

# Some kids with heart defects struggle in school

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Deficits in academic performance tend to rise along with severity of the defect, study finds.

(HealthDay)—Children born with heart defects often do worse in school than their peers, a new study finds.

Researchers led by Dr. Matthew Oster of Children's Healthcare of Atlanta analyzed end-of-grade test results for third-grade students in North Carolina public schools between 1998 and 2003.

Compared to other [children](#), those with a [congenital heart defect](#) were 40 percent less likely to meet reading proficiency standards, 20 percent less likely to meet math standards, and 50 percent less likely to meet standards in both subjects, the study found.

The researchers also found that 2.8 percent of children with heart

defects were held back in third-grade, compared with 1.9 percent of other children.

Two experts in pediatric care who reviewed the new findings weren't surprised.

"Children with [congenital heart disease](#) have long been known to be at increased risk for later problems in school with attention and academic performance," said Dr. Andrew Adesman, chief of developmental and behavioral pediatrics at Cohen Children's Medical Center of New York.

He said that the extent of academic difficulty is often in proportion to the severity of the child's heart defect. "Fortunately, the risks for later developmental problems are lowest for children with the least complicated and most common forms of congenital [heart disease](#)," Adesman said.

So, "most children with congenital heart disease will not have major academic struggles," Adesman said, but "parents and clinicians need to be vigilant for academic difficulties in children with a history of complex congenital heart defects."

Another expert stressed that more must be done to find out the causes of [academic performance](#) issues in these kids.

One question: "How much of the associated neurodevelopmental delays derive from side effects of necessary care—such as use of the heart-lung machine during heart surgery—versus resulting from defect-causing genetic issues that can also affect the brain?" said Dr. Bruce Gelb.

"Answers to that will direct physicians as to what strategies to try in order to achieve the best outcomes for children with congenital [heart defects](#)," said Gelb, who directs the Mindich Child Health and

Developmental Institute at the Icahn School of Medicine at Mount Sinai in New York City.

The study was scheduled to be presented Tuesday at the annual meeting of the American Heart Association in Orlando. Findings presented at medical meetings are typically considered preliminary until published in a peer-reviewed journal.

**More information:** The U.S. National Heart, Lung, and Blood Institute has more about [congenital heart defects](#).

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