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Do children understand how feelings affect school performance?

Most of us know that the way we feel emotionally and physically can influence how we do on tests. That's why we're told to get lots of rest and eat a good breakfast before taking a big exam. And previous studies have found that people do worse on tests and solving problems when they're tired, hungry, or upset.

But do children understand the link between feelings and performance? A new study by researchers at the University of Washington and the University of California, Davis, tells us that children comprehend the influence of one on the other, but only under certain circumstances. The study is reported in the January/February 2009 issue of the journal *Child Development*.

The researchers looked at more than 70 children who were 5, 6, and 7 years old, as well as a group of adults. Study participants heard stories about children who felt different positive and negative emotions (such as happiness or sadness) or different physical feelings (such as feeling well-rested or hungry), then faced challenging tasks at school (such as a spelling test, math problems, and a science lesson). For example, in one story, a girl loses her favorite teddy bear on the way to school and feels sad. Later that day, still feeling sad, she has to complete a difficult math assignment.

The researchers also looked at the participants' understanding of how other factors—such as how much effort a student makes and the amount of noise in the classroom—affect school performance.

They found that children of all ages understood that negative emotional and physical states would lead to poorer school performance. The fact that young children knew that negative emotions could cause poor school performance was especially surprising, since parents and teachers often focus on the physical side of getting ready for school (hence the advice to get lots of rest or eat a good breakfast), and rarely talk about the emotional side (for example, advising children to try not to feel sad). The researchers also found that children understood that levels of interest, effort, and classroom noise would affect performance.

When it came to positive feelings, however, only 7-year-olds recognized, as adults do, that positive feelings could improve school performance. For the younger children, seeing the tie between positive emotions and school performance was difficult; it was easier for them to grasp how positive physical feelings would lead to doing well in school.

The older children also had a better understanding of why emotions and physical states affect school performance. In explaining their judgments, they described how such feelings influence concentration, attention, the brain, and other aspects of thinking.

"Changes in emotional and physiological states are an inevitable part of children's everyday experience in the school setting," according to Jennifer Amsterlaw, research scientist at the Institute for Learning & Brain

Sciences at the University of Washington, who led the study. "If children know how and why these experiences affect them, they will be better able to prepare for and control their ultimate impact on school performance."

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Summarized from *Child Development*, Vol. 80, Issue 1, Young Children's Reasoning About the Effects of Emotional and Physiological States on Academic Performance by Amsterlaw, J (University of Washington), Lagattuta, KH (University of California, Davis), and Meltzoff, AN (University of Washington). Copyright 2009 The Society for Research in *Child Development*, Inc. All rights reserved.
