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Performance Anxiety Amongst Middle School-Aged Wind Instrumentalists as Influenced by Variations in Delivery of Instructional Script Given by Adjudicators During Sight Reading

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FLORIDA INTERNATIONAL UNIVERSITY

Miami, Florida

PERFORMANCE ANXIETY AMONGST MIDDLE SCHOOL-AGED WIND
INSTRUMENTALISTS, AS INFLUENCED BY VARIATIONS IN DELIVERY OF
INSTRUCTIONAL SCRIPT GIVEN BY ADJUDICATORS DURING
SIGHT READING

A thesis submitted in partial fulfillment of the
requirements for the degree of

MASTER OF SCIENCE

in

MUSIC EDUCATION

by

Jacqueline A. McAllister

2011

To: Dean Brian Schriner
College of Architecture and the Arts

This thesis, written by Jacqueline A. McAllister, and entitled Performance Anxiety Amongst Middle School-Aged Wind Instrumentalists, as Influenced by Variations in Delivery of Instructional Script Given by Adjudicators During Sight-Reading, having been approved in respect to style and intellectual content, is referred to you for judgment.

We have read this thesis and recommend that it be approved.

ErskinDottin

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Catherine Rand, Major Professor

Date of Defense: March 21, 2011

The thesis of Jacqueline A. McAllister is approved.

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Florida International University, 2011

DEDICATION

To John Allen McAllister, Lisa Marie McAllister, Jessica Lynne McAllister, Angela Michelle McAllister, and Doris Mama Hardison: I would have never reached this point without your support. Thank you not only for putting up with me during this time, but also for always loving me so unconditionally.

To William Alvin Worley: You are my light at the end of this long journey. I love you with all of my heart and I look forward to what the future has in store for us.

To Luther Thomas Papa Hardison: You are still with me at the end of this journey, as you were in the beginning. I miss you and love you always.

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Special thanks to my major professor, Dr. Catherine Rand. Watching you conduct in Wind Ensemble rehearsals every week has made me a better musician and educator. Please, no matter the hardships or hurdles you will face, never stop doing what you do best - making music. The world is truly a better place with teachers like you in it.

ABSTRACT OF THE THESIS

PERFORMANCE ANXIETY AMONGST MIDDLE SCHOOL-AGED WIND
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Florida International University, 2011

Miami, Florida

Professor Catherine Rand, Major Professor

The primary purpose of this research paper was to study performance anxiety among middle school students during a sight-reading audition. Furthermore, this study asks whether the manner in which directions are presented by the sight-reading adjudicator during the course of an audition has significant impact on the performance outcome.

Participants (n=75) were middle-school students attending a highly rated band program in the Miami-Dade County (Miami, FL) area. By use of investigator-derived surveys, levels of trait and state anxiety were determined before and after the sight-reading performances.

Means and standard deviations were calculated for perceived anxiety and for the resulting scores of the performance. A t-test compared the control and experimental groups perceived level of anxiety, where statistically significant results were found at the $p < .05$ level. A t-test revealed a statistically significant difference between the experimental and control groups in regards to performance outcome at the $p < .10$ level.

TABLE OF CONTENTS

CHAPTER	PAGE
I. INTRODUCTION	1
General Statement of Problem Area	1
Research Purpose	4
Research Questions	4
II. REVIEW OF RELATED LITERATURE AND RESEARCH	5
Performance-Based Assessment	5
State and Trait Anxiety	5
Music Performance Anxiety (MPA)	7
Sight-Reading	9
III. METHOD	11
Participants	11
Design	12
IV. RESULTS	19
Research Question 1	19
Research Question 2	22
Summary	24
V. DISCUSSION	25
Purpose/Problem	25
Discussion	25
Implications for Practice	26
Suggestions for Future Research	27
Summary	28
LIST OF REFERENCES	29
APPENDICES	31

LIST OF TABLES

TABLE	PAGE
1. Demographics of Participants by School	12
2. Assignments of Anxiety Levels	14
3. Means and Standard Deviations of Post-Test Survey Anxiety Levels	20
4. T-test of Post- Performance Anxiety during Audition	21
5. Means and Standard Deviations, Watkins–Farnum Performance Scale Score	22
6. Independent Samples T-Test	24

LIST OF FIGURES

FIGURE	PAGE
1. Watkins-Farnum Performance Scale, Form A #4, Trombone/Baritone	14
2. Watkins-Farnum Performance Scale with Errors Notated by Adjudicator	15
3. Hevner Adjective Circle	16
4. Watkins-Farnum Scale Scores, Control Group	23
5. Watkins-Farnum Scale Scores, Experimental Group	23

CHAPTER I. INTRODUCTION

General Statement of Problem Area

Sight-reading—the ability to perform written music at first sight—is a highly valued skill for young musicians to achieve. Music students must use sight-reading in many different situations, such as music school or honor ensemble auditions, seating auditions, and district and state evaluations. According to Standard No. 3 of the Sunshine State Standards of Florida, students need to be able to read and notate music and, more specifically, to sight-read music in bass and/or treble clefs in simple and compound meters (Florida Department of Education 2005).

Parrish (1998) stated, “Students who are good music readers are likely to succeed more quickly and have a solid foundation for continued ensemble participation throughout their lives” (p. 14). Sight-reading is a skill that many students cherish as young musicians. The ability to sight-read can enable students to move up the ranks in their ensembles and improve their chances for admission and scholarships at college-level music programs. The importance of sight-reading illustrates itself through personal advances, including improved facility and rhythm (Sariti 2005).

Research has shown that sight reading music is not only a complex skill, but also a frightening task for many students to perform. Anxiety can exist in many forms and at many levels of severity, and it produces a number of symptoms associated with stress (Kenny 2006). These include physical symptoms such as sweating palms, increased heart rate, and dry mouth, and emotional symptoms such as humiliation, panic attacks, and over-sensitivity to criticism. Music performance anxiety (MPA) is the experience of

marked and persistent anxious apprehension related to musical performance. This condition arises through specific anxiety conditioning experiences and can manifest itself through combinations of affective, cognitive, somatic and behavioral symptoms (Kenny 2006).

Many researchers have studied ways for students to improve their sight-reading abilities (Sariti 2005; Huenink 2002; Hayward & Gromko 2009; Watts 2008). Sariti (2005) suggests that students complete a “visual scan” of the music before they begin to play. The visual scan should include noting “red flags” such as changes in meter, tempo, key signature, accidentals, and rhythmic patterns; tempos are established according to the most difficult passage in the piece. Sariti also suggests that students practice sight-reading on their own, using music that has varying meters, tempos, and key signatures.

Prior research has investigated how to assist educators in teaching the fundamentals of sight-reading effectively (Sariti 2005; Huenink 2002, Grutzmacher 1987; Watts, 2008). Instructors should first assume that students understand fundamental concepts such as meter, key signature, and musical terminology (Sariti 2005). Huenink (2002) suggests teaching “ear training” as opposed to “eye training.” Ear training and sight singing in class will help students hear the notes that come next. Ear training is especially helpful for brass players due to the partials of their instrument.

In short, there is an extensive literature that students and instructors can consult in preparing for at a sight-reading audition. Nonetheless, no amount of training can prepare a student for a passive or negative adjudicator during an audition. One of the sad truths about performance anxiety is that it can easily be reinforced, and even heightened, by insensitive educators. While it might be well intentioned, giving the impression that the

audition is more important than it may actually be to get students to practice often causes unnecessary fear and panic. Band directors have more impact on the outcome of student performance than they might believe (Randall 2008).

During an interview with two magnet band directors, the investigator posed the question ‘Do you personally feel that when students audition for your school’s program that they are performing to the best of their ability?’ Brent Mounger, Director of Bands at Coral Reef Senior High in Miami, FL, has supervised the auditions for the Visual and Performing Arts Band Magnet at his school for the past five years. Mounger stated, “Some students’ reactions to the audition environment are more severe than others. While a student’s recommendation letter from a band director may say that they sight read music really well, the student could get to the audition and become nervous, causing them to play wrong notes and rhythms. I try to take the fact that the students who are auditioning for me are uneasy, but with 20 to 30 auditions every day, I’m sure that I’m not as sympathetic to their needs as I could be.” (B.A. Mounger, personal communication, June 16, 2010)

Lee Morrison (interview, June 16, 2010) stated that he and his fellow judges make sure not to “coach” students who are auditioning for him. Morrison said, “I want to know how a student performs under pressure and therefore will make sure that I do not say anything that might help them sightread more accurately. I believe that if a student suffers from performance anxiety, they will not be a good fit for my program because of their inability to perform well under pressure.”

The problem examined in this study is performance anxiety in middle school wind instrumentalists and the performance conditions that may prevent them from playing to

the best of their talent. The problem intensifies if circumstances during an audition, namely the language and delivery of script used by an adjudicator, affect a student's performance during sight-reading.

Research Purpose

The primary purpose of this research paper is to study performance anxiety among seventh- and eighth-grade students participating in a band program during a sight-reading audition. Furthermore, this study asks whether the delivery of script presented by the sight-reading adjudicator during the course of an audition has statistically significant impact on the performance outcome. This information could help to determine if changing the delivery method of an adjudicator's instructions during an audition could improve a student's performance.

Research Questions

- Question #1: Does the adjudicator's instructional delivery affect performance anxiety during sight-reading?
- Question #2: Does the adjudicator's instructional delivery affect sight-reading performance outcome during an audition?
- Hypothesis #1: The adjudicator will have a statistically significant influence over the induction of performance anxiety during a sight-reading performance.
- Hypothesis #2: The discourteous adjudicator will cause performers to feel uneasy, tense, and will not elicit a poor performance.

CHAPTER II.

REVIEW OF RELATED LITERATURE AND RESEARCH

Performance-based Assessment

Without a doubt, assessment of student music performance is a necessary and pervasive part of music education. A musician will be evaluated dozens of times over the course of a career: during lessons, classes, rehearsals competitions, auditions, placement exams, etc (Fiske 1977). Music teachers use performance evaluations in class to provide grades, place students on appropriate parts, and perhaps determine which concepts students have mastered at that point in their playing career.

The Music Educators National Conference (MENC) (1996), a nationally recognized association for music educators, has advocated that “performing on instruments, alone and with others, a varied repertoire of music” is one of the foundations of music education in schools. According to the National Association of Schools of Music (1999), “competence on at least one major performing medium should be expected...with competence specified as performing a cross-section of repertory, developing technical skills, and acquiring the ability to sight-read.” Standards in performance competency hold no significance without assessment and appraisal of student progress towards meeting objectives (Stewart 2002; Bergee 1995).

State and Trait Anxiety

C.D. Spielberger (1966) has identified two types of generalized anxiety that exist in human beings: trait anxiety and state anxiety. Trait anxiety reflects a pre-set level of anxiety that, if elevated, can cause a less appropriate reaction to any given situation. State anxiety can occur when a situation transpires that causes the individual to feel

temporarily anxious or uncomfortable. State anxiety diminishes after the situation has passed, and the person goes back to feeling “normal” again.

While trait anxiety is a type of baseline level of uneasiness, according to the Oxford Dictionary of Sports Science and Medicine (2007), state anxiety is defined as: “A temporary emotional condition characterized by apprehension, tension, and fear about a particular situation or activity. State anxiety is usually accompanied by physiological arousal and observable behavioral indicators...” This type of anxiety is present in music performance as it is in athletic performance.

Certain levels of anxiety may need to be present in order for musicians to perform at his/her optimum level. Many professional, advanced, and even intermediate musicians often suffer debilitating levels of anxiety just before the beginning of a performance. A possible explanation for this may be a result of unrealistic demands in the field of instrumental music that teachers place on their students in many parts of the world. In some cases, parents want their children to make swift progress in music class. These types of parents will demand that teachers test their children repeatedly to move them up to more advanced ensembles before they are ready. McPherson (2002) pointed out that parents may be contributing to performance anxiety. He stated, “Such regular encounters with performance anxiety may result in what was initially a temporary form of anxiety (state anxiety) taking on the more permanent manifestation of anxiety (trait anxiety)...” (p. 13-14).

Biological reaction such as fighting, fleeing, or avoidance make sense in a strictly biological realm but may become counterproductive in social contexts in which one of

the most feared situations is the possibility of being laughed at or ridiculed (Kesselring 2006).

Music Performance Anxiety(MPA)

Performance anxiety is a condition whose symptoms includesweating palms, shaking hands, cottonmouth, inability to concentrate, and increased heart rate (Taborsky 2007). This disorder can affect individuals in a variety of endeavors, such as test-taking, performance of music or dance, public speaking, or sports. Females are two to three times more likely to suffer from performance anxiety than males, particularly for MPA (Taborsky 2007).

Symptoms of MPA make performance nearly impossible and therefore differentiate this condition from simple nervousness. According to Petrovich (2004), students experience intense anxiety, and, in some cases, panic attacks. Students suffering from recurring performance anxiety will typically avoid performance situations and become increasingly sensitive to criticism. Anxiety stems from a previous performance situation in which the student suffered from over-judging, ridicule, or critique.

According to Kesselring (2006), in addition to motor expressive behavior, (e.g., trembling or shaky breathing, hands, arms, knees; changes in facial expression, chewing on fingernails, etc.) persons who suffer from MPA also endure reactions of the autonomous nervous system. Nervous system reactions can include rapid heart rate, sweating, flushing, shortness of breath, and gastrointestinal disturbances. Other physical reactions can include dry mouth, loss of appetite, nausea, vomiting, and insomnia. Another side effect of MPA could be subjective feelings that project increased irritability, depression, feelings of helplessness, panic, anguish, or feeling inadequate or worthless.

Cognitive appraisal may also be affected. A person's mind could go blank, lose concentration and memory, become confused, and infer unwarranted negative thoughts.

McPherson (2002) states that although performance anxiety is usually uncommon in younger children, students participating in specialized music programs can exhibit much higher anxiety levels than students not enrolled in specialized music programs. Much data exists on the onset of performance anxiety in adult musicians, and therefore it is concluded that much of this anxiety develops throughout the maturation process. More advanced musicians' evaluation of personal performance can often become associated with their personal identity as well as their level of talent on their instrument or voice. "When self-esteem is so closely intertwined with the musician's persona, any kind of setback, be it a substandard performance rating, criticism, or examination failure, is perceived as a direct attack on the person him- or herself" (McPherson, 2002, p. 8).

Students will often be considerably more nervous in front of ensemble directors than in front of their peers or audience. In a recent study that examined performance anxiety among choral singers, Andrews and Ryan (2009) found that performance anxiety was more intense during solo performances than ensemble practice. Choral students who study at the collegiate level in performance reported less frequent but equally harsh episodes of performance anxiety. The conductor was a primary factor in choral singers' experience of performance anxiety (Andrews & Ryan 2009).

Music educators' teaching styles play a role in whether or not a student feels anxious during an audition. McPherson (2002) stated, "Children who develop outstanding instrumental achievements tend to have learned in a positive emotional atmosphere that was enjoyable and free of anxiety. The learning context of children who drop out (of

elective music classes) tends to be negative and characterized by anxiety” (p. 23).

Conversely, a nurturing and positive environment can play a role in whether a student has a life-long fear of performing or simply has a healthy nervous reaction to public performance.

For the most part, investigation of music performance anxiety considers that students cause their own performance anxiety. Many articles describe to students and music educators alike what they can do to help overcome future performance anxiety (Kirchner 2005; Lee 2002; Petrovich 2004; Whitcomb 2008). However, to date, limited research has examined the role that audition facilitators play in MPA during an audition process.

Sight-Reading

Concert band festivals and evaluations have existed since the early twentieth century. These evaluations, which at first included only prepared performances, were eventually refined to include an unprepared (i.e., sight-reading performance) following the prepared stage performance. Adding a sight-reading component to evaluations ensured that directors taught general music reading skills and did not merely feed individual players their parts. Typically, three judges score the prepared stage performance; for the sight-reading performance, a fourth judge joins them. The resulting sight-reading score adds to the stage performance score to generate an overall rating (McLain 2008).

Some practical tips to improve sight-reading scores include reading music that has variations in tempo, meter and key signatures. Practicing music in this way reinforces the ability to help students recognize changes with ease (Sariti 2005). Music educators can

incorporate these methods by introducing their students to a variety of music literature in class well before they ask students to sight read on their own.

Another method for improving sight-reading in young brass players is to teach ear training rather “eye” training (Huenink 2002). Ear training addresses the issue of students, especially brass players, missing partials while sight-reading due to their lack of knowledge on how a note should sound before they hear it played. Huenink (2002) also suggests lessons that include teaching, *solfège*, playing echo games, and singing through, which often helps to improve listening skills and assists students to hear the music in their head before they play it on their instrument.

CHAPTER III.

METHOD

Participants

The participants were 75 seventh- and eighth- grade students, ages 12 to 14 from three highly rated band programs in Miami-Dade County Public Schools: Hammocks Middle School, South Miami Middle Community School, and Southwood Middle School (see Table 1). Hammocks Middle School's student population ethnic demographics are: 12% White Non-Hispanic, 6% Black Non-Hispanic, 76% Hispanic, and 6% Asian/Indian Multiracial. South Miami Middle Community School's demographics are: 18% White Non-Hispanic, 14% Black Non-Hispanic, 65% Hispanic, and 4% Asian/Indian Multicultural. Southwood Middle School's demographics are: 33% White Non-Hispanic, 21% Black Non-Hispanic, 38% Hispanic, and 8% Asian/Indian Multicultural.

The rank of each school's music program rank was determined by statewide district evaluations during the previous two years. All three of the participating schools in this study have received a "straight superior" rating at Music Performance Assessment evaluation during these years. The methodology requires that subjects have participated in an instrumental ensemble for a minimum of two school years, play a wind instrument, and take part in the most advanced non-jazz band class at their respective school. Participants were allowed to take part in the experiment if they were involved in more than one band class, including Jazz Band. All major wind instruments were represented in this experiment

Table 1: Demographics of Participants by School (N=75)

	Middle Schools	# of Students	% Male	% Female	% 2 Years	% 3 Years
Control	School A	19	86	14	29	71
	School B	7	43	57	14	86
	School C	13	36	64	29	71
Experimental	School A	11	90	10	20	80
	School B	8	43	57	43	57
	School C	17	68	32	58	42

School A: South Miami Middle School
 School B: Southwood Middle School
 School C: Hammocks Middle School

Design

The experiment is quantitative in nature. Data collected consists of scores obtained from the Watkins-Farnum Performance Scale (see Appendix B) as well as from investigator-devised surveys completed by the students. By using these surveys, levels of trait anxiety were determined before the sight-reading evaluation. After the experiment, students reflected on their experience of the project so that the investigator was able to determine perceived state anxiety.

On the “before” survey, a “musician level” was calculated in order to determine if the student met the requirements of participating in this experiment. Following the gathering of data, the investigator determined that calculating a “musician level” was not necessary so long as the student was in the top ensemble in their school as well as in their

second or third year of band. Many student participants are involved currently in various ensembles and classes such as music theory, jazz band, and other music classes.

In this investigation, the control group was the population that was read the script as it is asked to be read in the instructions of the Watkins-Farnum Performance Scale packet. This group was a control because students would normally be given instructions during a sight-reading audition that used the Watkins-Farnum Performance Scale in this manner. The population that was given an alternate script in an effort to make the adjudicator delivery seem friendlier and “human” as opposed to cold and “robotic” represented the experimental group.

This project was quasi-experimental in nature. The investigator randomly assigned students from each school into both the experimental and control groups. Randomization will be accomplished using a random number generator applied to class rosters and will be used to determine which students will be placed in each of the two groups.

Participants were asked to complete an investigator-devised survey both pre- and post- performance. The pre-performance surveys determined trait anxiety for any performance situation. Participants were to indicate if they have felt anxious during various performance evaluations in the past. Answers to these questions ranges from “Not at all” to “Very Much” and assigned to a scale of 1-3 in order to determine a “MPA number”. This number will help the investigator in determining a high or low level of trait anxiety for each participant (see Appendix A).

In order to determine performance anxiety during the audition, a label of “low”, “normal”, and “high” were assigned to number values depending on how each participant

answered questions in the surveys. By assigning numbers 1-3 or 1-5 for the pre- and post-performance surveys, respectively, the investigator could then add the scores and conclude whether a student felt anxiety. See Table 2.

Table 2: Assignments of Anxiety Levels

	Low Anxiety	Normal Anxiety	High Anxiety
Pre-Performance Survey	5 - 7	8 - 12	13 - 15
Post-Performance Survey	15 - 30	31 - 60	61 - 75

Participants were then given parent permission forms to be returned to their band director. After a few weeks, the investigator collected all parent permission forms. Willing participants were randomly assigned to the control or experimental group by means of a random number generator and a class roster.

About four weeks after filling out the first survey, each participant was asked to sight-read exercise four from the Watkins-Farnum Performance Scale, Form A (see figure 1). Performance conditions at all three schools were very similar: each student was in a quiet room that was separate from the band room; the hosting teachers provided a chair and stand of the same quality at each site; and, the investigator sat behind a large table on the same floor level as the student.

Figure 1 – Watkins-Farnum Performance Scale, Form A #4, Trombone/Baritone



During the performance, the investigator evaluated the accuracy of the sight-reading and assigned a score to the participant based on how well he or she executed the given exercise. The maximum possible score was a “10” and the minimum possible score was a “1” Scores were tallied based on the number of mistakes made by each participant. Mistakes were tallied according to the Watkins-Farnum directions by use of single-letter labels such as “T” for change in tempo, “P” for pitch error, “R” for rhythm error, etc. Students were only marked off for one mistake per measure (see figure 2).

Figure 2 – Watkins-Farnum Performance Scale with Errors Notated by Adjudicator

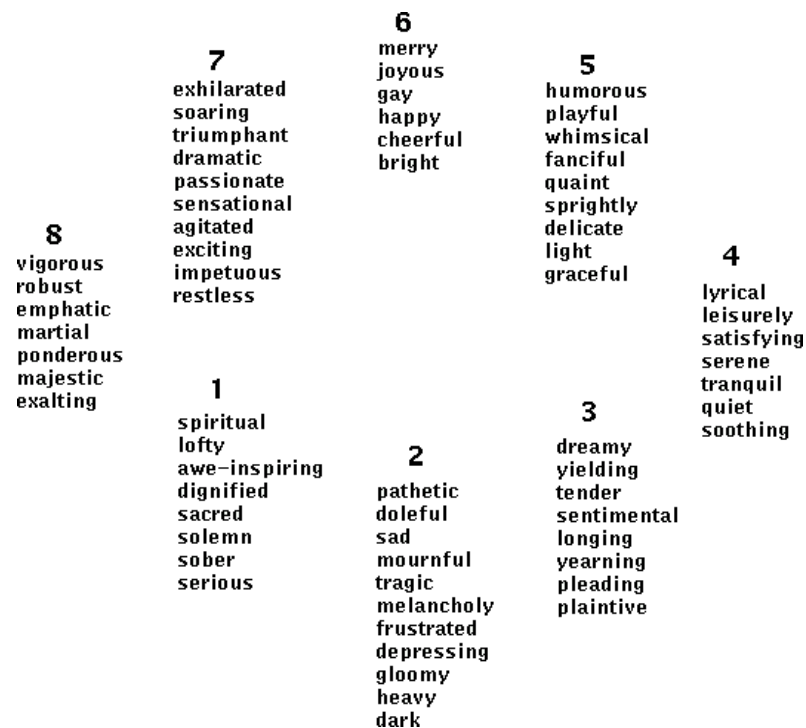


The investigator then read a script to the participants in the control group, delivering the instructions in a less-personable and dry manner. The experimental group heard the same instructions, but the delivery of said instructions by the adjudicator was in a personable manner(See Appendix D).

The Hevner Adjective Circle (Boyle &Radocy 2003) was the basis for each of the scripts used during the audition (see figure 3).Originally used to express musicality when listening to a piece, it is now often used to determine a variety of moods one is feeling or the opposite of a mood one is feeling. Each column is paired with another column that has the opposite meaning. For example, column one is opposite of column seven, column four is opposite of column eight, etc.Thus, the basis for the control groups’ script used

adjectives from one column, while the basis for the experimental groups' script used adjectives from the opposite column. Adjectives used are notated in parenthesis on each script.

Figure 3 - Hevner Adjective Circle



The post-performance survey calculated subjects' state anxiety in order to determine whether students actually felt nervous during the experiment. At each school, students walked to a separate room or hallway from the performance site and completed the post-performance survey. Participants ranked different aspects of their performance on a scale from one to five, one being "completely disagree" and five being "completely agree". The scores associated with each answer were then added together to determine a perceived level of state anxiety during the performance.

Several questions on the post-survey were decoys to the student participant. The researcher felt that by including “before” and “after” performance inquiries, along with unrelated topics to the research questions, the performer would be more likely read the questions and answer them to the best of their ability. To support this idea a peer group of other graduate music education students from Florida International University met to discuss. Along with the investigator, the other students determined that questions 2, 3, 5, 6, 8, 9, 11, 12, and 14 were not conducive of predicting performance anxiety during the sight-reading experiment.

All questions chosen for this study predicted state performance anxiety during the audition. Question number one stated “My performance was good”. This question was important because if a student believed immediately after sight-reading that their performance went well, they probably experienced low anxiety. Questions number four, ten, and thirteen through stated “I felt nervous during my audition”, “My hands were shaking during the performance”, and “My heart was beating fast during the performance”, respectively. These questions were important to report because they expressed how the student was feeling physically and mentally during the moments that they were actually performing on their instruments. Question seven stated “The music I was asked to play was easy”. By determining if the students felt that the music was easy or difficult, the investigator could conclude whether the student felt anxious due to the complexity of the music. The last question on the survey stated, “I enjoyed playing this music.” This question was important because it allowed the investigator to conclude if the student was disinterested in playing the music due to boredom, which could have affected anxiety levels.

An independent t-test determined if there was a difference in the Watkins-Farnum Performance Scale scores of the experimental and control groups. An independent t-test determined levels of state anxiety when comparing the control and experimental groups.

CHAPTER IV.

RESULTS

Students participating in the sight-reading experiment were randomly assigned to an experimental group or control group by use of a random number generator and classroom roster. In the experimental group the adjudicator asked participants to sight read while, during instructional delivery whereas in the control group the adjudicator read the script without conveying emotion. Data from the pre and post-performance surveys, along with scores from the results of the Watkins-Farnum performance scale were compiled for all participants to compare experimental and control groups

The pre-performance survey was a “baseline” because most students reported low or no trait anxiety. The pre-performance survey followed each student’s performance in the study. For each of the five questions, students were to rank their perceived level of anxiety during specific performance situations (See Appendix A). Each answer was then assigned a number (1, 2, or 3) and these numbers were added together to create an “MPA Number”. If a student’s total was 5-7, their anxiety was “low”; 8-12 was “normal”; 13-15 was “high” anxiety. Eighty-three percent of the participants reported a “normal” anxiety level before the experiment.

Research Question 1

In order to determine if instructional delivery of the adjudicator had affected performance anxiety during a sight-reading audition, the investigator employed data that indicated participants perceived level of anxiety. As stated in chapter 3, the investigator chose questions 1, 4, 7, 10, 13, and 15 from the post-test survey to determine the participant’s anxiety during the audition. The researcher computed standard deviations

and participants scores from each of these questions in the control group were compared to those of the experimental group. Results from this test are displayed in Table 3 and 4.

Table 3: Means and Standard Deviations of Post-Test Survey Anxiety Levels

	Control/Experimental	N	Mean	Std. Dev.
1. My performance was good	Experimental	36	2.1389	1.04616
	Control	39	2.3590	1.06344
4. I felt nervous during my performance	Experimental	36	2.69	1.348
	Control	39	2.51	1.295
7. The music I was asked to play was easy	Experimental	36	4.39	.964
	Control	39	4.41	.818
10. My hands were shaking during the performance	Experimental	36	1.61	1.128
	Control	39	2.10	1.273
13. My heart was beating fast during the performance	Experimental	36	2.14	1.246
	Control	39	2.21	1.490
15. I enjoyed playing this music.	Experimental	36	1.7500	.80623
	Control	39	2.1026	.94018

Table 4: T-test of Post-Performance Anxiety during Audition

	t-test for Equality of Means			
	t	df	Sig. (2-tailed)	Mean Difference
1. My performance was good	-.903	72.695	.369	-.22009
4. I felt nervous during my performance	.594	71.941	.554	.182
7. The music I was asked to play was easy	.103	68.929	.918	-.021
10. My hands were shaking during the performance	1.772	72.886	.081	-.491
13. My heart was beating fast during the performance	.208	73	.835	-.066
15. I enjoyed playing this music.	1.747	72.622	.085	-.35256

As seen in Table 4, the results of the t-test show that there was a statistically significant difference in only two questions at $p > .10$. For question one, four, seven, and 13 there was no statistical difference at sig (2-tailed) = .369, .554, .918, and .835 respectively.

Questions 10 and 15 showed the most noteworthy statistical difference at .081 and .085, respectively. These questions included “My hands were shaking during the performance” and “I enjoyed playing this music”. These two questions showed the most statistically significant difference between the control and experimental groups.

Research Question 2

In order to determine if the instructional delivery of the adjudicator affected performance outcome of the participants, an independent sample t-test was performed. The researcher compared the Watkins-Farnum Performance Scale of both the control and experimental groups. Equal variance was assumed because Levene's Test for Equality of Variance shows a significance at $p > .05$.

Calculated separately were the means and standard deviations for the control and experimental groups. The experimental group ($n = 36$) earned higher scores than the control group ($n = 39$). Results for each of these groups are found in Table 5. This information is also displayed as a bar chart in order to see the trend of scores in both the experimental and control groups (see figures 4 and 5).

Table 5: Means and Standard Deviations, Watkins–Farnum Performance Scale Score

	N	Mean	St. Dev.
Experimental	36	7.78	1.658
Control	39	7.00	1.622

Figure 4 - Watkins-Farnum Scale Scores, Control Group

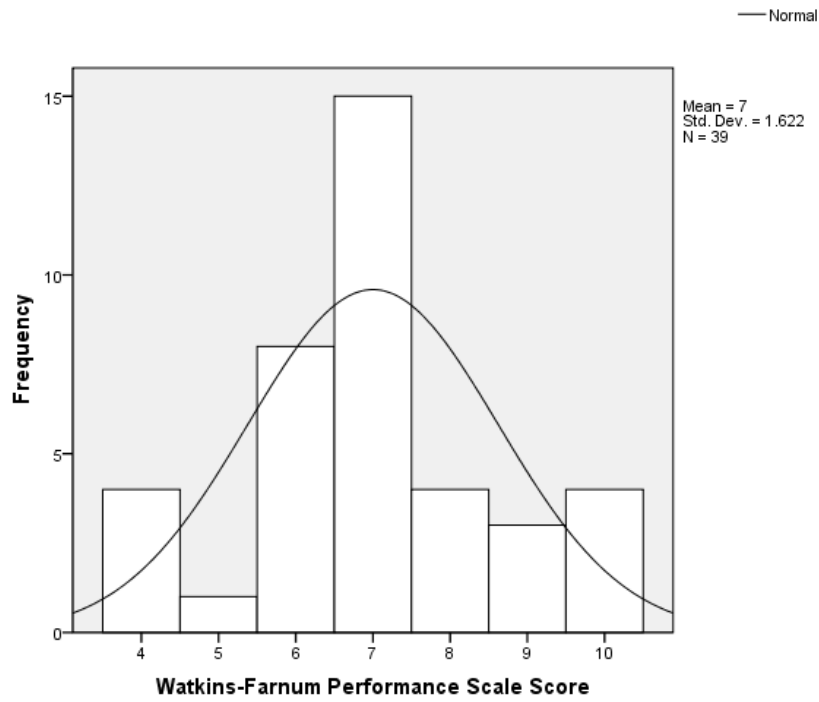
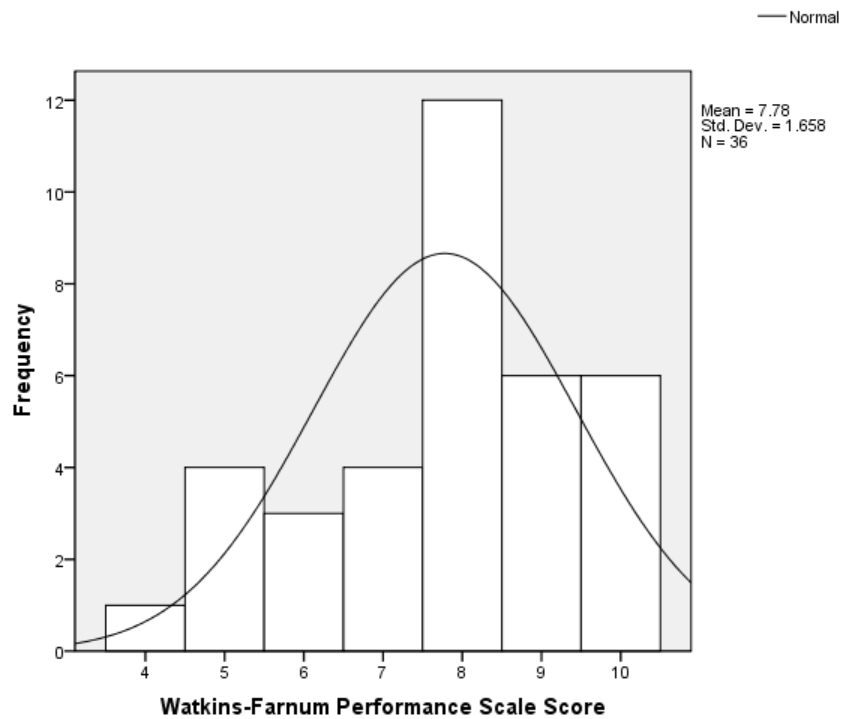


Figure 5 - Watkins-Farnum Scale Scores, Experimental Group



By combining both the experimental and control group results of the Watkins-Farnum Performance Scale scores, the investigator determined means and standard deviations. The mean difference between control and experimental groups was .778 (see Table 6).

Table 6: Independent Samples T-Test

t-test for Equality of Means				
	t	df	Sig. (2-tailed)	Mean Difference
Equal Variance Assumed	2.053	73	.044	.778

By running the t-test for Equality of Means (see Table 6) the investigator was able to conclude that there was a statistically significant difference between the scores of the control and experimental groups at the $p < .05$ level. Participants in the experimental group did have a statistically higher score than those placed into the control group.

Summary

Levels of anxiety were calculated via pre- and post-performance surveys. Scores of a sight-reading audition via Watkins Performance Scale were also calculated. The results compared participants in both the control and experimental groups. Means and standard deviations calculated on the surveys determined perceived anxiety. A t-test compared the perceived level of anxiety for both the control and experimental groups. The results determined that there was a statistically significant difference between the control and experimental groups. The test results from the second t-test also showed that there was a statistically significant difference between the control and experimental groups Watkins-Farnum Performance Scale scores.

CHAPTER V.

DISCUSSION

Purpose/Problem

The purpose of this study was to help improve adjudicator influence on sight reading auditions. The investigator determined if a ready-made script versus an adjudicator-made script used for the experimental group helped to improve performances of middle school-aged wind instrumentalists. The problem of this study was to determine if middle school students who were assigned to a more personable judge received felt more relaxed and received higher ratings during their auditions versus the control group that was adjudicated by a less personable and dry judge.

Discussion

For the most part, the majority of previous research in performance anxiety has only emphasized the need for improvements in the areas of student and teacher preparation for auditions. For example, Sariti (2005) suggested that there are ways to improve sight-reading by sight reading music that has variations in tempo, meter and key signatures. The researcher suggests that music educators can incorporate these methods by introducing their students to a variety of literature in class well before they ask students to sight read on their own.

Heunink, (2002), also suggested teaching training the ear rather than “eye” training. Ear training addresses the issues students, namely brass players, experience. Brass players often miss partials while sight-reading due to their lack of knowledge on how a note should sound before they hear it played. He also suggests lessons that include teaching solfège, playing echo games, and singing through music, which often helps to

improve listening skills and assists students to hear the music in their head before they play it on their instrument.

Participants' involvement in a magnet program and their availability to participate in this study made for an ideal sample. The seventh- and eighth-grade student participants used in this treatment had each been in a performing ensemble for at least one full school year and were either continuing their second or third year in band by participating in at least one of the top ensembles at their school. Each of the schools had participated in a district Music Performance Assessment and received straight superior ratings for at least the past two consecutive years.

The decision to employ exercise four from the Watkins-Farnum Performance Scale came after consulting with each of the three band directors at the participating schools before the experiment. It was obvious after volunteer students played several lines from the Watkins-Farnum Performance Scale that exercise number three was too simple and exercise five proved to be slightly too difficult. As a result, exercise number four proved to be the most appropriate for the participants in this experiment.

Implications for Practice

The investigator believes that band directors and music educators alike should recognize the role that they play at inducing music performance anxiety in their students during auditions. A student may feel that he/she is not necessarily good at auditions and therefore doubt their ability of reading a piece of music correctly the first time.

Something else to bear in mind is that many adjudicators lack the background of a band director. When considering the combined stress from seating auditions, getting into a magnet program, or placement in an honor band, students should be made to feel at ease

during auditions by means of judge demeanor and kindness. The investigator believes that most adjudicators truly want their students to have successful auditions. Band directors should be open to the idea of treating the student with kindness during the audition, rather than passive boredom of which they are so often exposed.

Suggestions for Future Research

While the surveys gave an overview of what the students could have been feeling after their audition, it may be interesting to conduct this study using actual medical evidence of music performance anxiety before, during, and after the audition. Due to the age of the participants, some individuals may not have been able to accurately verbalize, predict, or recall their actual physical symptoms of nerves and therefore may have reported insignificant heart rate, shaking hands, and nervousness. They may have in fact been experiencing these signs of MPA although it was not reported frequently in this study.

Choice of participants for this study would likely be changed in a future study in order to test a different type of music student. Investigators may find it useful to choose participants whom are not a part of a magnet school or program, but rather from a struggling music program or inner city school. By testing a sample population that does not necessarily have a high success rate, the resulting levels of anxiety may be considerably different.

Other music educators such as those in the orchestral or choral field may also find this study useful. An investigator may choose to create an assessment much like The Watkins-Farnum Performance Scale in order to test anxiety levels in front of an

adjudicator for choral or orchestral students. The levels of anxiety may be different depending on the type of instrument used during an audition.

Summary

The condition of MPA can arise through specific experiences and can manifest itself through combinations of affective, cognitive, somatic and behavioral symptoms (Kenny 2006). In order for students to feel more comfortable while sight-reading, practice, proper instruction, and fundamental work on these types of exercises must occur. This study focused on the adjudicator's influence on both the anxiety and the performance of a student during a sight reading audition. The results from this study support previous research that students do in fact experience performance anxiety during sight-reading. The research concluded statistically significant results favoring a personable judge versus a less-personable judge.

It can be concluded that performance anxiety and performance accuracy can be affected by an adjudicator's delivery of instructional script during an audition. In the future, band directors should be aware of their influence on their students when conducting chair placement auditions, as well as performance tests during class. Likewise, adjudicators should be aware that conveying empathy towards student performers could have an impact on their performance. Efforts to make audition environments as stress-free as possible may result in students experiencing less performance anxiety and performing to the best of their ability.

LIST OF REFERENCES

- Altenmüller, E., Weisendanger, M., & Kesselring, J. (2006) *Music, motor control, and the brain*. New York, NY: Oxford.
- Andrews, N., & Ryan, C. (2009). An investigation into the choral singer's experience of music performance anxiety. *Journal of Research in Music Education*, 57 (2), 108-126.
- Bergee, M.J. (2002). Faculty inter-judge reliability of music performance evaluation. *Journal of Research in Music Education*, 52(2), 137-150.
- Boyle, J.D. & Radocy, R.E. (2003). *Psychological foundations of musical behavior*. Springfield, IL: Charles C. Thomas.
- Fiske, H.E. (1977). Relationship of selected factors in trumpet performance adjudication reliability. *Journal of Research in Music Education*, 25(4), 256-263.
- Florida Department of Education. (2005). The arts: grades 6-8. *Sunshine state standards*. Retrieved from <http://www.fldoe.org/bii/curriculum/sss/sss1996.asp>.
- Green, S.K., & Hale, C.L. (2009). Six key principles of music assessment. *Music Educator's Journal*, 95(4), 27-31.
- Grutzmacher, P. A. (1987). The effect of tonal pattern training on the aural perception, reading recognition, and melodic sight-reading achievement of first-year instrumental music students. *Journal of Research in Music Education*, 35(3), 171-181.
- Huenink, J. S. (2002). Sing it, hear it, play it!: ear training for middle school students. *Teaching Music*, 10(1), 56-61.
- Kenny, D.T., (2006). Music performance anxiety: origins, phenomenology, assessment and treatment. [Research article] University of Melbourne faculty of music. *International Index to Music Periodicals*, 31, 52-64.
- Kent, M., (2006). *The oxford dictionary of sports science and medicine*. New York, NY : Oxford University Press.
- Kirchner, J. (2005). Managing musical performance anxiety. *American Music Teacher*, 54 (3), 31-33.
- Lee, S. (2002). Musician's performance anxiety and coping strategies. *American Music Teacher*. 52(1), 36-39.

- McLain, B.P. (2008). A review of research on band competition. Retrieved from <http://www.professoraloha.com/355F08/355F08/index.html>
- McPherson, P. (2002). *The science & psychology of music performance: Creative strategies for teaching and learning*. Parncutt, R., & McPherson, G.E., (Eds.). New York, NY: Oxford.
- Music Educators National Conference. (1996). *Performance standards for music*. Reston, VA.
- National Association of Schools of Music. (2009). *2009-2010 handbook*. Reston, VA.
- Parrish, R. T. (1998). Effects of two instructional methods on high school band students' sight reading proficiency, music performance, and attitude. *Application of Research in Music Education*, 17(1), 14-20.
- Petrovich, A. (2004). Performance anxiety: how teachers can help. *American Music Teacher*, 53 (3), 24-27.
- Randall, M. (2008). The trouble with nerves. *Teaching Music*, 16(2), 44-46, 48.
- Robinson, M. (1995). Alternative assessment techniques for teachers. *Music Educators Journal*, 81(5), 28-34.
- Sariti, D. (2005). Three steps to sight reading success. *American String Teacher*, 55(2), 44-48.
- Spielberger, C.D. (1966). Trait-state anxiety and motor behavior. *Journal of Motor Behavior*, 3, 256-279.
- Stewart, J.L. (2002, April). *Performance evaluation in music research*. Paper presented at the National Biennial In-Service Conference of MENC: The National Association for Music Education, Nashville, TN.
- Taborsky, C. (2007). Music performance anxiety: a review of literature. *Applications of Research in Music Education*. 26(1), 15-25.
- Watkins, J.G. & Farnum, S.E. (1954). *The Watkins-Farnum performance scale*. Winona, MN, and Milwaukee, WI: Hal Leonard Publishing Corporation.
- Watts, D. (2008). Therapy for sight-reading woes. *American String Teacher*, 58(2), 28-31.
- Whitcomb, B. (2008). Overcoming performance anxiety. *American String Teacher*, 58 (4), 36-39.

APPENDIX A

PRE-PERFORMANCE SURVEY



Please fill out the following information before the performance.

Circle One: Male Female Age: _____

Audition Instrument: _____

How many years have you been playing this instrument? _____

Are you in the most advanced concert band at your school? _____

Are you taking more than one music class this year? _____

If yes, what other music class are you taking this year? _____

Do you get nervous when you have to play in front of your band director (circle one)?

Not at all Somewhat Very Much

Do you perform well during auditions or tests in band class (circle one)?

Not at all Somewhat Very Much

Do you enjoy performing in front of other people (circle one)?

Not at all Somewhat Very Much

Do you feel physical symptoms of nerves when you play by yourself in front of other people (i.e. heart beating fast, shaking hands, sweaty palms, dry mouth) (circle one)?

Not at all Somewhat Very Much

Are you a strong sight-reader (circle one)?

Not at all Somewhat Very Much

FOR OFFICIAL USE ONLY

AUDITION NUMBER: _____

MPA NUMBER: _____ **L N H**


MUSICIAN LEVEL: _____

APPENDIX B

WATKINS-FARNUM PERFORMANCE SCALE

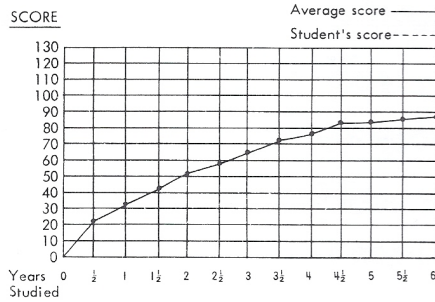
WATKINS-FARNUM PERFORMANCE SCALE

FORM A

Score Sheet For B^b Cornet, Clarinets, Baritone 

Name _____ Date _____
 Instrument _____ Years Studied _____
 School _____ Grade _____ Age _____

PROGRESS CHART



SCORING SUMMARY

(Student's score is "possible score" less errors)

Ex.	Possible score	Errors	Score
1.	" "	10	" "
2.	" "	10	" "
3.	" "	10	" "
4.	" "	10	" "
5.	" "	10	" "
6.	" "	10	" "
7.	" "	10	" "
8.	" "	10	" "
9.	" "	10	" "
10.	" "	10	" "
11.	" "	10	" "
12.	" "	15	" "
13.	" "	9	" "
14.	" "	10	" "

GRADE TOTAL SCORE

Remarks _____

GRADING CHART

Years	GRADES FOR CORNET CLARINET BARITONE											
	1/2	1	1 1/2	2	2 1/2	3	3 1/2	4	4 1/2	5	5 1/2	6
A	35	50	62	70	77	83	88	90	92	94	96	98
B	25	40	48	55	61	66	70	74	78	82	84	86
C	15	30	35	40	45	50	54	58	62	65	67	69
D	5	15	25	30	35	40	44	47	50	52	54	56

Sample—At the end of one year if the score of a clarinet player is 50 or higher the grade will be A. At the end of one year a score of between 30 and 39 will earn a horn player a B.

Errors may be indicated in two ways:
 1. Draw a cross through the incorrect measure.
 2. Indicate the type of error by using the symbols on page 4 and 5.

- | | | | |
|-------|---|-----------------|---|
| Pitch | P | Change of tempo | T |
| Time | R | Expression | E |
| Slur | S | Holds or pauses | R |
| Rest | R | Repeats | : |

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Test begins here: Check only one error per measure.

Note: In order to keep the number of score sheets to a minimum two groups of instruments are combined on this sheet. The example below is for Clarinet. Other instruments will obviously play the lower octave on certain passages as written in the test book.

WATKINS-FARNUM PERFORMANCE SCALE EXERCISES

Tempo ♩ = 88

1

Tempo ♩ = 88

2

Tempo ♩ = 88

3

Tempo ♩ = 88

4

Tempo ♩ = 100

5

APPENDIX C

POST-PERFORMANCE SURVEY



Please fill out the following information after the performance

Rate the following statements from 1 (disagree) to 5 (agree) by circling the appropriate number:

	Completely Disagree	Somewhat Disagree	Not Sure	Somewhat Agree	Completely Agree
1. My performance was good	1	2	3	4	5
2. The judge was mean	1	2	3	4	5
3. I felt nervous <u>before</u> my performance	1	2	3	4	5
4. I felt nervous <u>during</u> my performance	1	2	3	4	5
5. I felt nervous <u>after</u> my performance	1	2	3	4	5
6. I played the best that I could	1	2	3	4	5
7. The music I was asked to play was easy	1	2	3	4	5
8. I played all of the notes correctly	1	2	3	4	5
9. My hands were shaking <u>before</u> the performance	1	2	3	4	5
10. My hands were shaking <u>during</u> the performance	1	2	3	4	5
11. My hands were shaking <u>after</u> the performance	1	2	3	4	5
12. My heart was beating fast <u>before</u> the performance	1	2	3	4	5
13. My heart was beating fast <u>during</u> the performance	1	2	3	4	5
14. My heart was beating fast <u>after</u> the performance	1	2	3	4	5
15. I enjoyed playing this music	1	2	3	4	5

APPENDIX D

ADJUDICATOR SCRIPT

Control Population Script (anxiety-inducing):

***This script should be performed quickly, without any eye contact given to the subject in a medium-volume somewhat-monotone voice. The adjudicator should look down at the score sheet the entire time, whether or not they are writing. (Depressing/gloomy/frustrated)

“Have a seat over there.” (robust)

“In this exercise, you are going read the exercise provided exactly as it is written without stopping even one time. Hold each note to its correct value and observe all markings and signs. Do not miss any notes and do not stop if you mess up (vigorous). Go ahead and turn over the music and look at it for a couple of seconds.” (wait 15 seconds)

“The first exercise should be played at this speed (turn on metronome to 88 bpm). I will stop the metronome after you have finished the first measure. Please begin.” (agitated)

(Wait for student to finish performance)

“Thank you for your performance. You can return to your classroom now.”

Experimental Population Script (anxiety-reducing):

***This script should be performed slowly, with the adjudicator speaking in a soft tone, while looking at the student during the reading of the script. (bright/cheerful)

“Please have a seat and make yourself comfortable.” (soothing)

“I would like you to play the exercise on the back of this paper as beautifully as you can. Even if you mess up, just continue to play. (serene) The important thing here is that you have fun and that you play the best that you can. Go ahead and turn over the music and look at it for a couple of seconds” (wait 15 seconds)

I will start the metronome so that you get the tempo in your head and then stop it once you have finished the first measure. Do you understand the directions?”

(Turn metronome on)

“Please begin when you are ready.” (leisurely)

(Wait for student to finish performance)

“Thank you so much for your performance. You can return to your classroom now.”