



**ADHD**  
AWARENESS MONTH  
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ADHD MYTHS AND FACTS  
KNOW THE DIFFERENCE

## Myth: ADHD is caused by bad parenting

**Fact: Parents do not cause ADHD. The disorder comes from the accumulation of many environmental and genetic risk factors.**

By Stephen V Faraone, PhD

The idea that parents cause ADHD arose from the naïve observation that children with ADHD frequently misbehaved, along with the belief that misbehavior was a sign of poor parenting.

Although it is true that lax parenting can lead to misbehavior, **there is no evidence that lax parenting leads to the inattention, hyperactivity and impulsivity that define ADHD.**

The myth that bad parenting causes ADHD also comes from the fact that when psychologists teach parenting skills to parents, the behavior of the child improves. While this is true, it is also true that teaching parenting skills does not markedly improve the symptoms of ADHD.

Additionally, a very large body of scientific studies has discovered the causes of ADHD symptoms

- the genes we inherit from our parents **AND**
- adverse environments to which we are exposed.

We initially suspected genetic causes of ADHD from the simple observation that

ADHD runs in families. If one child has ADHD, their brothers and sisters and more likely to also have ADHD compared with the average child.

### Twin Studies

There have also been many twin studies of ADHD from Europe, the United States and Australia. There are two types of twins. Identical twins are genetic copies of one another. They share 100 percent of their genes. Fraternal twins are like regular brothers and sisters. They only share 50 percent of their genes.

All of the twin studies show that if one twin has ADHD, the probability that the other twin has ADHD is much greater if the twins are identical. This is very strong evidence that genes are involved in causing ADHD.

Very recently, I worked with an international group of over 100 scientists and clinicians to study the genetic material (DNA) of 20,183 people diagnosed with ADHD and 35,191 not diagnosed with ADHD. When we compared these two groups, we found convincing evidence that 12 areas of the

human genome harbored risk genes for ADHD. These data also proved that there were many more risk genes to discover. The total number is unknown but it could be in the thousands. **The data also showed us that each gene had only a very small impact on the risk for ADHD.**

The twin studies also proved that there must be some environmental risk factors for ADHD. We know that because if one identical twin has ADHD, the risk to the co-twin is not 100 percent. Scientists have discovered many environmental risk factors for ADHD. Most of these risks occur very early in the development of the brain. For example, children who have complicated births are at higher risk for ADHD, especially if the complication affects the flow of oxygen to the brain. When children are exposed to toxins (e.g.,

lead, pesticide, pollution), that can also increase the risk for ADHD. Like the genetic risk factors, the environmental risks each, individually have a very small effect on the probability of developing ADHD.

In rare cases, ADHD can arrive from a single cause. Examples are extreme environmental deprivation or large rearrangements of the chromosomes. But I and other scientists who study ADHD have concluded that **most cases of ADHD are due to the accumulation and interaction of many environmental effects that change the brain in a manner that leads to the symptoms of ADHD.** So, let's not blame parents for the ADHD in their children. That simply does not square with the facts.

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## ABOUT THE AUTHOR



Stephen Faraone, PhD, is a Distinguished Professor in the Departments of Psychiatry and Neuroscience & Physiology at SUNY Upstate Medical University, President of the World Federation of ADHD and Program Director for [www.ADHDinAdults.com](http://www.ADHDinAdults.com). His research studies of ADHD include epidemiology, neurobiology, and psychopharmacology.

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