## **Writing Out Your Worries**

Worry is probably the most common form of anxiety and also one of the hardest habits to break. Much performance anxiety involves worrying, and a classic example of it is test anxiety. Now a couple of psychologists at the University of Chicago have demonstrated the beneficial effects of writing down those worries just before a test.

In Study #1 20 students were administered two math tests, the first to provide a baseline level of math ability, the second to subject the students to a high pressure situation before taking a math test. The pressure was created by telling the students they would be given a monetary award if they got a high score. They were also told they would be paired with another student and that both scores would have to be high to get the award. They were then told the other student had achieved a high score, thus putting pressure on the subjects to do their very best. Finally, they were told that they were being videotaped during the test, which also puts extra pressure on performance. Just before the second test started, half the students were asked to spend 10 minutes writing about "their thoughts and feelings regarding the math problems" while the other students just sat quietly. **Results**: The students who wrote down their feelings had higher scores on the second test than did the sitting quietly students.

Study #2 (47 students) replicated the first study in every detail but one: instead of sitting quietly, one group was asked to write about "an unrelated unemotional event" while the other group wrote about their feelings about the math test. **Results**: Again those who wrote about their feelings got higher scores. A review of their writings revealed a lot of specific fears and worries (e.g., "I'm afraid I'm going to make a mistake.")

Studies #3 and #4 left the laboratory and went into the school system, specifically 9<sup>th</sup> graders taking their first Biology Final Exam. Several weeks before the exam, both groups were given questionnaires measuring their test anxiety. Just before taking the exam, they were instructed to write about either their thoughts and feelings about the exam, or about "a topic that would not be covered on the exam" **Results**: Those students who scored high on test anxiety and who wrote about their anxiety outperformed the other high anxiety group by about 6% on their test scores, which translates into a B+ versus B- grade. However, for the low anxious students the writing intervention made no difference in test scores.

So if you're anxious about tests to begin with, why would writing about your test worries help you do better on a test? Most people would try to focus their attention on something else and not think about their worries! However, if you read the What's New article **The Imp of the Perverse** you know that trying to put worries out of your mind is actually more distracting than just focusing on them. As the authors of this paper note, worry thoughts are *more intrusive* and thus more disruptive to your working memory when you are trying to put them out of mind. Writing them down makes them less likely to intrude when you start taking the test. This approach is also consistent with treatment for other kinds of anxiety, such as phobias. Fear of making a mistake becomes a kind of phobia, and the fear heightens as one approaches the possibility of making one (that is, when one

starts the test). **Just writing down what you fear is a way of facing that fear.** Facing your fear leads to a reduction in fear and fewer intrusive thoughts, freeing up working memory for remembering answers to the test.

So here's an idea the next time you have to take a test. Before starting the test, take a few minutes to write down your worries about it. It just might get you a better grade. Can you think of other "high pressure" situations where such an intervention might help?

Ramirez, G. & Bellock, S.L. (2011). Writing about testing worries boosts exam performance in the classroom. *Science*, Vol. 331, Pages 211 – 213.