# Anxiety-Reduction Techniques for Art Students

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Project Title: Anxiety Reduction Techniques for Art Stu	dents
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### **Abstract**

Visual artists, both professional and students, experience different psychological stresses in their chosen field, including anxiety. There have been minimal empirically based scientific studies conducted on how they cope with the anxiety they experience. This study looked at how effective two relaxation techniques (deep breathing and muscle relaxation) were in helping visual art students lower their levels of self-reported anxiety. There were three classes of Foundation Art students, one 2-Dimensional class and two 3-Dimensional classes, who participated in the study. Anxiety levels were measured with the Depression, Anxiety, Stress Scale and the Penn State Worry Questionnaire. There was not a statistical difference between the pre/post scores for either the PSWQ or the DASS measures of anxiety. However, the small difference that was shown implies that with more improvement the training could show a greater improvement on students' anxiety levels.

# **Anxiety-Reduction Techniques for Art Students**

A visual artist is a person who works in such areas as ceramics, drawing, painting, sculpture, printmaking, design, crafts, photography, video, filmmaking and architecture. These artists, both professional and students, experience different psychological stresses in their chosen field. One of the more interesting topics in this area is how an artist deals with the anxiety that is experienced. Although there has been quite a bit of personal speculation about anxiety, like web blogs, there has been little empirically based scientific study conducted on how effective conventional anxiety reduction techniques are in helping visual artists deal with their anxiety.

In his blog, Ron Stauffer (2011), a professional artist, described his own experiences when making art. In one particular blog, *Blank Canvas Syndrome*, he discussed attempting a painting class for the first time; he normally makes his living creating art on a computer. At the beginning of the blog, he stated that starting projects has been a continual issue for him; this is the time he becomes filled with anxiety. The painting class was no different. Throughout the class, the teacher repeatedly told him that it did not matter how well he did on the painting; unfortunately, this did not help him get started. It was not until the teacher told him to just paint six gray lines and not think about the final painting that he was able to start. The technique of having a student put anything down to break up the purity of an untouched surface is a common one among art teachers to help students get past their initial anxiety; however, its true effectiveness has not been scientifically studied. While this technique did help the artist overcome his anxiety in this

particular situation, in other projects it would not be an effective method since some projects require careful planning prior to actually beginning.

Another artist, Sybil Archibald (2009), uses his blog to describe his different experiences of trying to make his art. In one of his blogs, *Creation Anxiety: The Fear of Making Art*, he wrote that he would like to make art but he feels as if "life" gets in the way. He also writes, "The act of creation is so overwhelming and terrifying that sometimes I cannot physically bear it. I have to run away, turn on the TV or read email just to escape." At the end of the blog, he provided several sketches that are explained as him engaging his fear. However, no information was given if the issue continued after he confronted it or if he ever sought professional help.

In a case study that was done with a visual artist (Lijtmaer, 2002), the author wrote about how the artist struggled with anxiety over selling and promoting her work; the author described it as a resistance to success. This particular artist would have difficulties in beginning her painting, then after starting, she would feel that the work was not good enough and repeatedly paint it over, which added to her anxiety. It took several years for the therapist to help the artist place her work into a show; the artist needed quite a bit of encouragement and support through therapy before she was able to go to the first show. This particular case study did not describe in any detail the exact techniques utilized to reduce the artist's anxiety.

As shown above, there has been not been any empirically based research conducted studying anxiety and anxiety reduction in visual artists. When anxiety and its impact have been studied in the field of art, it is often observed as performance anxiety in musicians, dancers, and other performers. Although there have been minimal studies

about how artists can reduce their levels of anxiety (Silvia & Kimbrel, 2010), there is a large body of research into effective anxiety reduction techniques with other population and situations. Two techniques that have been empirically supported to reduce anxiety in stressful environments with other populations are deep breathing and muscle relaxation.

While certain types of breathing patterns (quick shallow breathing) may actually contribute to issues like anxiety, other types of breathing patterns (slow deep breathing) may actually help to reduce the same issues. Breathing exercises, like deep breathing, are effective because they helps to balance a person's oxygen and carbon dioxide levels in the body, allowing the respiratory system to operate correctly. Breathing exercises (like deep breathing) can also help to lower muscle tension, headaches, irritability and fatigue; all these things can contributive to a person feeling anxious (Davis & Eshelman, 2008). Like deep breathing, muscle relaxation, can reduce anxiety, headaches, irritability, and depression. Muscle relaxation is effective because a person's muscles tense when under stress; then the exercise targets a person's tense muscles and relaxes them (Davis & Eshelman, 2008).

In a study conducted in 2012, Kaspereen worked with teachers and other staff at an inner-city high school to look at how effective relaxation therapy would be. The researcher used two kinds of therapy, deep breathing and muscle relaxation. Kaspereen (2012) tested the teachers' and staffs' perceived stress levels, perceived job stress levels, and life satisfaction. These three areas had significant improvement after the relaxation therapies had been conducted.

In the same year, Dolbier and Rush (2012) studied the effectiveness of abbreviated progressive muscle relaxation when used by college students. The researchers measured to see if the students' level of stress decreased and if they had an increase in their ability to function. The researchers found that a single 20-minute session was ideal and that the students showed both a reduction of stress and an increase in functioning.

In another study done on muscle relaxation, Ponce et al. (2008) used a corporate setting to examine at how the length of the relaxation session changed how effective it was. In the first part of the study they compared 7 minute, 15 minute, and 25 minute sessions of muscle relaxation. Overall, each of the sessions was effective, but the longest progressive muscle relaxation technique showed the largest improvement in functioning.

Because these relaxation techniques have demonstrated benefits in other environments and populations, it is hypothesized that these two anxiety reduction techniques will be beneficial to the anxiety levels of art students. Specifically, it is hypothesized that the post measures of anxiety will demonstrate significant decreases in anxiety among art students after exposure to the two relaxation techniques.

### Method

# **Participants**

Participants for this study were art students enrolled in one of two foundation classes, 2-Dimensional or 3-Dimensional studies. One 2-Dimensional class and two 3-Dimensional classes were utilized. In these classes, art students learn the basic skills of how to work with different materials. The classes are set up in sections; each section will have one large or several small projects. At the end of the section, students must show their completed work in a class-wide critique. Critiques consist of both students and the professor discussing the strengths and the weaknesses of the artwork and how well the techniques were utilized. These classes are mostly graded on technical skill, so even

students who have no prior experience with the materials can do well. The same professor taught all of the classes that were used in this study. All of the participants were Northern Kentucky University students. There were 32 female participants and 14 male participants. The mean age was 21.13 (SD = 7.37). Nearly all of the participants reported being Caucasian (94%), with 4% reporting Asian, and another 2% as Other/two or more listed. The mean self-reported GPA was 3.24 (SD = .56); eight participants reported the study happening in their first semester, so they had no GPA. The mean credit hours reported by the participants were 12.9 (SD = 3.21). The largest percent of participants reported their major/minor as Visual Communication (35%), followed by Studio Arts (24%); the rest reported a mix of other major/minors. Seven of the participants were excluded from the study because they did not complete the relaxation training.

# Measures

For this study, two different measures of anxiety were used (Fischer & Corcoran, 2007). The Depression Anxiety and Stress Scale (DASS) is used to measure the negative emotional states of depression, anxiety, and stress (See Appendix A). The Penn State Worry Questionnaire (PSWQ) is utilized to measure a person's level of worry (See Appendix B).

The DASS has 42 items divided into three sections: Depression, Anxiety, and Stress. Higher scores in each area suggest that negative emotion in that area is more severe. The DASS is considered public domain and is free for research and clinical use (Depression Anxiety Stress Scales – DASS, n.d.). The internal consistency reliability for the DASS is Depression (.96), Anxiety (.89), and Stress (.93) (Fischer & Corcoran, 2007). It also has solid concurrent validity with subscales correlating significantly with

several other measures: BDI, BAI and STAI-I (Brown, Chorpita, Korotitsch & Barlow, 1997).

The PSWQ has 16 items in a single section; higher scores are suggestive of more worry (Fischer & Corcoran, 2007). It has solid concurrent validity and has correlated in predicted directions with other emotional-disturbance questionnaires (Rijsoort, Emmelkamp, & Vervaeke, 1999). The PSWQ also distinguishes different levels of diagnosable General Anxiety Disorder (GAD) and produced higher scores among individuals with GAD than those diagnosed with posttraumatic stress disorder (Fresco, Mennin, Heimberg, & Turk, 2003). The principal investigator has obtained permission via email to use the PSWQ for this study (Newman, 2015; Borkovec, 2015) (see Appendix C & D respectively).

# **Procedures**

Each of the data sets were not collected until the participants completed at least one of their class projects, including a critique of their work at the end; by doing this, the students were able to gain practical experience about what to expect from the class-projects process. Data collection and relaxation techniques training were conducted over three different days. A fourth day was used for the debriefing.

Because of time constraints, the baseline anxiety measure was taken toward the end of one project instead of the original plan of taking the measures in between two projects; in other words, after the completion of one project but before the start of the next project. Before the participants were given the two anxiety measures, they were given an introduction (see Appendix E and Appendix F), including a consent form (see Appendix G). After signing the consent form, the participants were administered the two

sets of the anxiety measures to obtain baseline anxiety data. The measures included the Depression Anxiety and Stress Scale (DASS) (see Appendix A) and the Penn State Worry Questionnaire (PSWQ) (see Appendix B). The participants were also given a demographic survey (see Appendix H).

A week and a half after the initial baseline was taken, the participants were taught how to utilize the selected relaxation techniques (see Appendix I); deep breathing and muscle relaxation (see Appendix J & Appendix K respectively). Only part of the muscle relaxation was used. This included the feet, full leg, buttocks, stomach, chest, hand, full arm, mouth, eyes, and eyebrows. The participants were verbally provided with the information on how to find the same instructions online for their personal use. The primary researcher gained permission to use the techniques from a website Anxiety BC via email (Griffiths, 2014) (see Appendix L).

A week after the relaxation techniques were taught, the main researcher returned and administered the post-measures (see Appendix M for the post survey script). At this time, the participants were administered two anxiety measures: the Depression, Anxiety, and Stress scale and the Penn State Worry Questionnaire, as well a post-study survey (see Appendix N).

Once all the data analysis was completed, the main researcher conducted a debriefing in each of the three classes to inform the participants of the study's results (see Appendix O for the debriefing script). At that time, any questions that were not asked previously were addressed. The participants were also provided contact information for future questions and the information for NKU's counseling center.

### Results

A paired-samples t test was used to compare the Penn State Worry Questionnaire (PSWQ) pre and post-training scores. Between the pre (M = 54.36, SD = 13.51) and the post (M = 53.42, SD = 12.97) scores, no statistical significance difference was found; t(35) = 1.01, p = 0.318 (See Figure 1). The Depression, Anxiety, Stress Scale has three separate section (depression, anxiety, and stress) scores, as well as a total score; the pre and post-training scores for each section were compared using a paired-samples t test. The depression section of the DASS was the only section to increase instead of decrease; pre (M=13.31, SD=2.11) and post (M=14.83, SD=2.52); t(28)=-1.52, p=0.473 (See Figure 2). The anxiety section of the DASS decreased but it was not statistically significant; pre (M=12.86, SD=10.14) and the post (M=12.28, SD=8.19); t(28)=.586, p = 0.648 (See Figure 3). The stress section of the DASS also decreased but it was not statistically significant; pre (M=19.07, SD=10.17) and the post (M=18.90, SD=10.17) and the post (M=18.90) and M=18.90, M=10.1710.48); t(28) = 1.72, p = 0.891 (See Figure 4). The overall score of the DASS did decrease but it was not statistically significant; pre (M=45.25, SD=28.35) and the post (M = 43.39, SD = 28.76); t(27) = 1.86, p = 0.589 (See Figure 5).

### **Discussion**

The goal of this study was to determine if a single day of relaxation training, using deep breathing and abbreviated muscle relaxation, would make a difference in the anxiety levels of foundation art students. Although the differences between the pre and post scores of the PSWQ and the DASS were not statistically significant, overall there was a slight decrease in the participants' anxiety, stress, and worry scores. There are several reasons that could explain why the difference was not significant and that the depression score slightly increased.

One of the limitations of this study was how few students were available to participate in the study; this lowered the overall power. A larger group of participants would help to increase the power and perhaps demonstrate a greater statistical difference. A second limitation of this study was at what time in the semester the study was conducted, toward the end of a school semester. This is a highly stressful time for a student and this stress could have changed how the participants received the training. To help deal with this, it may better to start the study earlier in the semester.

Another limitation that may have affected the results would be the amount of training that the participants received. Several of the participants commented on the post-study survey that they would have liked the training to have been longer, over a number of days instead of just once. Several other participants commented that they either forgot to do the techniques when feeling stressed or forgot how to do the techniques all together. One possible way to address this issue would be with increased training time, like weekly training sessions over a semester. Another way could be giving the participants a daily journal to note when and where they do the relaxation techniques.

By using two techniques, deep breathing and abbreviated muscle relaxation, participants were able to choose which one that they preferred to use. During the post-study survey the participants were asked to report how often they did either deep breathing and muscle relaxation during the week between training and the post surveys. For deep breathing, the majority (62%) reported that they did the technique 1-3 times. The participants also reported that 26% of them agreed and 28% of them slightly agreed that the deep breathing technique was useful in relaxing, while 36% reported that it was not useful.

For the abbreviated muscle relaxation, the majority (49%) reported that they did not use it at all during the week; the second largest group (33%) reported that they used the technique 1-2 times. The participants also reported that 28% found this technique moderately useful, while 23% reported that they did not find it useful for relaxing. These findings suggest that the participants did the deep breathing technique more often and that they found it to be more relaxing than the abbreviated muscle relaxation technique. Most participants did not explain the reason for their preference. However, one participant reported feeling more stressed following the abbreviated muscle relaxation. Since this study used an abbreviated version of the muscle relaxation technique, it might have made a difference had the full technique been used.

In summary, while the results did not show a statistical difference, the small difference between the pre and post measures implies that the study could show a greater difference if it is improved upon. If relaxation techniques could be shown to be useful in lowering art students' anxiety level, training might be helpful to students who are entering into art as a professional career so they may be better prepared for any future situations that cause anxiety. While the results did not show statistical differences, the small change between the pre and post measures implies that future studies could show a greater statistical difference if the limitations are addressed. The limitations in this study include the amount of participants; a greater number would increase power. Also instead of working with students just at the end of the semester when stress levels are very high; it would be better to work with the students on relaxation training throughout the semester. This could allow them to retain the techniques better and also allow them to utilize the techniques throughout the semester during stressful events.

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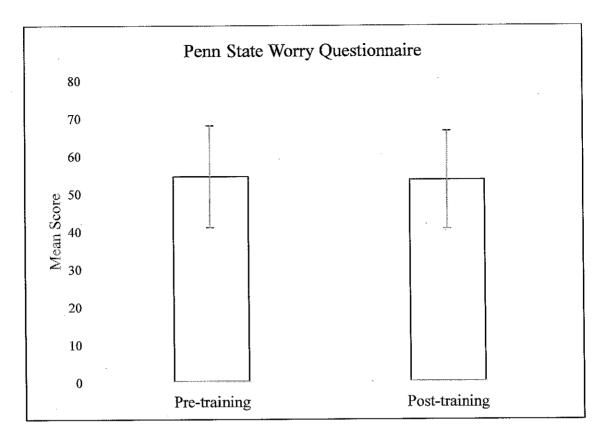
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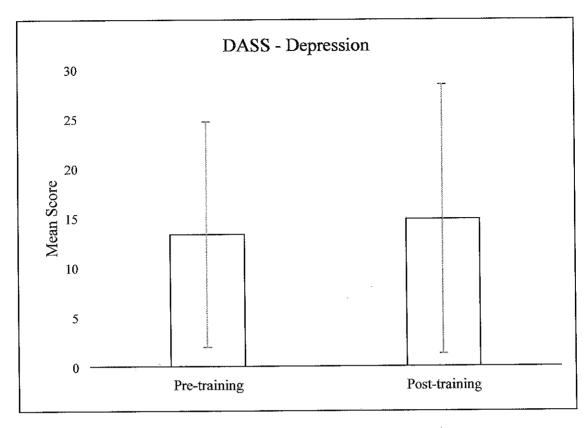
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**Figure 1.** The mean scores of the pre-training measure and the post-training measure of the Penn State Worry Questionnaire. There was a slight difference between the pre and post, with the post measure being lower; it is not statistically significant. Standard deviation is represented in the figure by the error bars attached to each column.



**Figure 2:** The mean scores of the pre-training measure and the post-training measure of the Depression, Anxiety, and Stress Scale – depression section. There was a slight difference between the pre and post, with the post measure being higher; it is not statistically significant. Standard deviation is represented in the figure by the error bars attached to each column.

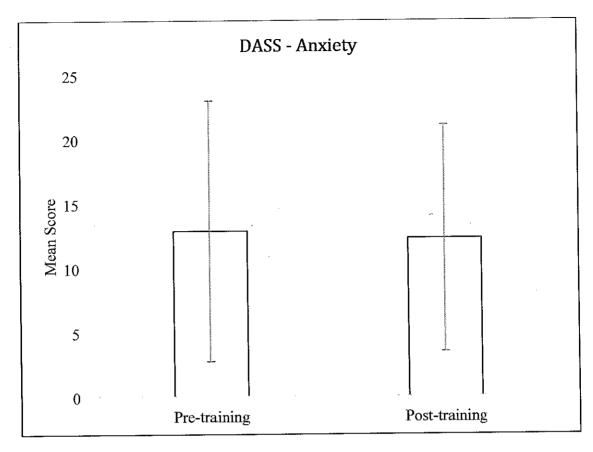


Figure 3: The mean scores of the pre-training measure and the post-training measure of the Depression, Anxiety, and Stress Scale – anxiety section. There was a slight difference between the pre and post, with the post measure being lower; it is not statistically significant. Standard deviation is represented in the figure by the error bars attached to each column.

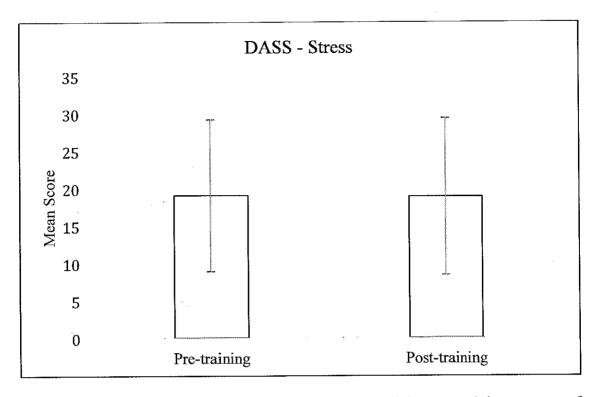


Figure 4: The mean scores of the pre-training measure and the post-training measure of the Depression, Anxiety, and Stress Scale – stress section. There was a slight difference between the pre and post, with the post measure being lower; it is not statistically significant. Standard deviation is represented in the figure by the error bars attached to each column.

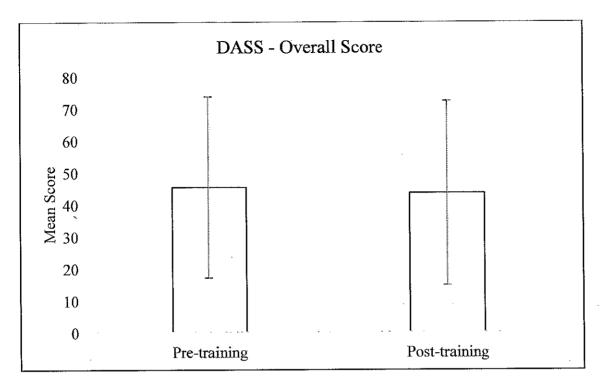


Figure 5: The mean scores of the pre-training measure and the post-training measure of the Depression, Anxiety, and Stress Scale – overall score. There was a slight deviation between the pre and post, with the post measure being lower; it is not statistically significant. Standard difference is represented in the figure by the error bars attached to each column.

# Appendix A

DASS	Name:	Date:

Please read each statement and circle a number 0, 1, 2, or 3 that indicates how much the statement applied to you over the past week. There are no right or wrong answers. Do not spend too much time on any statement.

	applied to you over the past week. There are no right or wrong answers. ime on any statement.	Do no	ot spend	too mu	ch
(	The rating scale is as follows:  Did not apply to me at all Applied to me to some degree, or some of the time Applied to me to a considerable degree, of a good part of time Applied to me very much, or most of the time				
]	1. I found myself getting upset by quite trivial things	0	1	2	3
2	2. I was aware of dryness of my mouth	0	1	2	3
1	3. I couldn't seem to experience any positive feeling at all	0	1	2	3
4	4. I experienced breathing difficulty(eg, excessively rapid breathing,	0	1.	2	3
	breathlessness in the absence of physical exertion)	·			
:	5. I just couldn't seem to get going	0	1	2	3
(	6. I tended to over-react to situations	0	1	2	3
	7. I had a feeling of shakiness (eg, legs going to give way)	0	1	2	3
;	8. I found it difficult to relax	0	1	2	3
	9. I found myself in situations that made me so anxious I was most	0	1	2	3
	relived when they ended				
	10. I felt that I had nothing to look forward to	0	1	2	3
	11. I found myself getting upset rather easily	0	1	2	3
	12. I felt that I was using a lot of nervous energy	0	1	2	3
	13. I felt sad and depressed	0	1	2	3
	14. I found myself getting impatient when I was delayed in any way	0	1	2	3
	(eg, elevators, traffic lights, being kept waiting)			~	
	15. I had a feeling of faintness	0	1	2	3
	16. I felt that I had lost interest in just about everything	0	1	2	3
	17. I felt I wasn't worth much as a person	0	1	2	3
	18. I felt that I was rather touchy	0	1	2	3
	19. I perspired noticeable (eg, hands sweaty) in the absence of high	0	1	2	3
	temperatures or physical exertion				
	20. I felt scared without any good reason	0	1	2	3
	21. I felt that life wasn't worthwhile	0	1	2	3

Please turn the page

# Reminder of rating scale:

0 Did not apply to me at all

1 Applied to me to some degree, of some of the time
2 Applied to me to a considerable degree, of a good part of the time

3 Applied to me very much, of most of the time

3 Applied to the very finden, of most of the time				
22. I found it hard to wind down	0	1	2	3
23. I had difficulty in swallowing	0	1	2	3
24. I couldn't seem to get any enjoyment out of the things I did	0	1	2	3
25. I was aware of the action of my heart in the absence of physical	0	1	2	3
exertion (eg, sense of heart rate increase, heart missing a beat)				
26. I felt down-hearted and blue	0	1	2	3
27. I found that I was very irritable	0	1	2	3
28. I felt I was close to panic	0	1	2	3
29. I found it hard to calm down after something upset me	0	1	2	3
30. I feared that I would be "thrown" by some trivial but	0	1	2	3
unfamiliar task				
31. I was unable to become enthusiastic about anything	0	1	2	3
32. I found it difficult to tolerate interruptions to what I was doing	0	1	2	3
33. I was in a state of nervous tension	0	1	2	3
34. I felt I was pretty worthless	0	1 ·	2	3
35. I was intolerant of anything that kept me from getting on	0	1	2	3
with what I was doing				
36. I felt terrified	0	1	2	3
37. I could see nothing in the future to be hopeful about	0	1	2	3
38. I felt that life was meaningless	0	1	2	3
39. I found myself getting agitated	0	1	2	3
40. I was worried about situations in which I might panic and make	0	1	2	3
a fool of myself				
41. I experienced trembling (eg, in the hands)	0	1	2	3
42. I found it difficult to work up the initiative to do things	0	1	2	3

# Appendix B

PENNSTATE			22of
Center for the Treatment of Anxiety and Depression	(circle one)		
	PI-M-P2-FU6-FU12 FU24	Date	Code
Enter the number that best de	escribes how typical or	characteristic e	each item is of
you, putting the number next	to the item.	_	
1 2	3 Camazuhat	4	5 Very typical
Not at all	Somewhat typical		very cypicar
Typical 1 .If I don't have enougl		I don't worry	about it.
2. My worries overwhe			
3. I don't tend to worry			
			••
4. Many situations mak			:1
5. I know I shouldn't w		just can't neip	IT.
6. When I am under pro	essure I worry a lot.		
7. I am always worryin	g about something.		
8. I find it easy to dism	iss worrisome thought	S.	
9. As soon as I finish or	ne task, I start to worry	about everyth	ing else I have to
do.			
10. I never worry abou	ıt anything.		
11. When there is noth	ning more I can do abou	ıt a concern, I d	on't worry about
it anymore.			
12. I've been a worrier	all my life.		,
13. I notice that I have	been worrying about t	hings.	
14. Once I start worry	ing about things.		
15. I worry all the time	e.		
16 Lworm about proi	ects until they are all d	one.	

# Appendix C

From: michellegnewman@gmail.com [michellegnewman@gmail.com] on behalf of

Michelle G. Newman [mgn1@psu.edu]

Sent: Wednesday, November 5, 2014 3:04 PM

To: Melody Alvarez

Subject: Re: Question about the PSWQ

items 1, 3, 8, 10, 11 are reverse scored and add the items together. The measure is attached and freely available so you do not need permission to use it.

### Michelle

Michelle G. Newman, Ph.D.
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Editor, Behavior Therapy
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FAX: 814-863-7002

On Wed, Nov 5, 2014 at 2:50 PM, Melody Alvarez <alvarezm2@mymail.nku.edu>> wrote:

Good Afternoon Dr. Newman,

My name is Melody Alvarez, I am a student at Northern Kentucky University working on a Honors in Psychology project (aka HIP).

For each HIP project they have us design and execute our own study. I am interested in anxiety, particularly in students who are facing a "nontraditional" testing setting. I was interested in using the PSWQ (Penn State Worry Questionnaire). In the book I found it in Dr. Borkovec was listed as the contact, however, Penn State's website listed him as retired. I called the office up and they gave me your name and said you might be able to help me.

Could you let me know who I have to gain premision from to use it? If allowed could you also tell me where I can find the answer key? Please contact me as soon as time allows.

Just encase you need to contact my adviser her name is Dr. Smita Ward, her email is Wards5@nku.edu<mailto:Wards5@nku.edu>

Thank you, Melody Alvarez

# Appendix D

Hi, Melody.

You have my permission to use the PSWQ in your research. I'm attaching a copy of the questionnaire, and the scoring key is given at its bottom.

Good luck with your study!

Tom

On 11/5/2014 12:20 PM, Melody Alvarez wrote:

> Good Afternoon Dr. Borkovec,

>

- > My name is Melody Alvarez, I am a student at Northern Kentucky University working on a Honors in Psychology project (aka HIP).
- > For a HIP project they have us design and execute our own study. I am interested in anxiety, particularly in students who are facing a "nontraditional" testing setting.
- > I would like to ask if I could use the PSWQ to measure the students who are participating in the study?
- > If allowed could you also tell me where I can find the answer key?
- > Please contact me as soon as time allow.

>

> Just encase you need to contact my adviser her name is Dr. Smita Ward, her email is Wards5@nku.edu

- > Thank you,
- > Melody Alvarez

# Recruiting and Initial Contact Script - Appendix E

# Melody/Dr. Ward

Good (afternoon or evening). My name is Melody Alvarez; I am a double major in Studio Arts and Psychology. This is Dr. Smita Ward. This semester I am conducting a study to see how effective self-help relaxation techniques are when used by foundation art students. Dr. Ward will be observing all of the steps of the study as it is conducted. Right up front I would like to say that this is completely voluntary, no one is obligated to do this. Also you are free to stop at any time.

Before I can get started I have to have everyone sign these consent forms. The only people who will see them are Dr. Ward or myself. (As I am handing out the forms) The forms state that you are willing to participate and that you know that you can quit at any time without any consequences. Please read through it and sign if you are willing to participate. It is important to put your email address on the consent form so we can contact you with any important information, like if a date changes. Here is our contact information (write contact information on board). If you have any questions, feel free to email us. If you have any other questions or concerns here is the contact information for NKU's Counseling center (write on board), which offers free services to students. (Get forms back).

The way this will work is we are going to give you two surveys and this demographic survey to take today and then leave you alone until about half way through the project that is coming up. Once you reach the midway point (which I believe is about a week and a half), we will return for a second time so we can teach you how to do the self-help relaxation techniques. The relaxation techniques are both well known and

commonly used; one is deep breathing (also known as calm breathing), the other is muscle relaxation. We will go into detail about how to do the techniques when we come back to teach them. After your project and project critique are complete, we will return for a third time and have all of you take the two surveys again, along with a post study survey. Once we have analyzed the results from the surveys, we will come into the classroom one more time and let you know the results of the study. We will also answer any questions you have at that time and give you our contact information again.

To help protect your identities, please do not put your name on any of the surveys. Instead use your D.O.B., sex, and the last four digits of your phone number. I have brought in pencils for anyone who needs them. (Hand out the three surveys) There are no right or wrong answers on these surveys, just put what fits you best. (Take surveys back once they are done). Thank you for participating, we will see you all again at about the midway point of your project to do the relaxation techniques.

# Initial Contact Script - Appendix F

# **Professor Bonner**

All right, class, today we have two people from the psychology department visiting. I am going to let them tell you about their study. However, before they even start, I would like to say that whether you decide to participate or not will not affect your grade in any way. To make sure you know this, I will be out of the room for the study. (He can leave at this time and go across the hall to his office)

# Consent Form for Study Participation -Appendix G

You (the student) are invited to participate in an Honors study conducted by Melody Alvarez (<u>alvarezm2@nku.edu</u>) for the Honors in Psychology project. The study will be supervised by Dr. Smita Ward (<u>wards5@nku.edu</u>), 859-572-5574.

As a participant, I understand that there are no right or wrong answers to the questions and that the researchers are simply interested in learning my opinion, as well as learning about two relaxation techniques. The study should take approximately 1.5 hours over a period of four days.

As a participant, I understand that on the first day I will be given two surveys and a demographic survey to fill out (day1). Then about a week and a half later (day 2) I will learn how to do two different self-help relaxation techniques. Around a week and half after that (day 3) I will fill out the two surveys again, as well a post study survey. I understand that once the researchers have analyzed the results from the surveys, they will return to let me know the results of the study I have participated in (day4).

As a participant, I understand that the researchers do not anticipate that there are any serious risks associated with my participation in this study. However, I understand that I may experience some stress or emotional reaction when answering questions but that I am free to skip questions or stop participating at any time. I understand that the techniques I learn may be beneficial to me; I may also gain some understanding about psychological research.

As a participant, I understand that the surveys are completely confidential. For confidentiality sake I will only put my name on this consent form and not on any of the surveys themselves. The consent form will not be connected with my surveys so as to protect my confidentiality. Surveys and consent forms will be kept securely under lock for a minimum of 5 years.

Please see next page...

As a participant, I understand that my participation is completely voluntary and that I may refuse or discontinue participation at any time with out penalty.

I am at least 18 years of age.

If there are any questions, comments, or concerns regarding this study, please contact Dr. Smita Ward (see contact information above). If you have any questions about your rights as a research participant, please contact the chair of the Institutional Review Board Philip J. Moberg, Ph.D., <a href="mailto:mobergp1@nku.edu">mobergp1@nku.edu</a>, 859-572-1913.

I agree to participate in the Honors study conducted by Melody Alvarez (<u>alvarezm2@nku.edu</u>) for Honors in Psychology project. The study will be supervised by Dr. Smita Ward (<u>wards5@nku.edu</u>), 859-572-5574. If you agree to the above, please sign below.

	<del></del>		
Sign your name he	ere	Date	
			·
Print your name h	ere		
Print your NKU er	nail address (e.g. Smithr2	— '@nku.edu)	
Nick Bonner	Circle class: 132-2D or 1	133-3D	
Instructors Name		Sec	tion number

# Demographic Survey Form - Appendix H (Please leave your name off of the form, thank you.)

Age:	
Gender: Male Female	
Ethnicity: African American Asia	n Hispanic Native American
Pacific Islander White/Caucas	ian Other
What is your major/minor?	
How many years have you been in co	llage?
Cumulative GPA (example 3.52):	
(If t	his is your first semester put: None Yet)
Please indicate all that apply:	
Full-Time Student Part-Time Stude	nt Non-degree seeking Honors Student
How many Credits are you taking this	s semester?
How many art classes are you taking	this semester?
How many hours a week do you spen	d on extra curricular activities?
How many hours a week do you work	? <u></u>

# Relaxation Training Script - Appendix I

# Melody/Dr. Ward

Good (afternoon/evening) class. As you may recall we told you last time that we would return and teach you how to do two different self-help relaxation techniques. One of them is called deep breathing and the other one is muscle relaxation. While we are doing the techniques I am going to turn the lights down. (Dim the lights)

First we are going to go through the deep breathing technique. (Go through the Deep breathing instructions - See Appendix H).

Now we are going to go through the muscle relaxation technique. (Go through the muscle relaxation technique – See Appendix I).

(Turn lights back up) Instruction for these techniques came from a website called Anxiety BC, they were nice enough to let me use their instructions. If you would like to do these techniques at home and cannot remember how, you can look them up on Anxiety BC's website by searching for deep breathing or muscle relaxation. You can also just do a search for deep breathing or muscle relaxation on the Internet; there are a lot of sites and free videos that give good instructions. Thank you for participating and we will see you after your projects are done.

# Calm Breathing - Appendix J

What is "calm breathing"?

Calm breathing (sometimes called "diaphragmatic breathing") is a technique that helps you slow down your breathing when feeling stressed or anxious. Newborn babies naturally breathe this way, and singers, wind instrument players, and yoga practitionersuse this type of breathing.

Why is calm breathing important?

Our breathing changes when we are feeling anxious. We tend to take short, quick, shallow breaths, or even hyperventilate; this is called "overbreathing".

It is a good idea to learn techniques for managing "overbreathing", because this type of breathing can actually make you feel even more anxious (e.g., due to a racing heart, dizziness, or headaches)!

Calm breathing is a great portable tool that you can use whenever you are feeling anxious. However, it does require some practice.

# How to Do It

Calm breathing involves taking smooth, slow, and regular breaths. Sitting upright is usually better than lying down or slouching, because it can increase the capacity of your to fill with air. It is best to 'take the weight' off your shoulders by supporting your arms on the side-arms of a chair, or on your lap.

- 1. Take a slow breath in through the nose, breathing into your lower belly (for about 4 seconds)
- 2. Hold your breath for 1 or 2 seconds
- 3. Exhale slowly through the mouth (for about 4 seconds)
- 4. Wait a few seconds before taking another breath

About 6-8 breathing cycles per minute is often helpful to decrease anxiety, but find your own comfortable breathing rhythm. These cycles regulate the amount of oxygen you take in so that you do not experience the fainting, tingling, and giddy sensations that are sometimes associated with overbreathing.

# Helpful Hints:

Make sure that you aren't hyperventitating; it is important to pause for a few seconds after each breath.

Try to breathe from your diaphragm or abdomen. Your shoulders and chest area should be fairly relaxed and still. If this is challenging at first, it can be helpful to first try this exercise by lying down on the floor with one hand on your heart, the other hand on your abdomen. Watch the hand on your abdomen rise as you fill your lungs with air, expanding your chest. (The hand over your heart should barely move, if at all.)

# Rules of practice:

Try calm breathing for at least five minutes twice a day.

You do not need to be feeling anxious to practice – in fact, at first you should practice while feeling relatively calm. You need to be comfortable breathing this way when feeling calm, before you can feel comfortable doing it when anxious. You'll gradually master this skill and feel the benefits!

# Muscle Relaxation - Appendix K

Progressive Muscle Relaxation teaches you how to relax your muscles through a twostep process. First, you systematically tense particular muscle groups in your body, such as your neck and shoulders. Next, you release the tension and notice how your muscles feel when you relax them. This exercise will help you to lower your overall tension and stress levels, and help you relax when you are feeling anxious. It can also help reduce physical problems such as stomachaches and headaches, as well as improve your sleep.

People with anxiety difficulties are often so tense throughout the day that they don't even recognize what being relaxed feels like. Through practice you can learn to distinguish between the feelings of a tensed muscle and a completely relaxed muscle.

Then, you can begin to "cue" this relaxed state at the first sign of the muscle tension that accompanies your feelings of anxiety. By tensing and releasing, you learn not only what relaxation feels like, but also to recognize when you are starting to get tense during the day.

# How To Do It

### **STEP ONE:** Tension

The first step is applying muscle tension to a specific part of the body. This step is essentially the same regardless of which muscle group you are targeting. First, focus on the target muscle group, for example, your left hand. Next, take a slow, deep breath and squeeze the muscles as hard as you can for about 5 seconds. It is important to *really feel* the tension in the muscles, which may even cause a bit of discomfort or shaking. In this instance, you would be making a tight fist with your left hand.

It is easy to accidentally tense other surrounding muscles (for example, the shoulder or arm), so try to ONLY tense the muscles you are targeting. Isolating muscle groups gets easier with practice.

Be Careful! Take care not to hurt yourself while tensing your muscles. You should never feel intense or shooting pain while completing this exercise.

Make the muscle tension deliberate, yet gentle. If you have problems with pulled muscles, broken bones, or any medical issues that would hinder physical activity, consult your doctor first.

# STEP TWO: Relaxing the Tense Muscles

This step involves quickly relaxing the tensed muscles. After about 5 seconds, let all the tightness flow out of the tensed muscles. Exhale as you do this step. You should feel the muscles become loose and limp, as the tension flows out. It is important to very deliberately focus on and notice the difference between the tension and relaxation. This is the most important part of the whole exercise.

# The Different Muscle Groups

Foot (curl your toes downward)

Entire leg (squeeze thigh muscles while doing above), (Repeat on other side of body) Hand (clench your fist)

Entire right arm (tighten your biceps by drawing your forearm up towards your shoulder and "make a muscle", while clenching fist), (Repeat on other side of body)

Buttocks (tighten by pulling your buttocks together)

Stomach (suck your stomach in)

Chest (tighten by taking a deep breath)

Mouth (open your mouth wide enough to stretch the hinges of your jaw)

Eyes (clench your eyelids tightly shut)

Forehead (raise your eyebrows as far as you can)

**Final Note:** Remember to practice progressive muscle relaxation often, whether you are feeling anxious or not. This will make the exercise even more effective when you really do need to relax! Though it may feel a bit tedious at first, ultimately you will gain a skill that will probably become a very important part of managing your anxiety in your daily life.

# Permission to use both the Deep Breathing and Muscle Relaxation - Appendix L

Re: Honors in Psychology request, Melody Alvarez Geoffrey Griffiths <a href="mailto:spgriffiths@anxietybc.com">spgriffiths@anxietybc.com</a> Melody Alvarez; Hello Melody

I am sorry the late response, you want written permission from us to use our materials. You did not provide an adress so I am assuming an e-mail is good enough.

You may use the materials you have listed in your request as long as you credit AnxietyBC as the source of the material.

Yours Sincerely
Geoff Griffiths
Communications Strategic Support
AnxietyBC.com
604.525.7566

Anxiety  $BC^{\infty}$  is a non-profit organization, focused on increasing awareness and promoting education and evidence-based treatments related to anxiety disorders.

On 11/27/2014 7:03 PM, Melody Alvarez wrote:

Good Evening Mr. Griffiths,

My name is Melody Alvarez, I am an undergraduate student at Northern Kentucky University. I called this past Tuesday about permission to use Anxiety BC's handouts for "calm breathing" and for "deep muscle relaxation". Before I can use the the handouts, I have to have written permission to give to NKU's Institutional Review Board. At that time I was told I would need to send the details of my study to you for that written permission.

Here is a overview of the study:

During the spring semester I will be working with my faculty mentor Dr. Ward for my Honors in Psychology project (HIP). For the project we want to look at anxiety levels and how doing a day of training with relaxation exercises could help. The main focus would be on first year classes, particularly in the art department. It will take us several days to conduct the experiment: on the first day we would introduce the what would be going, have them sign consent forms, then have them take several anxiety measurements. On the second day we would come in and walk them through the relaxations exercises, making sure there is time to answer any questions. On the third day we would have them take the measurements again. This process would take several weeks, then at the end of the semester we would return to the classrooms to explain what the study was all about, tell them about any findings and answer any questions.

If you have any questions please contact me at (513) 288-9413 or via email.

If you need to contact my faculty mentor Dr. Ward, her email is Wards5@nku.edu

Have a nice weekend,

Melody Alvarez

# Post Survey Script - Appendix M

# Melody/Dr. Ward

Good (afternoon/evening) class. Today we are going to retake the two surveys that you took during the first day we were here. There will also be a Post study survey that will ask you a few questions about your view on the techniques; there will also be a place for you to comment. Again please remember to not put your name on any of the surveys; this helps to protect your identities. Instead use your D.O.B., sex, and the last four digits of your phone number. I have brought pencils for anyone who needs them. (Hands out surveys) Please take your time and remember that there are no wrong or right answers, just your own view. (Get surveys back when they are done). We would like to thank everyone for participating today. Once we have analyzed the results from the surveys, we will come back one more time and let you know the results of the study. We will be informing Professor Bonner when that is so he will be able to let you all know. At that time we will also answer any questions you have and give you our contact information again.

# Post Study Survey - Appendix N

Please circle the appropriate numbers.

How often did you use the Deep Breathing Technique per week?

- 1. Never
- 2. 1-3 times
- 3. 4-6 times
- 4. 7-9 times
- 5. 10 or more times

How often did you use the Muscle Relaxation Technique per week?

- 1. Never
- 2. 1-2 times
- 3. 3-4 times
- 4. 5 or more times

I found the Muscle Relaxation Technique to be useful. I ...

- 1. Disagree
- 2. Slightly Disagree
- 3. Moderately Disagree
- 4. Neither Agree or Disagree
- 5. Moderately Agree
- 6. Slightly Agree
- 7. Agree

I found the Deep Breathing Technique to be useful. I...

- 1. Disagree
- 2. Slightly Disagree
- 3. Moderately Disagree
- 4. Neither Agree or Disagree
- 5. Moderately Agree
- 6. Slightly Agree
- 7. Agree

I did not find the Muscle Relaxation Technique to be relaxing. I ...

- 1. Disagree
- 2. Slightly Disagree
- 3. Moderately Disagree
- 4. Neither Agree or Disagree
- 5. Moderately Agree
- 6. Slightly Agree
- 7. Agree

Please turn over....

I	lid n	ot find	the	Deep	Breathing	Technique to	o be re	laxing. I	
---	-------	---------	-----	------	-----------	--------------	---------	-----------	--

- 1. Disagree
- Slightly Disagree
   Moderately Disagree
- 4. Neither Agree or Disagree
- 5. Moderately Agree
- 6. Slightly Agree
- 7. Agree

Comments			
	-		
_	 	 	 

# **Debriefing Script - Appendix 0**

# Melody/Dr. Ward

Good (afternoon/evening) class. As promised we have returned to let you know about the study's results. As some of you may have guessed the study was about how effective self-help relaxation techniques were on your levels of anxiety. I choose to do this study because a lot of art students are in situations that can cause them to experience anxiety but there has been no research done on ways for them to deal with that anxiety.

We found that ...(cannot give results until study has been done)

Does anyone have any questions they would like to ask? (address any questions asked at that time and any that has been asked previously but not addressed). (Write both Dr. Ward's and the NKU's Counseling center contact information on board) If you have any future questions here is the contact information for both Dr. Ward and NKU's Counseling center.