

Youth with autism gravitate toward STEM majors in college—if they get there

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It's a popularly held belief that individuals with an autism spectrum disorder (ASD) gravitate toward STEM majors in college (science, technology, engineering mathematics).

A new study, co-authored by Paul Shattuck, PhD, assistant professor at the Brown School at Washington University in St. Louis, confirms that view yet finds that young adults with an ASD also have one of the lowest overall college enrollment rates.

The study, "STEM Participation Among College Students with an [Autism Spectrum Disorder](#)," was published online Nov. 1 in the [Journal of Autism and Developmental Disorders](#).

"STEM careers are touted as being important for increasing both national economic competitiveness and individual career earning power," Shattuck says. "If popular stereotypes are accurate and college-bound youth with autism gravitate toward STEM majors, then this has the potential to be a silver lining story for a group where gloomy predictions about outcomes in adulthood are more the norm."

The study provides the first national picture of college enrollment and STEM participation for young adults with an ASD, compared with 10 other disability categories, including learning disabilities; speech/[language impairment](#); [intellectual disabilities](#); [emotional disturbances](#); [hearing impairment](#); visual impairment; orthopedic impairment; other health impairment; [traumatic brain injury](#); and

multiple disabilities.

The study found that 34.3 percent of students with an ASD gravitated toward STEM majors. That's not only higher than their peers in all 10 other disability categories, but also higher than the 22.8 percent of students in the general population who declared a STEM major in college. Science (12.1 percent) and computer science (16.2 percent) were the fields most likely to be chosen by students with an ASD.

But the study also learned that young adults with ASD have one of the lowest overall college enrollment rates when compared with students in other disability categories. Factors such as gender, family income and ability to carry on a conversation played a role in whether or not the individual with ASD attended college.

"Clearly, only a subset of youth with autism will head to college after high school," Shattuck says. "A low family income puts these young people at a disadvantage even if they are cognitively capable. We need to get better at connecting students with financial aid to help them achieve their highest potential and be contributing members of society." The study says the tide may be turning. Advances in early identification and treatment of ASDs are likely to increase [college enrollment](#) rates, and with it increased participation in STEM majors.

"More and more children are being identified as having autism," Shattuck says, "children who grow up to be adults. With the majority of a typical lifespan spent in adulthood, that phase of life is the one we know least about when it comes to autism spectrum disorders.

"This study is the latest addition to a growing body of evidence we are building here at the Brown School about the needs, strengths and challenges facing this vulnerable population," Shattuck says.

More information: Link to article:

<http://www.springerlink.com/content/e4x4818242078875/?MUD=MP>

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