

AGE-RELATED CHANGES IN DISTRACTIBILITY: DEVELOPMENTAL TRAJECTORY OF SUSTAINED ATTENTION IN ADHD

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SYNOPSIS

The study used the MOXO d-CPT to evaluate age-related changes in distractibility among ADHD children and controls. Results showed that while distractibility in controls tends to diminish with maturation, in children with ADHD it persists into adolescence.

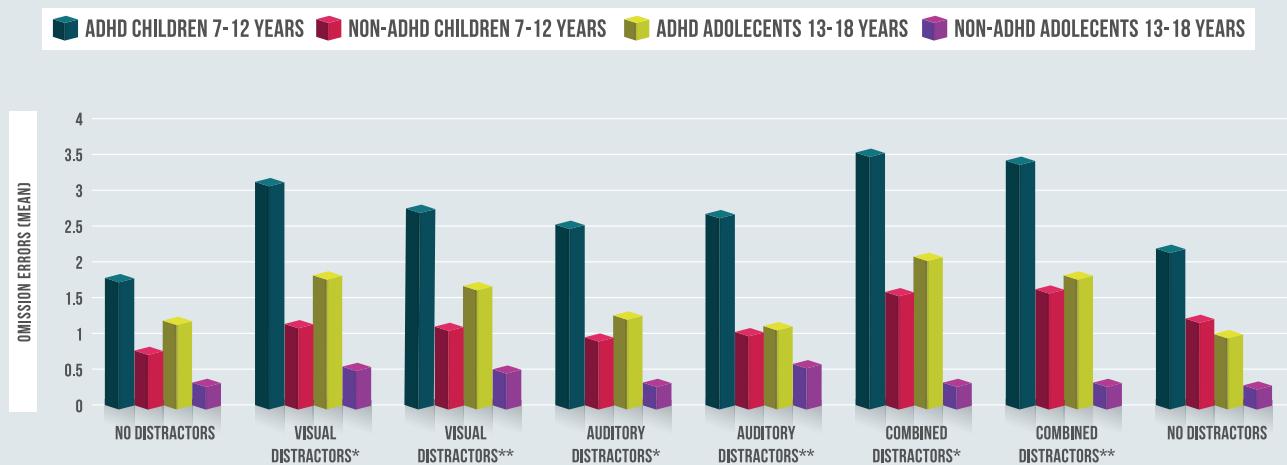
STUDY SUMMARY

- Population: 839 children (7-18 years), of them 478 diagnosed with ADHD, and 361 controls.
- Measures:
 - Parents and teachers form of Conner's ADHD/DSM IV scales.
 - Age appropriate versions of the MOXO d-CPT test were employed for children and adolescents. Omission errors were observed during test performance.

RESULTS

- ADHD children demonstrated higher rate of omission errors in all distractors conditions and all levels of distractibility (low and high) compared with baseline. In the control group, only combined distractors increased the rate of omission errors. The number of distracting stimuli, namely the level of distractibility, did not affect the number of omission errors in controls.
- ADHD adolescents produced more omission errors in the presence of visual distractors and the combination of visual and auditory distractors than in baseline level. This finding was consistent for both low and high levels of distractibility. In the control group, the presence of distractors did not significantly affect the amount of omission errors, as compared with baseline. The number of distracting stimuli did not affect the number of omission errors in adolescents with or without ADHD.
- Children with or without ADHD did not demonstrate higher amount of omission errors in the last level of the test (no distractors) than at the beginning of it (baseline) (Figure 1).

FIGURE 1: DEVELOPMENTAL TRAJECTORY OF SUSTAINED ATTENTION IN THE PRESENCE OF MOXO d-CPT DISTRACTORS



* Low distractibility- one distracting stimuli at a time ** High distractibility-two distracting stimuli presented simultaneously

DISCUSSION

- ADHD children and adolescents were more distracted than their typically developing peers. Although distractibility diminished in adolescent controls, those with ADHD continued to be distracted in a way that resembled younger control children.
- Findings suggest that although part of the difficulties in ADHD could be explained by developmental delay that improves with time, other deficits, such as increased distractibility causing more omission errors, do not show a clear developmental trajectory.