Michigan Today - November 2008

RESEARCH NEWS

At the magical age of eight, belief synchs with behavior

BY DIANE SWANBROW

November 18, 2008

I think I can, I think I can. Believe. You can fly if you just believe. I won't die if you just believe.

Archetypal advice from The Little Engine That Could and Tinkerbell notwithstanding, a new study finds that until children are at least eight years of age, their beliefs have little or no connection to their behavior.

They may believe they are good at math even when they do poorly on tests, for example. Or they may behave aggressively with other children even though they say it is hard for them to act aggressively.

The study of approximately 1,600 children ages six to 18 appears in the September/October 2008 issue of Child Development.

"Children entering school have two important tasks," says University of Michigan psychologist Pamela Davis-Kean, who conducted the study with colleagues from U-M and from the University of Minnesota, Indiana University and Duke University. "They need to learn and achieve in school, and they need to cooperate with others.

"The findings of this study suggest that the best ways to help children accomplish these key tasks may be very different depending on their age."

Davis-Kean directs the Center for the Analysis of Pathways from Childhood to Adulthood at the U-M Institute for Social Research (ISR). The research was funded by the National Science Foundation.

For the analysis, Davis-Kean and colleagues analyzed data from two different long-term studies. In one study, children in Southeast Michigan were asked about their ability in math and how well they expected to do in math in the coming year. The researchers also obtained the students' math grades from school records.

In the other study, children in Indiana and Tennessee were presented with cartoons or videos depicting ambiguous events, and then asked how easy or difficult it would be for them to act aggressively in that situation. For this study, mothers were also asked about their children's aggressive behavior.

With children younger than age 8, direct responses like time-outs or rewards may work better than having them think about their behavior.

The researchers analyzed the concurrent connection between beliefs and behaviors across both studies and at different ages. They found that the link between belief and behavior strengthened with age, for both math performance and aggressive behavior. And they also found that until the age of eight, the link was virtually nonexistent.

According to Davis-Kean, the findings have important implications for parents, teachers and others interested in helping children to improve academic achievement and behavior.

"Just saying to a child, 'You know this is wrong. Why do you keep doing it?' may not be an

effective strategy before the age of 8," Davis-Kean said. "Younger children may know it's wrong, but they haven't associated that knowledge with their own behavior."

With children younger than age 8, it may be more effective to try to change their behaviors directly—either by giving them time-outs to discourage negative behavior or by rewarding them for positive behavior.

With children over the age of 8, encouraging children to think differently about their behavior may have more of an impact, she said.

Diane Swanbrow is a writer for the University of Michigan News Service