

# Researchers confirm link between high test scores in adolescence and adult accomplishments

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Students who score extremely high on standardized tests as adolescents often become high achievers in adulthood, a new study has confirmed.

Researchers from Vanderbilt University who lead the [Study of Mathematically Precocious Youth \(SMPY\)](#) and the [Duke University Talent Identification Program \(TIP\)](#) looked at 259 TIP adolescent students who had scored in the top 0.01 percent (or top 1 in 10,000) for their age on above grade-level tests in the 1980s and 1990s. This is approximately equivalent to scoring 700 or higher on the SAT-Math or 630 on the SAT-Verbal section, or both, before turning 13 years old.

They found that 37 percent of the students who met that criteria went on to earn doctorates, 7.5 percent earned tenure as college professors and 9 percent held at least one patent by the time they turned 40.

The researchers found that not only did the top .01 percent fare well against the general population, but also when compared to the top 1 percent of adolescent test-takers.

The research used Web-based search engines to collect information about the educational, occupational and creative accomplishments of these same individuals in adulthood.

"The findings here indicate that above-level testing at an early age is a

helpful tool for identifying individuals with profoundly high ability who have the potential to make great contributions to society in adulthood," the researchers concluded in their study. "Along with other factors (including opportunity, interest, etc.), the results of above-level tests can be used to identify individuals with great academic potential."

The researchers say the study's findings are a strong validation of prior studies conducted by SMPY, the longest-running study of gifted children in the world. Over the past 40-plus years, SMPY's studies have shown that students tested and identified as gifted at an early age generally become high-achieving adults. Further, quantitative and verbal scores are predictors of the type of careers they are likely to pursue.

This latest study was authored by Matthew Makel and Martha Putallaz of Duke TIP, David Lubinski and Camilla Benbow of SMPY, and Harrison Kell of the Educational Testing Service, the world's largest private nonprofit educational testing and assessment organization.

"Duke TIP was an ideal partner for our most recent study because they have been collecting data since 1980 and they were able to pull comparable samples by age and ability," SMPY's Lubinski said.

"Replication is so important and it's not done often enough. I'm excited because this study confirms what we have learned about intellectual giftedness, and this makes our results that much more definitive."

"Duke TIP is a strong advocate for above-level testing as a diagnostic tool for academically talented students and this study shows how powerful a tool it can be when it comes to identifying individuals who grow up to achieve outstanding accomplishments," said TIP's Makel. "If an easier test had been used, or even the same test used a year or two later, we would not have been able to identify these [students](#) as being different from many of their peers."

**More information:** M. C. Makel et al. When Lightning Strikes Twice: Profoundly Gifted, Profoundly Accomplished, *Psychological Science* (2016). [DOI: 10.1177/0956797616644735](https://doi.org/10.1177/0956797616644735)

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