



Dr Jon LaPook: For the first time, researchers have shown how it's possible for children to grow out of⁽¹⁾ ADHD⁽²⁾, as their brains grow up.

Dr Philip Shaw: These are kids who don't have ADHD. These are the brains of kids that do.

LaPook: Doctor Philip Shaw, a psychiatrist and lead author⁽³⁾ of the NIH (National Institute of Mental Health) study, says the findings may help settle⁽⁴⁾ a long standing⁽⁵⁾ question over the nature of ADHD. Does the brain develop normally but more slowly, or does it develop abnormally?

Dr Shaw: We found that kids with ADHD, waves of chilhood brain development were delayed⁽⁶⁾ by two to three years in these kids.

LaPook: Researchers compared the brain images of 223 kids with ADHD to 223 without the disorder. They found most of the action in the front of the brain, the area responsible for attention and impulse control. On average, the ADHD brain on the left shows about a three-to- five-year lag⁽⁷⁾ in development compared to the normal one on the right. By mid-adolescence that gap has narrowed. So there may still be lingering⁽⁸⁾ behavioral issues.

There is more reassuring news today for parents. A study of 16,000 children found that disruptive⁽⁹⁾ kids in kindergarten⁽¹⁰⁾ were doing just as well academically by the fifth grade as well-behaved children.

Take 20-year-old Laura Aussness, diagnosed with ADHD at age five.

Laura: I knew I was different from the other kids because I couldn't sit still⁽¹¹⁾, I couldn't concentrate.

LaPook: She's now a college student at a Catholic University and thriving with a 3.6 GPA (grade point average).

The implications of these new findings? It's possible for children to catch up with⁽¹²⁾ the right kind of support.

Richard Gallagher: It may mean that we have to just provide them with education and interventions that are timed differently.

LaPook: For parents of these kids, it means time may be on your side.

Katie Couric: So Jon, what impact will this play in terms of medicating these children if some of them might in fact outgrow⁽¹³⁾ the condition?

LaPook: Well, they may not necessarily totally outgrow it. Remember, this study looked at pictures of the brain, not at the underlying⁽¹⁴⁾ brain chemistry. So a lot of children and adolescents may do much better with medication. But what's exciting about the study to me is that it shows that the brains of these kids can actually develop normally but maybe just at a slower rate.

Couric: It means we shouldn't necessarily pigeonhole⁽¹⁵⁾ them. Dr Jon LaPook, Thank you Jon. **CBSNews**

Lexical helpline:

- 1. grow out of (v): become too mature for something
- 2. ADHD: Attention Deficit Hyperactivity Disorder
- 3. lead author: principle author
- 4. settle (v): put in order
- 5. long standing: existing for a long time
- 6. delay (v): make late
- 7. lag: position of having fallen behind
- 8. lingering: persisting in the mind
- 9. disruptive: agitated, restless

10. kindergarten: a school or class for young children before they begin formal education

11. still: not moving, motionless**12. catch up with (v):** finally have an effect

- **13. outgrow (v):** change so that old interests, ways of behaving are lost in favour of new ones **14. underlying:** positioned beneath something else
- **15. pigeonhole (v):** categorise somebody without a great deal of thought