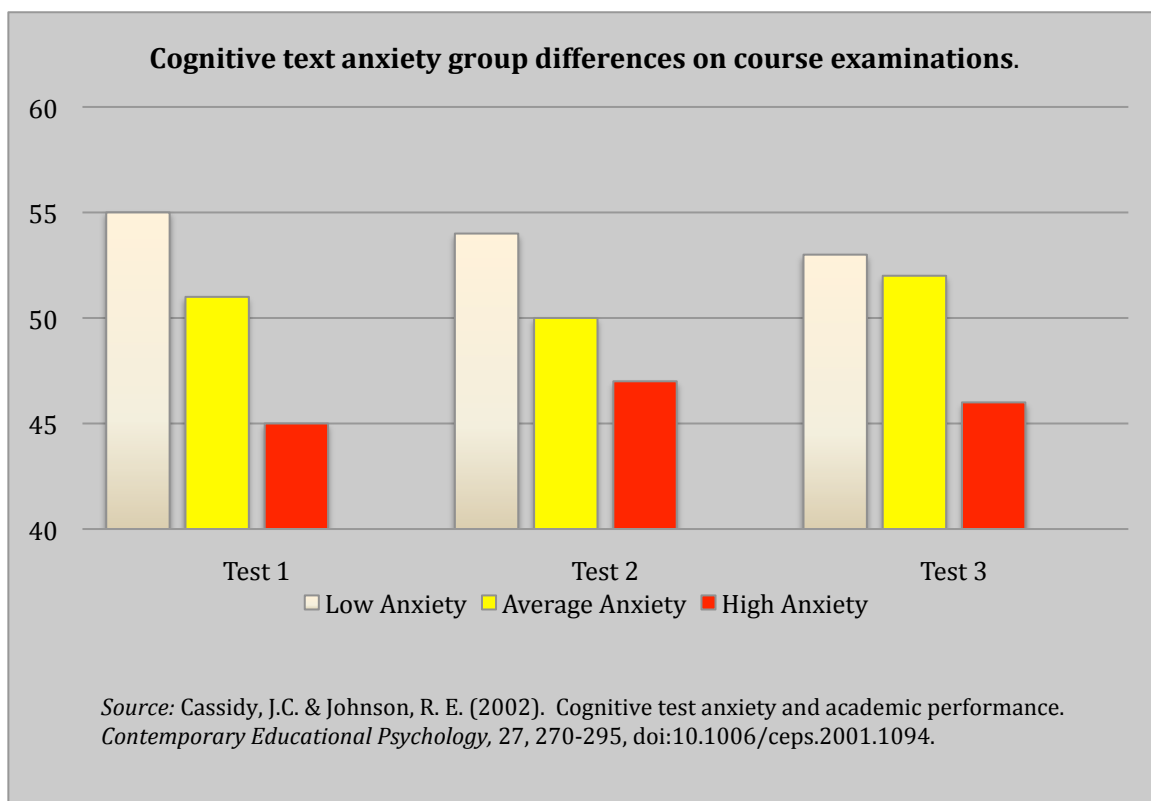


Reducing Test Anxiety
Bill Cerbin
UW-La Crosse Center for Advancing Teaching & Learning
June , 2011

Many college students have test anxiety that interferes with their academic performance. Not only does anxiety affect students' test performance but also interferes with their test preparation and contributes to the belief that there is little they can do to improve their performance.

The graph below shows the test scores of 168 students in an undergraduate psychology course. Based on a test anxiety questionnaire the researchers categorized students as low, average or high-anxiety. High-anxious students (the red bar) consistently had lower examination scores than students with lower test anxiety.

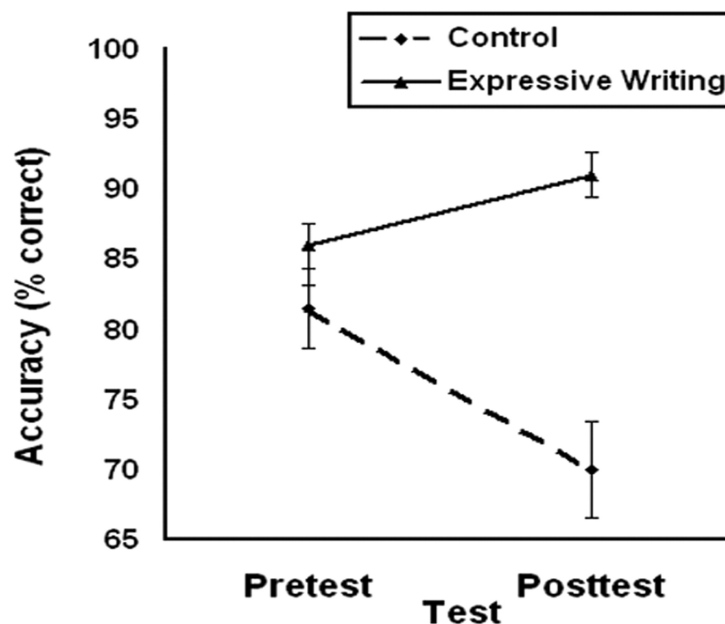


Results like these are typical; test-anxious students underperform on examinations. But recent research has uncovered a way to reduce the negative effects of test anxiety. And, the intervention is surprisingly easy to implement in college courses.

Test anxious students who write about their test-related worries for a few minutes just before an examination essentially perform normally, that is, closer to their actual potential. To illustrate, the graph below shows the results of a study with two groups of high-anxious students.

On a low-pressure pretest the two groups scored at the same level. The researchers then induced anxiety by making post-test performance of greater consequence to students. One group (expressive writing) was asked to write about their test worries for several minutes before the post-test. The

control group did not do the writing. Students who wrote about their anxiety improved their performance on the post-test while the performance of the control group dropped significantly.



Source: Ramirez, G. & Beilock, S. (2011). Writing about testing worries boosts exam performance in the classroom. *Science*. Vol. 331, January 14, 2011, pp. 211-213.

How to identify test anxious students. The Cognitive Test Anxiety Scale (below) is a short questionnaire that focuses on the cognitive consequences of test anxiety such as students' tendencies to have irrelevant or "intruding" thoughts during test taking and compare themselves to other students. The questionnaire is an easy way to determine the number of test-anxious students in your classes.

How to use expressive writing to reduce test anxiety. If you decide to use the expressive writing technique, allow extra time—about 10 minutes—before each of your class examinations for students to respond in writing to the prompt (see prompt below). If you collect the written responses, be sure to indicate that students' responses are anonymous and will not be evaluated or graded. After the allotted 10-minute writing time, students can proceed with the exam. Remember that the expressive writing technique will help only test-anxious students. Students who have low test anxiety will not benefit from the intervention.

References

- Beilock, S. (2010). *Choke: What the secrets of the brain reveal about getting it right when you have to*. Free Press: NY.
- An interview with Sian Beilock on how writing about testing-worries boosts exam performance in the classroom, <http://www.sciencemag.org/content/331/6014/211/suppl/DC2>
- Cassady, J. C. & Johnson, R. E. (2002). Cognitive test anxiety and academic performance. *Contemporary Educational Psychology*, 27, 270–295. doi:10.1006/ceps.2001.1094.
- Cassady, J. C. (2004). The influence of cognitive test anxiety across the learning-testing cycle. *Learning and Instruction*, 14, 6, 569-592.
- Ramirez, G. & Beilock, S. (2011). Writing about testing worries boosts exam performance in the classroom. *Science*. Vol. 331, January 14, 2011, pp. 211-213.

Cognitive Test Anxiety Scale

- A. 5 Not at all typical of me
- B. 5 Only somewhat typical of me
- C. 5 Quite typical of me
- D. 5 Very typical of me.

1. I lose sleep over worrying about examinations.
2. While taking an important examination, I find myself wondering whether the other students are doing better than I am.
3. I have less difficulty than the average college student in getting test instructions straight.*
4. I tend to freeze up on things like intelligence tests and final exams.
5. I am less nervous about tests than the average college student.*
6. During tests, I find myself thinking of the consequences of failing.
7. At the beginning of a test, I am so nervous that I often can't think straight.
8. The prospect of taking a test in one of my courses would not cause me to worry.*
9. I am more calm in test situations than the average college student.*
10. I have less difficulty than the average college student in learning assigned chapters in textbooks.*
11. My mind goes blank when I am pressured for an answer on a test.
12. During tests, the thought frequently occurs to me that I may not be too bright.
13. I do well in speed tests in which there are time limits.*
14. During a course examination, I get so nervous that I forget facts I really know.
15. After taking a test, I feel I could have done better than I actually did.
16. I worry more about doing well on tests than I should.
17. Before taking a test, I feel confident and relaxed.*
18. While taking a test, I feel confident and relaxed.*
19. During tests, I have the feeling that I am not doing well.
20. When I take a test that is difficult, I feel defeated before I even start.
21. Finding unexpected questions on a test causes me to feel challenged rather than panicky.*
22. I am a poor test taker in the sense that my performance on a test does not show how much I really know about a topic.
23. I am not good at taking tests.
24. When I first get my copy of a test, it takes me a while to calm down to the point where I can begin to think straight.
25. I feel under a lot of pressure to get good grades on tests.
26. I do not perform well on tests.
27. When I take a test, my nervousness causes me to make careless errors.

*Item should be recoded to produce consistency in scale so that high values always reflect high-cognitive test anxiety responses. The possible range of scores is 27 to 108. Higher scores indicate higher cognitive test anxiety.

Sources: Cassady, J. C. & Johnson, R. E. (2002). Cognitive test anxiety and academic performance. *Contemporary Educational Psychology, 27*, 270–295. doi:10.1006/ceps.2001.1094.

Cassady, J. C. (2004). The influence of cognitive test anxiety across the learning-testing cycle. *Learning and Instruction, 14*, 6, 569-592.

Writing Prompt

“Please take the next 10 minutes to write as openly as possible about your thoughts and feelings regarding the test you are about to take. In your writing, I want you to really let yourself go and explore your emotions and thoughts as you are getting ready to start the test. You might relate your current thoughts to the way you have felt during other similar situations at school or in other situations in your life. Please try to be as open as possible as you write about your thoughts at this time. Remember, there will be no identifying information on your essay and your response will not be evaluated or graded. Please start writing.”

From: Ramirez, G. & Beilock, S. (2011). Writing about testing worries boosts exam performance in the classroom. *Science*. Vol. 331, January 14, 2011, pp. 211-213. See supporting materials at www.sciencemag.org/cgi/content/full/331/6014/211/DC1