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## The write stuff for test anxiety

Fearful students score better if they jot down their worries

## By Bruce Bower

High school and college students can go from choking to smoking on big tests by writing about their exam fears beforehand, a new study suggests.

In what amounts to a Heimlich maneuver for choking under pressure, writing down test-related worries for 10 minutes before taking a major exam appears to dislodge those concerns and clear the way for higher achievement, say psychologists Gerardo Ramirez and Sian Beilock of the University of Chicago.

Writing about unspoken fears of failure and related anxieties lets students reevaluate such concerns and keeps worries at bay during a test, Ramirez and Beilock propose in the Jan. 14 Science.

"One bout of writing about test anxiety can substantially increase students' test scores and prevent the dreaded choke," Beilock says.

Ramirez and Beilock provide the first evidence of people reaping immediate benefits from expressive writing, remarks psychologist James Pennebaker of the University of Texas at Austin. His research has linked writing about personal conflicts and traumas over several days at the start of a college semester to improved physical health and final grades by semester's end.

Researchers have also found that depressed people who write about distressing personal experiences over several months ruminate progressively less about melancholy topics.

Over two consecutive school years at a Midwestern high school, Ramirez and Beilock had teachers randomly assign one of two writing exercises to a total of 106 ninth-graders about to take final exams in biology. Each student had 10 minutes to write either thoughts and feelings about the upcoming exam or a description of a biology topic that they suspected wouldn't be on the exam.

On questionnaires administered six weeks before the final exam, 54 of the students had reported constant worries about taking—and potentially failing—tests.

Among test-anxious students, those who wrote about exam-related feelings scored an average of 6 percent higher on the final than those who wrote about biology topics. Expressive writers received a B+ average on the final, versus a B- for biology writers.

It's unclear whether students plagued by test anxiety can repeatedly raise their test scores via expressive writing, Beilock notes.