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## Write Your Test Stress Away

Study found that putting fears, anxieties on paper improved student performance

By **Serena Gordon**  
*HealthDay Reporter*

THURSDAY, Jan. 13 (HealthDay News) -- Whether it's winter mid-terms or the upcoming SAT that's got your teen's stomach tied up in knots, a simple intervention might ease their anxiety and improve their scores.

New research, published in the Jan. 14 issue of *Science*, found that when students spent 10 minutes writing about their test anxiety and fears just before a test, their scores went up. And, the biggest improvements were seen in teens who were most stressed before testing.

"We show that giving students an opportunity to write their thoughts and feelings about an exam before the exam can boost performance, especially for those who are anxious before the test," said study co-author Sian Beilock, an associate professor of psychology at the University of Chicago.

"Students who are chronically anxious generally perform below their classmates," noted Beilock, who is also the author of the book, *Choke: What the Secrets of the Brain Reveal About Getting It Right When You Have To*.

"With this intervention, we have an opportunity to erase that difference," she added.

In background information in the study, the researchers pointed out that while the idea of drawing attention to the problem of test anxiety by writing about it might intuitively seem to be something that would increase worry, other studies done on depression and other psychological disorders have found the opposite to be true. Expressive writing about a traumatic or emotional event is an effective way to get people to stop worrying about the experience.

To see if this type of writing might help lessen testing anxiety, the researchers performed four tests on high school and college students.

The first test included 20 college students who were asked to take two math tests. During the first test, the students were simply told to do their best. For the second test, the researchers added pressure to the situation by promising a monetary incentive if people scored well. However, each student was paired with another, and both partners had to do well on the test to earn the money. Half of the students were told to spend 10 minutes before the test writing about how they felt about it. The other half was told to sit quietly during this time.

Those who didn't perform writing exercises "choked under pressure" and their test scores dropped by 12 percent, according to the study. Those who wrote about their feelings regarding the test improved their scores by 5 percent.

In the second study, the researchers had 47 college students taking the same set of tests. Only this time, there was a third group that was instructed to write for 10 minutes about an unrelated unemotional event. Students in the non-writing group and in the group that wrote about an unrelated event had a 7 percent decrease in their test scores, while the group that wrote about their test fears improved by 4 percent.

Studies three and four were done one year apart, using different 9th grade students from year to year who attended the same school. Study three had 51 students and study four had 55 students.

Six weeks before a final exam, the researchers measured the students' general anxiety levels about taking tests. Then, right before taking the first final exam of their high school career, half were directed to write about their test anxiety. The other half was told to sit quietly and think about something other than the test topics.

After the final exam was graded, the researchers found that those with the highest anxiety levels performed the worst in the non-writing group. But those in the writing group who were highly anxious before the test performed similarly to the low-anxiety teens. There was no significant difference between the writing and non-writing groups if the students had low anxiety levels about the test to begin with, the study authors noted.

Beilock said the writing exercise works because once you have the worries out on paper, you don't need to worry or ruminate about them during the test.

"Worries can compromise important thinking and reasoning skills that we could otherwise use to think at our best. This writing exercise gives students more cognitive horsepower," she explained.

"They're definitely on to something here," said Dr. Jonathan Pletcher, an assistant professor of pediatrics in the division of adolescent medicine at Children's Hospital of Pittsburgh. "When you're worrying and you don't put that worry into words, it has an impact and makes it harder to focus and to pull knowledge from your memory to do well on the test."

Pletcher said he recommends a similar technique for teens who have trouble sleeping at night. Before bed, writing down a list of concerns you have clears your head and lets you fall asleep.

He said that students could practice this skill ahead of time and see if it helps.

Although many teachers might not allow a student to take 10 minutes to write down their worries just before a test, Beilock said that writing about your test fears earlier in the day might still be helpful.

"In our increasingly test-obsessed culture, we can develop quick and easy exercises to help everyone achieve their full potential," she said.

**More information**

Learn more about test anxiety and what your child can do about it from the [Nemours Foundation](#).

*SOURCES: Sian Beilock, Ph.D., associate professor, psychology, University of Chicago, and author, Choke: What the Secrets of the Brain Reveal About Getting It Right When You Have To; Jonathan Pletcher, M.D., assistant professor, pediatrics, division of adolescent medicine, Children's Hospital of Pittsburgh; Jan. 14, 2011, Science*

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