

What makes a math person? Interest, recognition are key factors, researchers say

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The research suggests that interest and recognition are key factors that can help students become “math persons.” Credit: <https://flic.kr/p/gXGgKd>

You're either a math person or you're not – at least that's what we've

always heard.

Now, National Science Foundation-funded research conducted by Florida International University Professor Zahra Hazari shows that's not really the case.

"Much of becoming a math person and pursuing a related STEM (science, technology, engineering or math) career has to do with being recognized and becoming interested – not just being able to do it," said Hazari, who specializes in STEM Education at FIU's College of Education and STEM Transformation Institute. "This is important for promoting [math education](#) for everyone since it is not just about confidence and performance."

Hazari worked with colleagues Jennifer D. Cribbs from Western Kentucky University, and Philip M. Sadler and Gerhard Sonnert, both from Harvard University. Their research, published recently in the journal *Child Development*, suggests that interest and recognition are key factors that can help students become "math persons," while confidence in one's abilities is not enough.

To arrive at their conclusions, the team surveyed more than 9,000 college calculus students from across the country.

Data analysis revealed that while belief in one's competence and performance is indeed a factor to seeing oneself as a math person, it is secondary to the individual's interest in the subject and the recognition received from teachers, parents, relatives or friends.

"It is surprising that a student who becomes confident in their math abilities, will not necessarily develop a math identity," Hazari said. "We really have to engage students in more meaningful ways through their own interests and help them overcome challenges and recognize them

for doing so. If we want to empower students and provide access to STEM careers, it can't just be about confidence and performance. Attitudes and personal motivation matters immensely."

This summer parents can help their children become math people with these simple tips from Hazari:

- Have your [child](#) teach or help a younger sibling or friend with a math problem.
- Help your child connect math to something they're interested in (figuring out LeBron James' shooting percentage in the NBA Finals or the proportion of water to Kool-Aid that makes the best popsicle).
- Shower your child with encouragement and public kudos if they solve a challenging math problem.
- And don't forget to hold your child to high expectations in math. Believing they can do challenging [math](#) is another way of recognizing them.

Provided by Florida International University

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