

2019 study looked at ADHD arcs in boys and girls

Research Spotlight *highlights scientific research focused on girls and women with ADHD and informs non-scientists about the research process. This Spotlight breaks down “Sex differences in ADHD trajectories across childhood and adolescence,” published in January 2019.*

Study goal

To determine if seven- to 15-year-old boys and girls showed different ADHD symptom trajectories over eight years

Already known about the topic

- In childhood, ADHD is more commonly diagnosed in males than in females, but this difference disappears in adulthood.
- Because girls with ADHD typically show less disruptive behavior and are not referred as often for evaluation by teachers and parents, ADHD is often identified later in girls than it is in boys. ADHD diagnoses in women may “catch up” to those in men during adulthood, as women can report on their own inattention symptoms and refer themselves for evaluation.
- How ADHD symptoms look can change over time. It’s not yet known if these changes vary between males and females or contribute to age-related differences in diagnoses.

How this study was done

- 1,571 seven-year-old children were randomly selected from 56 schools in Switzerland to participate (with parental consent).
- From ages seven to 15, teachers annually rated their hyperactive/impulsive behaviors and attention levels.
- Researchers used growth-mixture modeling to study the students’ symptom trajectories over eight years.

Study findings

- Thirty-nine percent of boys and 41 percent of girls showed problems with inattention at some point during childhood and/or adolescence. Of those:
 - Problems with attention were generally stable over time for both sexes.
 - Twenty-four percent of affected girls who were highly inattentive during childhood became more attentive as they got older.
- Thirty-seven percent of boys and 19 percent of girls showed elevated hyperactive/impulsive behaviors at some point during childhood and/or adolescence. Of those:
 - Boys were 18 percent more likely than girls to show frequent hyperactive/impulsive behaviors during childhood. For these boys, symptoms remained high into adolescence.
 - Fifty-three percent of girls (10 percent of all girls in the sample) showed trajectories of “adolescence-triggered” hyperactive/impulsive behaviors. For these girls, hyperactive/impulsive behaviors weren’t present in childhood; they emerged in early adolescence, from ages 11 to 13.

Actionable items for...

Parents of girls with ADHD symptoms:

- Be aware that when symptoms are present – particularly symptoms of inattention – they often continue over time.
- Recognize that for some girls, adolescence may bring more ADHD symptoms, especially hyperactive/impulsive behaviors.
- Consider tracking your daughters’ symptoms at regular intervals, such as before medication-management visits or at the beginning of school terms. This can help inform conversations with clinicians about whether intervention changes are needed.
 - Talking with adults who see your daughters can help you track ADHD symptoms over time and across settings.

Clinicians who evaluate and treat ADHD:

- Investigate whether new hyperactive/impulsive behaviors in early-adolescent girls might reflect broad patterns of ADHD symptoms or could be due to other causes.
- Conduct thorough developmental histories to reveal whether symptoms (particularly less disruptive symptoms of inattention) may have been present earlier in childhood, even if more obvious hyperactive and impulsive behaviors don’t emerge until adolescence.

Educators of school-age girls:

- Know that ADHD symptoms look different in male and female students, and may appear different over time.
- Check out these [CHADD training videos](#) that help teachers identify youth with ADHD and support their classroom success. 📺



Term to know

Growth-mixture modeling: This type of data analysis can help researchers identify differences in symptom trajectories over time. It groups similar trajectories together, allowing researchers to characterize different patterns of change.