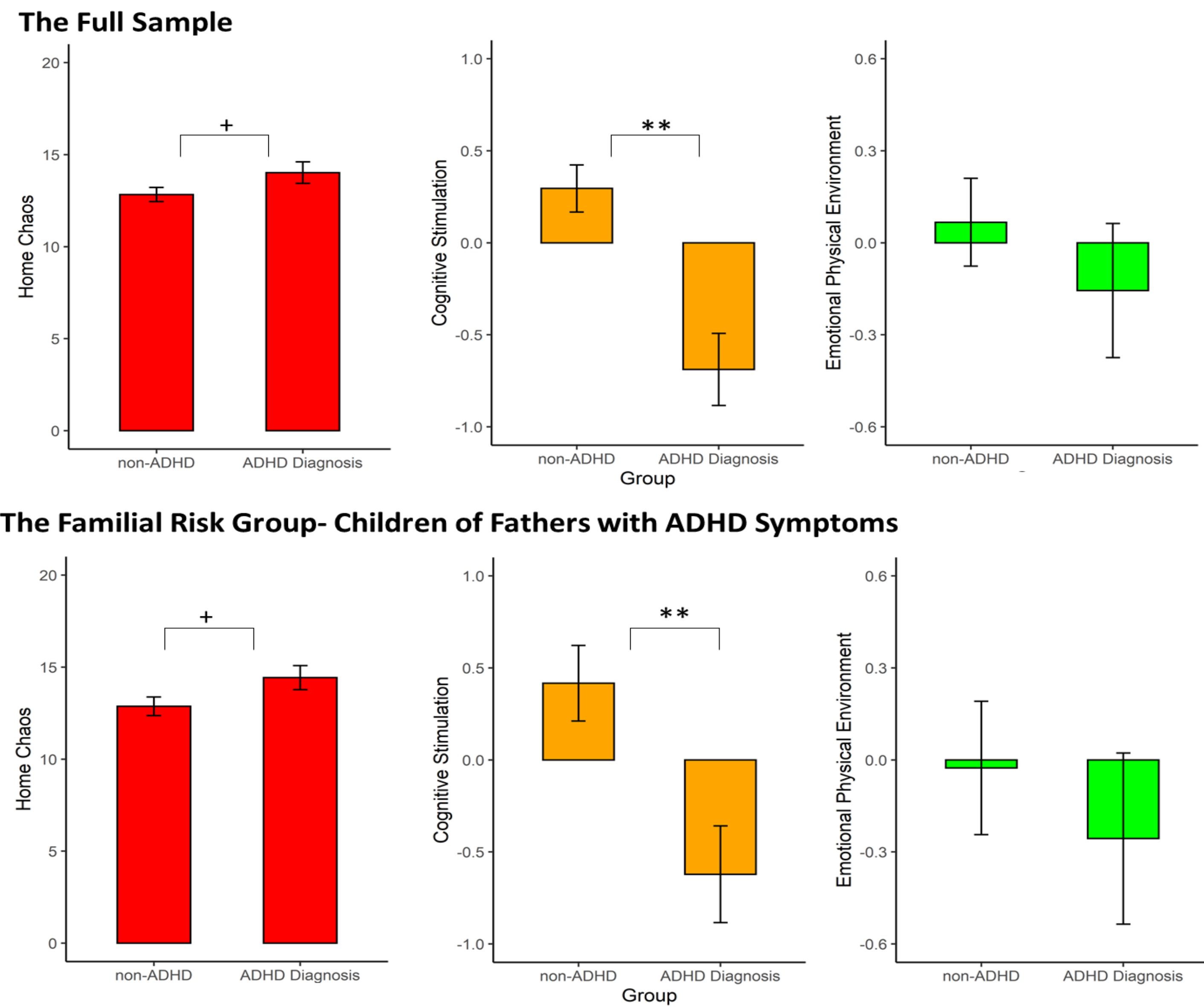
The sample consisted of 70 male adolescents (M = 13.56 years, SD = 0.95); 21 (30%) had been diagnosed with ADHD.

### Design



## Results

Which environmental aspects were different between those who were eventually diagnosed with ADHD and those who were not?



A home environment high in cognitive stimulation in early childhood was the factor that was different between participants that developed ADHD and those who did not.

Early cognitive stimulation longitudinally predicted ADHD symptoms and diagnosis in adolescence

Predicting ADHD Symptoms			Predicting ADHD Diagnosis	
Predictor	$\beta$	$\Delta R^2$	Odds ratio, 95% CI	Wald statistic
Step 1			.01	
Paternal ADHD symptoms	-.08		1.02[.97, 1.07]	.57
Maternal ADHD symptoms	.05		.96 [.89, 1.03]	1.50
Step 2			.18**	
Home chaos	-.03		1.11 [.86, 1.43]	.67
Cognitive stimulation	-.36**		.31 [.15, .67]	8.92***
Emotional/physical	-.20		1.01 [.52, 1.98]	.00
Total R <sup>2</sup> (Adjusted R <sup>2</sup> )			.19(.11)*	

Note. CI = Confidence Interval

Early cognitive stimulation, but not home chaos and emotional/physical environment, **longitudinally predicted both ADHD symptoms and diagnosis** in adolescence.

## Conclusions

- ❖ Early cognitive stimulation may have a protective role in the developmental course of ADHD.
- ❖ Parents' efforts to improve the home environment should focus on promoting learning stimulation, both by providing adequate materials (e.g., toys and activities) and through active encouragement of learning (e.g., reading books to and playing with their children).

## References

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