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## Teacher Interventions Used To Reduce Test Anxiety: Does Free-Writing Before a Test Help Reduce Anxiety?

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Teacher Interventions Used  
To Reduce Test Anxiety: Does Free-Writing  
Before a Test Help Reduce Anxiety?

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*Abstract: The focus of this study is to look at how common testing anxiety is among students and how teachers can work with their students to reduce this anxiety. The study examines and discusses past research to see what causes test anxiety and what methods have been effective in the past in reducing this anxiety. Then, based on past research, a similar study is completed in my high school honors geometry classroom to determine whether the suggestions given by past researchers will decrease reported test anxiety in my students.*

## Introduction

Testing is one of the main ways used to assess students. However, testing might not reflect a students' actual knowledge due to many factors. One of these factors is test anxiety. Hashemi and Mashayekh (2011) define test anxiety as a mental condition in which people can become distressed to the point that it can affect how they perform before, after, or during a test. Testing is part of our culture, especially in the United States. Students begin testing in school at a very young age, continue testing through graduation, are tested throughout college, and, most often, must be tested to be qualified in their field of study. It is estimated that between elementary school and graduation from high school, students will take around 1,000 tests (Hashemi & Mashayekh, 2011). This is a shockingly high number of tests, meaning that each academic year students will have taken around 83 tests. Teachers need to help students learn to control high-testing anxiety because it could affect their performance. The students' anxiety could lead to scores that are lower than the optimal score that they could have achieved and do not give teachers an accurate representation of the students' knowledge. Cizek and Berg (2006) explain that, "Previous research has demonstrated that test anxiety can have a negative impact on grade point average and that children with high levels of test anxiety are more likely to drop out of school" (as cited in Barterian, Carlson, Goforth, Segool, & Won Der Embse, 2013). The major goal of assessment is to measure how well students are meeting learning objectives. If testing anxiety is interfering with students' performance, then tests are not accurately portraying what students do or do not know, not giving the teachers an accurate description of whether our students are learning the desired objectives set by the state and teacher.

Test anxiety has been studied for a very long time. It interests many people because of their personal experiences with tests and how testing anxiety has affected their own performance, especially on important tests such as the ACT and SAT. This topic particularly interests me because, throughout my elementary and high school years, I experienced high test anxiety. As will be discussed later, certain people are more susceptible to experiencing testing anxiety. Because of my personal experience, I am interested into looking at what causes this anxiety and how I, as a future teacher, can alleviate some of the anxiety that my students may be experiencing.

I know that I am not the only person who has or is currently experiencing test anxiety. According to High-Von der Embse, Barterian, and Segool (2013), 10-40% of students experience test anxiety to the point that it is affecting their performance. High-stakes testing is becoming more prominent and important for students to graduate, to get into college, start a career, and is also affecting how teachers are rated. Thus, test anxiety rates are likely to continue to rise. The increase of testing creates a dire need for teachers to do things in their classroom to help students overcome their anxiety so that they can perform to the best of their ability.

### Literature Review

#### **Test Anxiety Definition**

Hall Brown et al. (2005) agree with Hashemi and Mashayekh's definition of test anxiety. Hall Brown et al. (2005) reports that "Test anxiety can be described as physiological, cognitive, and emotional response created by stress experienced during the assessment, and, it in a sense, has a negative contribution on the students' attitudes towards courses" (as cited in Dogar, Gurses, Gunes, Kaya, & Yolcu). Test anxiety is a performance-based anxiety (Hashemi & Mashayekh, 2011), which is a feeling a person has in a situation where performance really

matters or when there is a lot of pressure to do well. Examples of when someone can feel performance-based anxieties include before an important sports game, a big performance, or a presentation in front of a large audience. Many of the same symptoms one may feel before one of those big events are the same feelings that someone experiencing test anxiety can feel before a test. Hashemi and Mashayekh (2011) list some of the symptoms. Symptoms of test anxiety include both mental symptoms such as guilt, anger, helplessness, and worry, and physical symptoms such as sweaty palms, headaches, nausea, feeling cold or hot, and losing focus. One of the most commonly cited symptoms of test anxiety in students is the feeling of “blinking out,” not being able to recall the information that was previously learned. Many thoughts during a test can include past experiences, expectations, and feelings of low or high self-esteem. When negative thoughts occur, according to Beilock and Carr (2005) and Grimmley and Banner (2008), it is assumed that negative thoughts about the situation and/or the consequences will take over some of the limited working memory resources, which then cannot be used for recall of information (as cited in Hoogerheide, Mavildi, & Paas, 2014). This assumption explains why people report the feeling of “blinking out” during a test, even on easy questions!

### **Who Test Anxiety Affects**

Not every person will experience test anxiety, and each person who does have test anxiety will experience a different amount. In all of the studies researched, the authors cite three different categories of anxiety levels: low, moderate, and high. People who fall under the category of experiencing high amounts of test anxiety are the ones who experience most of the negative symptoms that were discussed above. To reiterate, Von der Embse, Barterian, and Segool (2013) report that 10-40% of students experience test anxiety that can be categorized at the high level (Goh, Liem, See Yeo, 2015). In addition, “Test anxieties appear to be increasing

in step with the increased national emphasis on standardized testing. The majority of students rate schoolwork and exams as the major sources of worry and stress in their lives” (as cited in Hashemi & Mashayekh, 2011, p. 2150). Teachers can help reduce the major source of stress in these students’ lives if they are willing to try to teach their students to manage their stress and change some things in their classroom that will help decrease their stress. These topics will be explored later.

Now that we understand the prevalence of test anxiety among students, we can look to which students in our classroom are most likely to experience this anxiety. In a study completed by Dogar, Gurses, Gunes, Kaya, and Yolcu in 2010, the researchers found that females are more likely to experience test anxiety. The assumed reason that females experience higher rates of test anxiety is because they, along with minorities, experience stereotype threat. A stereotype threat is “the possibility that a poor performance will confirm negative assumptions about the group to which they belong” (Paul, 2013). Because of the stereotype threat, females tend to perform lower than what they are capable. The study continues to report that students who have siblings that are seen as successful and intelligent are also more likely to experience test anxiety (Dogar, Gurses, Gunes, Kaya, & Yolcu, 2010). Students who feel that they cannot reach the expectations that their siblings may feel more under pressure to perform well. However, the largest group of students who reports having high-test anxiety are those with low self-efficacy and self-image. Cassady (2004) supports this idea by explaining that test anxiety is highly correlated with low-performing students and students with poor study skills. The two statements have a strong connection. Low performing students typically have a lower self-confidence than those who are consistently performing well in school. Many people may believe that these students are unmotivated to try hard. However, Culler and Holohan (1980) found that, “Students

with high-test anxiety have been shown to study as much or more than their low anxiety peers, but the methods of study reported by the high-anxiety group were highly repetitive and less effective” (as cited in Cassady, 2004, p. 571). From this, we can deduce that students who are not performing well on tests are often trying to study but just not doing so effectively. Once the students arrive for the test, they may feel confident because of the amount of studying done. When the test is distributed, the students realize that they do not know what they thought they did, increasing their anxiety. The students may not understand why they are incapable of succeeding. Then, on future tests, these students will develop the belief that they will always perform poorly, no matter how hard they try (Cassady, 2004). The students begin to see tests as threatening and begin to develop learned helplessness. Bandura (1989) reminds us that low levels of self-efficacy are associated with a motivational orientation that is characterized by learned helplessness. So we must ask: What can teachers do to help their students with high test anxiety perform better, with less stress leading up to the exam?

### **Ideas on How to Reduce Anxiety in the Classroom**

First, we must consider how psychologists suggest reducing anxiety in general. We will then consider how a teacher can play a role in reducing this anxiety, especially test anxiety. Hashemi and Mashayekh (2011) explain that the best way to reduce anxiety is to work on personal health, diet, exercise, and sleep. Their suggestions continue to explain that improving your self-image, motivation, and attitudes can help reduce anxiety. As many know, teachers do not have control over how healthy a student is, how much sleep he or she gets, or what his or her home life is like. But teachers can help reduce anxiety in some ways. One of the main areas causing this test anxiety is the low self-image of students who consistently perform poorly on tests. This is an area teachers can work on with their students. Coleman (1993) gives specific

examples of how teachers can improve self-image of their students. Coleman's suggestions include a long list of small changes teachers can make in the classroom: Encourage students to remind themselves of the positive attributes they hold; focus on creating realistic plans of actions for finding and reaching students' individual goals; congratulate students' progress, even if the end goal is not yet met; use descriptive feedback, for example, say "You set up the equations correctly!" instead of "Good job"; do not compare progress between students; and use practice tests to boost confidence. Self-image is one of the main reasons students experience test anxiety, so the simple ideas listed above can improve the students' images of themselves. Cassady (2004) supports Hashemi & Mashayekh by stating that to overcome test anxiety, teachers should implement setting goals in the classroom, show students how to effectively prepare for tests, teach how to control stress, and provide motivational support. By implementing these above ideas in our classrooms, students may be less likely to fall down the spiral of negative thinking from one or two bad performances or experiences with a subject.

Cassady supports setting goals in the classroom to increase self-confidence, but also believes that students need to learn how to prepare for tests. Teachers can also help improve this area as well. As mentioned above, practice tests are a good way to improve self-image, but also help students reduce anxiety. Hashemi and Mashayekh (2011) explain that practice tests are the most proven, yet least used way to study for tests to reduce anxiety. With practice tests, students are given a chance to see their areas of weakness and strength. The students also get a look at how a test may be organized, enhancing their confidence and reducing anxiety. When test day does arrive, teachers can continue to reduce anxiety by making sure that the tests are parallel to the teaching and practice tests.

Salend (2012) focuses on how to write tests to decrease anxiety. Salend explains that it is important to use “student-friendly tests,” which he defines as tests that are valid, accessible, and motivating and employ best practices for creating test directions and items (as cited in Salend, 2009; Saldend, 2011b). Salend suggests to use essay questions to test students on information learned during cooperative learning or inquiry activities, while using multiple choice or true and false questions to test students on factual knowledge, making sure to use the same terminology used in class. Salend (2012) continues explaining that tests should be easy to read, using vocabulary students know, and separating directions so it is easy to distinguish directions from questions. Salend also suggests using test questions related to students’ lives.

We must realize, though, that just by making the test easy to read and relatable may not reduce anxiety in students. As seen above, confidence and thoughts before and during the test can also cause anxiety. So, it is also important for teachers to teach test taking strategies (Hashemi & Mashayekh, 2011). The teacher can develop and review study guides that will provide students with insight on the purpose, content, and formation of the test. Lastly, make sure summative assessments are not the only type of assessment used. Consider using other assessments such as portfolios and observations. This will make students feel more comfortable, knowing that tests are not the only part of their grade.

### **Past Research on Reducing Test Anxiety**

Everything presented above is relevant, but it is crucial to look at different research that has been put into practice to try and reduce test anxiety and what effect they had on the students. We know the two big ways to reduce test anxiety are improving students’ study and test-taking skills along with increasing their self-confidence.

The first study we will discuss was performed to study test anxiety by teaching test taking strategies, but also worked to increase self-image of students. Gih, Liem, See Yeo (2015) looked at how using Cognitive-Behavioral Therapy (CBT) in Singapore schools works, to see if it lowered test anxiety among students. The items contained in a CBT program include teaching relaxation techniques, teaching skills such as making a schedule to study, paying attention to physical signs of stress, teaching muscle relaxation techniques, and teaching positive self-talk. The research found that after two months, CBT greatly lowered test anxiety in students compared to the non-participating students. However, the research found that positive self-talk did not aid in lowering test anxiety, but the other strategies discussed above did. The research also compared whom CBT benefitted most. The study found that highly anxious students had the greatest benefit from the program. The study also found that moderately anxious students also benefitted immensely. The evidence showed that the control group of moderately anxious students with no intervention increased in test anxiety over time, whereas the experimental group decreased. From these studies, we see that teaching test taking strategies and how to study are some of the best ways teachers can help their students reduce test anxiety. It could be that when students learn how to study and take tests, they become more confident also increasing their self-image. Both of the factors that are correlated with high-test anxiety may not necessarily be causing test anxiety. Not having proper test taking and study strategies can lead students to perform poorly, thus creating a low self-image. From these studies, we noticed the biggest decrease in anxiety is made when the focus is on teaching test taking strategies and promoting good study habits.

Moreover, some studies looked at reducing test anxiety by implementing techniques right before a test was given. Ramirez and Beilock (2011) completed this study that looked at how 9<sup>th</sup>

grade students' test performance would change if they were given ten minutes before a test to write down their anxieties about the test, write about an irrelevant topic that they are thinking about at the time, or just sit quietly. The results show that providing time for students to clear their working memory of unrelated test thoughts increased test performance (as cited in Hoogerheide, Mavilidi, & Paas, 2014).

After looking at this study, Hoogerheide, Mavilidi, and Paas (2014) formed their own hypothesis on test taking strategies. The researchers' hypothesis was that allowing students to look ahead on a math test before the test began would lower anxiety, increasing test performance. The three researchers found that allowing sixth graders to look ahead produced higher test scores than their counterparts who were not allowed to look ahead. The participants were split into three groups: low, moderate, and high anxiety. Each group was then further split in half, one that had the opportunity to look ahead and one that did not. Each group that had one minute to look ahead produced higher test scores. The authors believe that this is because students were able to see what was going to be asked of them, reducing anxiety. The authors also believe that by flipping through the test questions, the schemas that needed to be used were activated right at the beginning of the test, also increasing test performance (Hoogerheide, Mavilidi, & Paas, 2014). These two groups of researchers found that teachers can introduce test-taking strategies before the test begins to reduce anxiety.

This idea is also supported by Meichenbaum (1972) who designed a test anxiety reduction technique that calls for students to become "aware of their anxiety-producing thoughts and emit thoughts and behaviors that would facilitate attention to the task" (p. 39). Skills like these can be used in classes further down the road, on classroom exams or high stakes testing. If students write down their thoughts at the top of the page or look ahead in a test section to

activate their schemas, they perform better. Learning these skills will not only help in the short-term, but also in the long term. Based upon these interventions introduced in the past to help reduce test anxiety, I applied these researchers' ideas to perform a similar intervention in my own classroom, to see how the intervention given right before a test impacts the students' anxiety level.

### Methodology

I implemented the study in my high school honors geometry classroom, composed of 9<sup>th</sup> and 10<sup>th</sup> grade students ranging from 15-17 years old. There are a total of 80 students in honors geometry, 70 of whom participated in the study due to absences when the baseline data was collected.

At the beginning of the semester, I gave each student a survey (Appendix A) that asks students different questions such as their beliefs about their ability in mathematics, their self-reported test anxiety score on a scale of 1-5, and different coping methods for dealing with their test anxiety. The survey allowed me to gather a baseline of data for how much stress the students self-report and how much the students believe that stress affects their actual test performance. After the baseline data were collected, the students tested with no intervention for the first semester. Then, once I began teaching the classes as their student teacher in the spring, I implemented the intervention to all of the honors geometry classes. Most of the students in all three classes participated on behalf of my mentor teacher, as she did not want only one class to be altered. My mentor teacher explained that if she were to change something in one class, she would change it for them all. If one class was affected positively or negatively, she wanted the rest of the classes to have the same experience so that all students received the same treatment.

**Intervention**

At the beginning of each test throughout the third quarter, students cleared off their desks.

I then handed out a half sheet of paper with the following directions:

*Use this sheet and take 3 minutes before the test to write down whatever you want to clear your mind. Write down what you are thinking about so you can start with focus. At the end, fill out the back and turn it in with your test. Good Luck!*

Students were given the three minutes of uninterrupted time to write down whatever they wished. After the three minutes, a timer rang, and I began to hand out the tests as students finished their thoughts. Students kept the half sheet of paper and whatever they wrote on their paper at their desk for the entirety of the test. This means that if students wrote down content on their half sheet of paper, they were allowed to use it on their test. Once the students finished their test, the back of the half sheet of paper had a quick, two-question survey on it to measure the students' test anxiety before this test and their anxiety after the writing activity. This survey is shown in Appendix B.

Once the students finished their test, they brought the test and free-write to my desk and started two piles, one for their test and the other for their half sheet of paper. When students left the classroom, I input the students' reported anxiety before and after the intervention into an Excel spreadsheet. The Excel spreadsheet contained the students' original baseline of test anxiety and how they believe it affected their performance. Then, each time the intervention was performed, new data were entered. The new entries had two columns, one for their anxiety before the test and one for the students' anxiety after the intervention. Because each test covers different material, students' anxiety levels were expected to be different each test—depending on the perceived difficulty of the material. Thus, it is important to see how the students' anxiety

level is affected before each test, looking at the intervention both on a test-by-test basis and as a whole. After the third quarter ended, I had implemented the intervention five times.

At the end of the third quarter, I explicitly asked a few questions about the impact, both positive and negative, that the students felt the writing intervention had on their test anxiety and what their attitude was toward the intervention. I also wanted to know whether the students would use the technique on other tests. Would students write down information or ideas inhibiting their working memory before tests? To get a better understanding of this impact, I gave students a post-intervention questionnaire shown in Appendix C. The students' responses were then grouped for similarity to analyze trends in their responses.

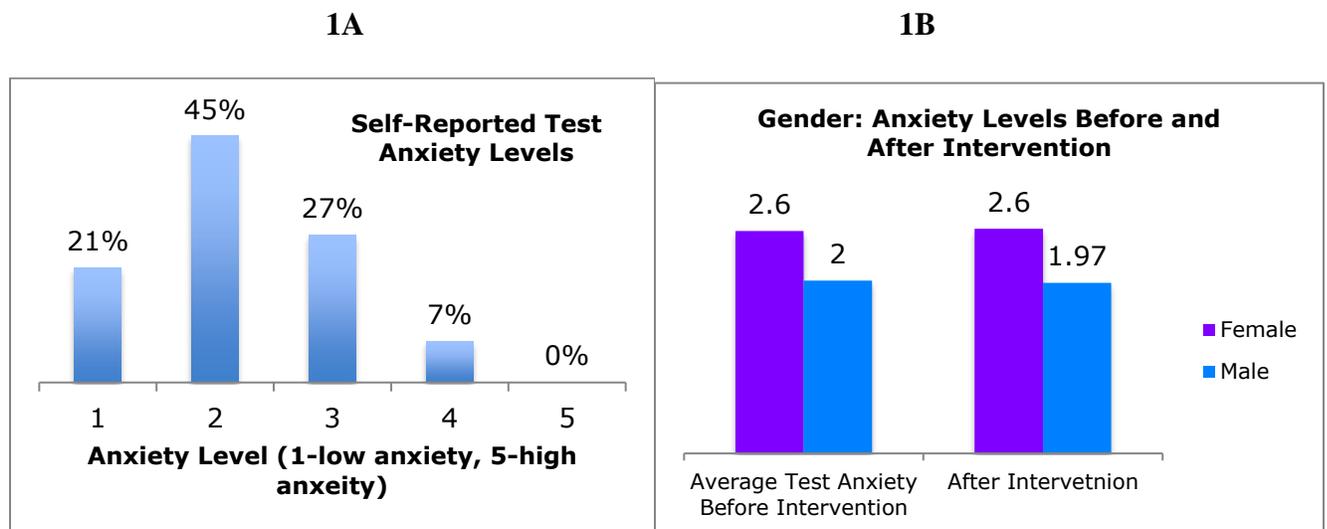
After all of the data was collected, I looked at the data in a few different ways. I compared the students' baseline test anxiety to their reported test anxiety *after* the intervention for the third quarter. I also analyzed the total increase or decrease of reported anxiety for each individual test in the third quarter to determine whether the intervention increased or decreased their anxiety immediately before each test. To analyze this data, I grouped the students by their reported baseline anxiety. I found the total sum of increase or decrease for each individual student. I then found the average increase or decrease for each group. Lastly, I read and organized what the students wrote about in their three minutes of free-writing time. By organizing this data, I saw what techniques the students used to help themselves before the test.

#### Results/Conclusion

In this section, I will discuss the reported impact of reducing test anxiety of the writing intervention for the students. I will also describe the students' opinions on the intervention activity.

## Impact

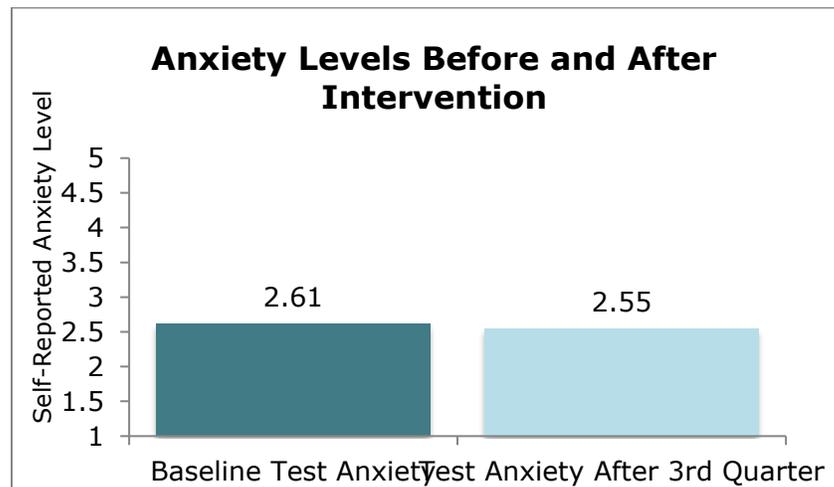
After analyzing the data, a few trends emerged. The first trend that emerged is that most students in the honors geometry class have moderate test anxiety. Graph 1A shows that seventy-two percent of students rated themselves with a test anxiety level of 2-3, showing that the problem studied is relevant to this group of students. Also from this data, it is clear that no student rated themselves as a 5, showing that no student felt, “Very nervous, I dread these days at school.” Instead, students rated themselves between 1-4 on the anxiety scale. In addition to looking at all of the 70 participants who took both the pre- and post-survey, I also analyzed the anxiety levels by gender. Graph 1B shows the difference in anxiety among gender in this group of students. Both before and after the intervention, females exhibit higher self-reported anxiety levels. Continuing, after the intervention, there was not a difference in whom the intervention helped more, as it did not decrease overall anxiety in either of the two sub-groups.



When analyzing the data with hypothesis testing after both the pre- and post-survey, there was not a statistically significant decrease in the students’ test anxiety levels—with both the before and after self-reported anxiety levels remaining relatively the same. The average test anxiety level for the entire sample of students pre-intervention was 2.6. The average test anxiety

level after the intervention was 2.5 (See graph 2 below). The results show that there was not a significant change in how the students perceived their anxiety about test taking after the free-writing activity.

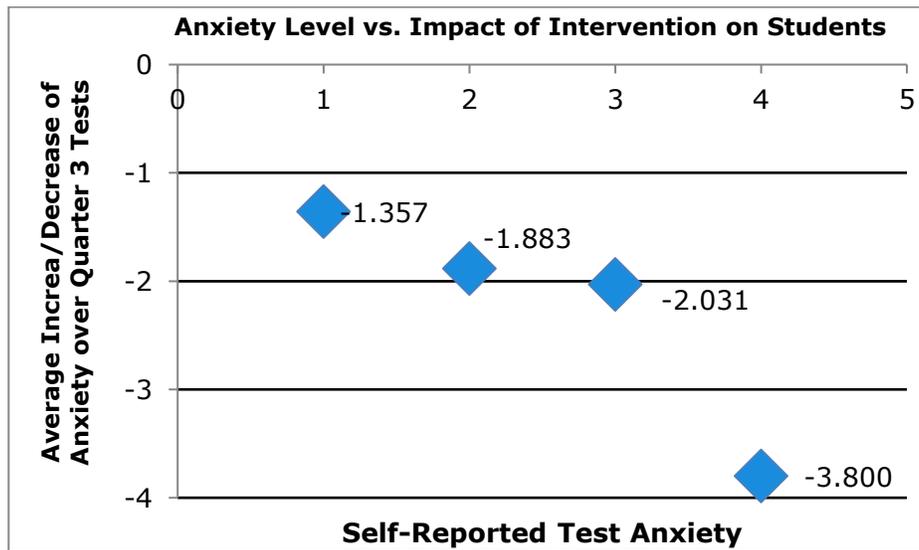
2



The result that was most interesting was the reported anxiety levels after each individual test. As described in the methodology, the students wrote down their anxiety level directly before and after the free-write. After each test, there is a noticeable difference in the students' anxiety levels. The intervention had the largest impact on those with the highest self-reported anxiety level. When analyzing the data, I grouped the students by anxiety level and averaged the total increase or decrease in anxiety after all of the tests. I averaged these changes to see the results the free-write had immediately before a test. Below, in graph 3, one can see the there is a positive association with the data—as test anxiety increases, the reported change in test anxiety also increases. On average, the students reporting a 4—the highest anxiety level reported in this class—had a 3.8 decrease in their anxiety directly preceding a test. On the other hand, those who reported a 1—or very little to no anxiety—only decreased by an average of 1.36 for the individual impact the free-write had directly before a test. These results show that when used

before a test, there is not a great impact on those with little anxiety, but there is a great impact on those with high-test anxiety. The important item to note is that although those with little anxiety did not benefit greatly from the intervention there was not an increase of anxiety in these students either. Thus, although the intervention did not change the students' overall anxiety, it did have a positive impact for decreasing anxiety before individual tests.

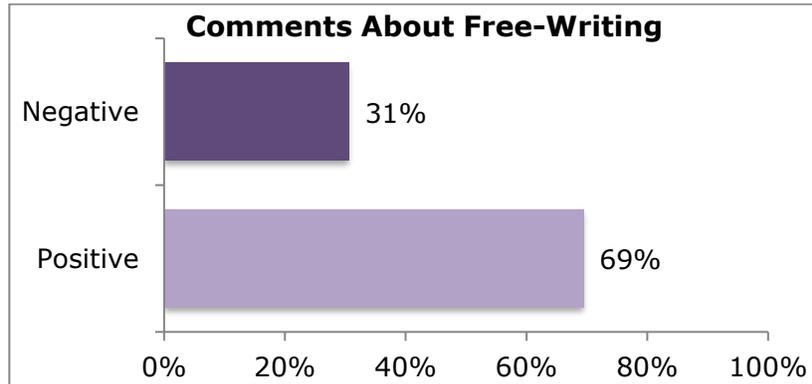
## 3



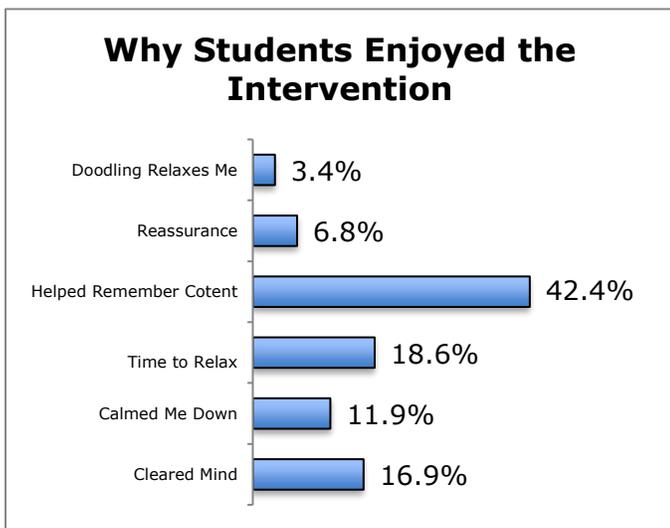
### Student Opinion

After looking at the quantitative data, I analyzed the students' qualitative responses from the post questionnaire on their opinions on the free-writing activity. The first thing I did was to group the positive and negative comments about the free-write on the students' forms. The graph below (4A) shows that the overwhelming majority of students wrote positive responses in regards to the intervention. I then further organized the information by what the positive comments said—organizing the students' opinions into a pie chart. The pie chart shows what students liked most about writing. I replicated the same process for the negative opinions on the free-write, grouping together similar responses. Charts 4B and 4C show these results.

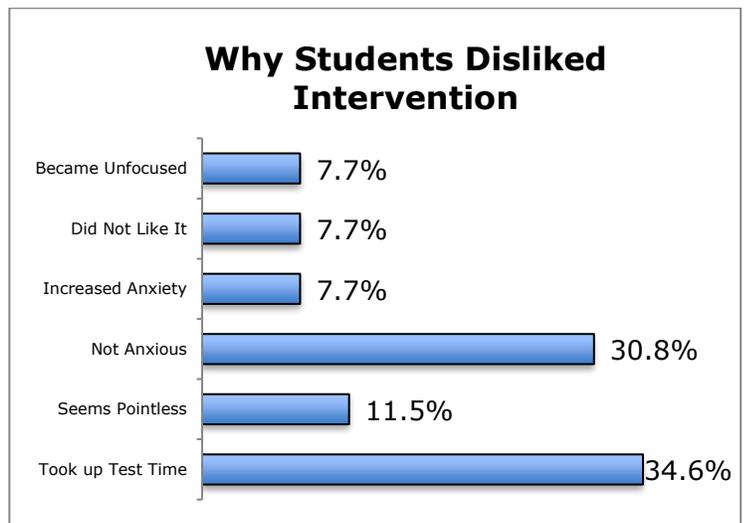
4A



4B



4C



From the qualitative responses, one can see that most students enjoyed the writing intervention because it helped them remember content. When reading students' free-write activity after each test, many students wrote down content including formulas, tricks, or reminders to themselves about things that they most often forget. The majority of the students who did not like the intervention disliked it because it took up test time, and the students felt more rushed.

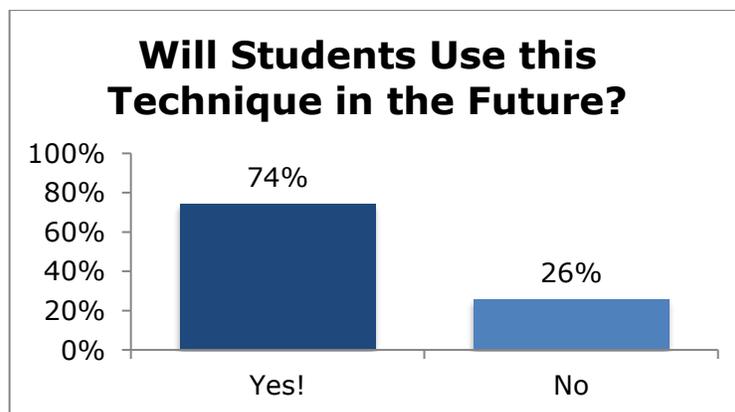
Looking more closely at what the students wrote about during their three minutes before the test shows that almost all students wrote in 1 of the 4 following categories: Their personal

life, their school day, content to remember, or about other things. An example of personal life is students writing about friend difficulties or problems at home. Passages about the students' school day included to-do lists, thoughts about other classes, or their stress levels. Content responses included formulas or reminders for themselves. Lastly, the other category included responses such as doodling, song lyrics, and jokes. The free-writing gave a great insight of the other things going on in the students' lives and had a great impact on me—allowing me to be more empathetic to the students and what they are facing every day. The honesty the students provided in their responses was surprising, as I did not expect the students to take the free-write seriously. The students truly used the time to write.

### **Effect on Students Test-Tasking Strategies**

The last item to analyze is whether the students plan to use this technique in the future. In the analysis, it was found that 74% of students would use this technique in the future even if the half sheet of paper was not provided for them (Graph 5). The students explained in their responses that it is a good way to “get out” the formulas from their minds so that they could focus on their thought process when working problems instead of focusing on lower level thinking skills such as not forgetting items that they memorized.

5



### Discussion

Reflecting upon the results from this ACTION research study, there are limitations that must be considered. The study was completed in an honors geometry class. The students in this class are all high achieving, supported by their parents, are college bound, and self-motivated. The students also view themselves as intelligent in the subject matter—with 75% of the students rating themselves a 4 out of 5 on a scale measuring their mathematical ability. The type of student in this class has an impact on the results, not allowing the impact of the intervention to be generalized to all students.

In addition to the type of students in this class, the effectiveness of the intervention changed from test to test. When studying and analyzing the data, I found that tests that students perceived as most difficult were more likely to increase their stress level or have no change at all. When asked why the students believed this happened, they explained it was because they felt more pressed for time. Thus, the perceived difficulty of the test will affect how much the intervention helps each student. Because each student is challenged by different content, the intervention benefits students in specific situations depending upon their anxiety level about the content.

Lastly, the intervention had different results for each individual student. Receiving feedback from the students was the best way to determine how much they felt it helped, but was very different for each student. Thus, as an educator, it is important to know and understand your class when trying a free-writing activity a test as the results vary by the type of student and content that the test is covering.

### Conclusion

Using the free-writing intervention allowed the students to free their working memory and write about whatever they were thinking. The intervention had a great impact on reducing anxiety directly before a test—especially on those with higher reports of test anxiety. In addition to reducing this situational anxiety, this ACTION research study provided an insight into my students' lives outside the content area that I teach. Each student wrote about something different, surprising me by how honest the students were when writing. Although this study has its limitations, it is an intervention I will try in the future with a different group of students—college preparatory and basic level math students—to see whether the results are similar.

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Appendix A

Pre- and Post- Survey

**Do Tests Stress You Out?**

\* Required

What is your name (First, Last)? (Your name will not be used anywhere)

Your answer

---

What period is your math class?

Choose ▾

Gender? \*

Choose ▾

Do you enjoy solving math problems?

Choose ▾

In your opinion, how good are you at math?

1      2      3      4      5

I do not think I am good at math.                                    I think I am excellent at math.

How likely are you to ask for help in math?

1      2      3      4      5

Not likely at all                                    Very likely

How nervous do you get before a math test on a scale of 1-5? \*



1      2      3      4      5

Not nervous at all. It feels like any other day at school!                                    Very Nervous! I dread these days at school!

What methods do you use to calm nerves before a test? \*

Your answer

---

Describe the symptoms of anxiety you get before a math test below. (Examples: trouble sleeping, butterflies in your stomach, "blanking" out on tests, trouble concentrating, feeling nauseous, etc) \*

Your answer

---

How much do you think your nerves affect your test performance? \*



Choose ▾

If you do get nervous, what do you think causes you to be nervous? (Examples: your personality, influence from parents, etc.)

Your answer

---

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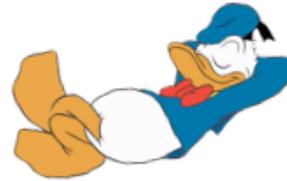
Google Forms

## Appendix B

## Intervention and Survey Before Each Test

- ☐ Use this sheet and take 3 minutes before the test to write down whatever you want to clear your mind. Write down what you are thinking about so you can start with focus. At the end, fill out the back and turn it in with your test.

**Good Luck!**



On a scale of 1-5, rate your anxiety level where

1-Not nervous at all. It feels like any other day at school!

5-Very Nervous! I dread these days at school!

1. \_\_\_\_\_ What was your anxiety level before you came to class today?
2. \_\_\_\_\_ What was your anxiety level after participating in the writing activity?

## Appendix C

## Free-Write Follow Up Questions

Name: \_\_\_\_\_

Class: \_\_\_\_\_

**Free-Write Follow-Up**

1. Go to the link <http://bit.ly/nerves2-misslantz> and fill-in the online survey. When finished please answer the following questions.
  2. What is your test anxiety level now, in the third quarter? (1-Not nervous at all, it feels like any other day at school to 5-Very nervous! I dread these days at school!)
 

1	2	3	4	5
---	---	---	---	---
  3. Overall, after participating in a free-write before a test, my test anxiety decreased.  
Yes or No (Circle one)
  4. Will you use this technique on future tests? (For example, writing items you remember at the top of a test page before you begin)  
Yes or No (Circle one)
  5. Did this technique **REDUCE** your test anxiety overall? If so, why do you think it helped?
  6. Did this technique **INCREASE** your anxiety? If so, why did it increase your anxiety?
  7. Did you enjoy the free write before the test?  
Yes or No (Circle one)
  8. If YES, what did you like about it? If NO, what did you not like about it?
-