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LONGITUDINAL RELATIONS BETWEEN YOUNG STUDENTS' FEELINGS ABOUT MATHEMATICS AND ARITHMETIC PERFORMANCE

Song, C. S., Xu, C., Maloney, E. A., Skwarchuk, S.-L., Di Lonardo Burr, S., Lafay, A., Wylie, J., Osana, H. P., Douglas, H., & LeFevre, J.-A.

Math is an important skill that we use every day. But some people just don't like math and try to avoid it.

What did we ask?

(1) Do children feel anxious about math? (2) Does children's math anxiety relate to their math performance?(3) Are the relations between math anxiety and math performance reciprocal over the course of one school year? (4) Does working memory moderate these relations in this time frame?



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What did we do?

Children completed measures of math anxiety and math [number comparison, problem solving, and arithmetic fluency (i.e., addition and subtraction)] in grade 2 and again in grade 3. They also completed measures of children's matrix reasoning ability, receptive vocabulary, and working memory in grade 2 only.

What did we find?

Children felt somewhat positive about math. Children's feeling about math was correlated with arithmetic fluency, but not with number comparison or problem solving. Poor arithmetic fluency predicted the change in children's feeling about math from grade 2 to grade 3, especially for children with higher working memory scores.

Why is this important?

These findings help us understand how math anxiety develops in relation to math performance, and when (and how) to intervene.

Brought to you by Dr. Erin Maloney's Cognition and Emotion Lab at the University of Ottawa

