

THE EFFECT OF GUIDED IMAGERY AND PREFERRED MUSIC LISTENING
VERSUS GUIDED IMAGERY AND SILENCE ON MUSICAL PERFORMANCE
ANXIETY

A THESIS

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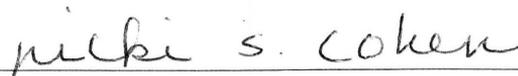
To the Dean of Graduate Studies and Research:

I am submitting herewith a thesis written by Soo Y. Kim entitled "The Effect of Guided Imagery and Preferred Music Listening versus Guided Imagery and Silence on Musical Performance Anxiety." I have examined this thesis for form and content and recommend that it be accepted in partial fulfillment of the requirements for the degree of Master of Arts with a major in Music Therapy.



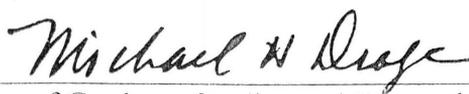
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We have read this thesis and recommend its acceptance:





Accepted:



Dean of Graduate Studies and Research

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ABSTRACT

The Effect of Guided Imagery and Preferred Music Listening versus Guided Imagery and Silence on Musical Performance Anxiety

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The purpose of this study was to determine the effect of guided imagery and preferred music listening versus guided imagery and silence on musical performance anxiety.

The design was a pre-test/post-test control group design. Eighteen volunteer music students were randomly divided into two groups: (a) the experimental group (N=9), which underwent the guided imagery plus preferred music listening treatment, and (b) the control group (N=9), which experienced the guided imagery plus silence condition. Participants in both groups listened to the guided imagery tape, which lasted approximately 10 minutes. The participants in the experimental group listened to the preferred relaxation music tape they had chosen for 5-6 minutes. No specific verbal instructions were given during the music treatment. The strategy for the control group was the same, except that the participants remained quiet without music for 5 minutes and 30 seconds after hearing the guided imagery tape.

Dependent variables were *The Alpert and Haber's Achievement Anxiety Test*, adapted by Sweeney and the *Sweeney Piano Performance Anxiety Scale*. *T-tests* for repeated measures were used to analyze the debilitating and facilitating anxiety pre-test/

post-test scores of both groups on the *Alpert and Haber's Achievement Anxiety Test*, adapted by Sweeney. *T-tests* for independent means were used to analyze the post-test scores of the experimental and control groups on the cognitive and emotional subscales of the adapted *Sweeney Piano Performance Anxiety Scale*. No significant difference was found between the pre-test and post-test means for the experimental group but a significant difference was found for the control group on the *Alpert and Haber's Achievement Anxiety Test*. Also, no significant difference was found between the post-test scores of the experimental group and the control group on the adapted *Sweeney Piano Performance Anxiety Scale*.

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CHAPTER I

Introduction

Performance anxiety is a major problem for performing musicians. Performance anxiety, which is also called “stage fright,” is a factor that can and does make public performing less pleasurable, and on the worst occasions, can turn it into an agonizing nightmare (Reubart, 1985). It could affect performers adversely at any time in their careers. Some performers are never able to control their performance anxiety and, as a result, either suffer from it throughout their entire careers or eventually change careers (Nagel, 1990). Frequently this can lead to self-destructive behaviors such as drug or alcohol abuse (Wolfe, 1990). The stress response can be varied and involve physiological changes as well as emotions ranging from psychological distress to severe nausea.

Professional musicians and college music students alike have experienced anxiety in performance situations. According to the definitions used in the “demand-control” scale developed by Karasek and co-workers (1979), “demand” is described as the amount of work or time required to get a task done, and “control” involves job decision latitude such as the amount of control over the tasks to be performed and how or when to finish them (Steptoe, 1989). A London study (Steptoe, 1989) found that orchestral musicians and music students perceived their careers to be stressful, as measured by the “demand-control” scale, even though the two different groups confront their problems differently.

The psychological distress associated with performance anxiety can be considerably greater than mere “stage fright.” Many veteran musicians with exemplary

skills and practice techniques describe experiencing dramatic emotional tension and psychological distress while performing. They acknowledge that their apprehensions are greatest before they perform, rather than during the performance itself (Salmon, 1990). Anthony (1994) describes a television interview in which the world famous violinist, Anne-Sophie Mutter, describes her own pre-performance anxiety vividly, saying that she feels the draft from the concert hall when the door to the stage opens.

Psychological problems have always plagued musicians. Stress can be increasingly greater for those musicians who depend on performing to make a living. This stress may be overlooked by health care professionals who work with performers. During the past five years, musicians, physicians, and other professionals have become more interested in the characteristics and needs of performers. This interest has stimulated research in a variety of health and education related fields (Salmon & Meyer, 1992).

Other previous laboratory research investigations into the reduction of performance anxiety of professional musicians have been focused mainly on cognitive/behavioral therapy to neutralize or eliminate the symptoms associated with performance situations. These topics have focused on reducing or modifying the impact of one's emotional response related to stressful performance events (Stephoe, 1989). Treatments frequently involve relaxing the body to enhance control over physiological states and to reduce somatic activation (Appel, 1976). However, it is unclear whether the effectiveness of treatment would carry over into real-life performing situations.

Treatment should be applicable beyond controlled laboratory settings for it to be useful to the performing musician (Montello, 1989).

Music in Performance Anxiety

Music therapy may provide a useful modality to assist those who experience performance anxiety. It is likely that music therapists may have opportunities to investigate and treat performance anxiety since many music therapy programs are umbrellaed within music departments (Brotons, 1994). Music Therapy can deal directly with performance anxiety since the music therapist is interested in treating the entire person (Hesser, 1985). Understanding performance anxiety and exploring effective treatments to reduce it could help musicians become liberated from unnecessary feelings of stress and anxiety. As a result, their performances may be more musical and expressive.

Purpose of the Study

The purpose of this study was to determine the effect of guided imagery and preferred music listening versus guided imagery and silence on musical performance anxiety. This study explored the following questions:

1. Were there any significant differences in trait anxiety between the experimental and control groups?
2. Were there any significant differences in state performance anxiety between the experimental and control groups?

Definitions

The following definitions clarify the primary terms in this study:

Music therapy is “an interpersonal process in which the therapist uses music and all of its facets--physical, emotional, mental, social, aesthetic, and spiritual--to help clients to improve, restore, or maintain health” (Bruscia, 1991, p. 5). *Guided imagery* is “a process where you are asked to focus on selected to help you achieve certain goals. Common applications include relaxation, relieving pain and other physical symptoms, reducing distress from surgery and other medical procedures, increasing creativity, enhancing confidence, stimulating healing responses in the body, and enhancing memory and learning” (Rossman, 2001). *Imagery* is “a thought process that involves the use of the senses: vision, audition, smell, taste, the sense of movement, position and touch. It is the communication mechanism between perception, emotion and bodily change” (Achterberg, 1985, p. 3). *Affirmations* are “strong, positive, feeling-rich statements about situations and experiences you wish to draw into your life” (Kaminski, 2000). *Musical Performance Anxiety* is “the experience of persisting, distressful apprehension about and/or actual impairment of performance skills in a public context, to a degree unwarranted given the individual’s musical aptitude, training, and level of preparation” (Salmon, 1990, p.3).

Limitations of the Study

This study involved the following limitations:

1. Only college-level music majors participated because the present study focused on musical performance anxiety. Since music majors are required to perform juries as their final examinations in applied music courses, they regularly

experience musical performance anxiety. A juried examination is a musical performance which is evaluated by a faculty panel.

2. All participants were volunteers who were randomly assigned to experimental and control groups.
3. The participants were not currently involved in psychological treatment or therapy that might affect their musical performance anxiety.
4. The time of day for treatments was not consistent because individual sessions were scheduled at the convenience of the volunteers.

CHAPTER II

Review of Literature

Anxiety

Everybody is familiar with the feeling of anxiety; between 10% and 30% of people suffer from some form of anxiety (Salmon, 1990). Basically, anxiety is a form of emotional preparation to face a situation in which an individual feels threatened. For example, anxiety may motivate students to study harder for an exam or help musicians perform better on the stage. Sometimes, it can help people cope with threatening events.

Anxiety has both physiological and psychological manifestations which can contribute positively or negatively to one's performance. Some physiological reactions associated with anxiety are rapid heart beat, rapid or irregular breathing, and dizziness. More personalized emotional experiences can include specific fears of losing control, going to pieces, going insane, or dying (Martin, 1971). Martin explained that a performer's process involving emotional expression and social interaction could interfere with obtaining reinforcement from playing an instrument and affect one's tendency to approach or avoid performing (1971). Ingram and Kendall's study (as cited in Salmon & Meyer, 1992) suggested that anxiety reflects the interaction of certain critical features such as broader characteristics associated with psychological distress, and a component reflecting individual differences in reaction. Certainly, critical features of anxiety can contribute to a performer's satisfaction or frustration with the act of performing. Anxiety can manifest itself in psychological distress representing feelings of inadequacy, losing

control, or losing the ability to concentrate at a given moment.

Musical Performance Anxiety

Based upon constructs derived from Kelly's (1955) Personal Construct Theory and Ellis' (1962) Rational Emotive Therapy, two studies conducted by Tobacyk and Downs (1986) measured musicians' cognitive and irrational belief systems for generating negative emotions, including anxiety. These two studies, conducted with 33 college music majors, found that the amount of state anxiety in those students, as measured by Kellian Threat scores (Krieger, Epting, & Hays, 1979) and the Irrational Belief Questionnaire (Newmark, Frerking, Cook, & Newmark, 1973), significantly increased prior to end of semester music jury examinations.

Even though most performers perceive anxiety as a negative experience, it can actually have either positive or negative effects on actual performance (Lehrer, Goldman, & Strommen, 1990). On the negative side, anxiety can interfere with learning or disrupt adequate preparation if it interferes with the creative drive or demands a perfect performance. Anxiety can present a challenge to performers when they try to overcome it and to think positively. On the positive side, Wolfe (1990) described performance anxiety as consisting of two adaptive components (arousal/intensity and confidence/competence) and two negative, or maladaptive, components (nervousness/apprehension and self-consciousness/distractibility). The positive feelings of arousal and intensity tend to be perceived as facilitative factors, and the negative feelings of apprehension and distractibility tend to be perceived as debilitating factors for those who experience performance anxiety (Niemann, Pratt, & Maughan, 1993). The existence of these positive

components is supported by the work of Lehrer, Goldman, and Strommen (1990), who found that musicians who used techniques for coping with anxiety found that it facilitated their performance. Musicians who avoided using anxiety-coping techniques were more nervous and apprehensive while performing and sometimes performed poorly (Wolfe, 1990).

Leglar (1979) found that excessive anxiety tends to impede performance and that the degree of anxiety can be tremendously affected by the demand characteristics of performance situations. Salmon (1990) found that performing from memory was very closely related to strong negative effects of performance anxiety with maximum levels of physiological arousal. New findings (Stephoe, 1989) describe other stressful aspects of the careers of orchestral musicians. Orchestral musicians, physicians, air traffic controllers were compared with waiters in Sweden, and the occupation of orchestral musician was found to be as high stress. Bochkarev's (1975) study illustrated the involvement of anxiety for musicians under situational and social stress conditions. It revealed that stress generally impaired the performance of Soviet participants in the Fourth International Tchaikovsky competition. Not surprisingly, it is also showed that two thirds of professional musicians suffer to some degree from occupational medical problems which result to some degree from stress (Salmon, Shook, Lombart, & Berenson, 1995). Another study by Steptoe and Fidler (1987) found that professional orchestral musicians experienced the lowest performance anxiety when compared with that of undergraduate music students and amateur musicians, even though situational factors related to anxiety varied with the performers' experience levels. The authors

indicated that coping strategies utilized by orchestral musicians included psychological counseling and sedatives, such as alcohol, along with behavioral therapies.

Non-Music-Related Treatments for Performance Anxiety

Some performance anxiety, which is a widespread phenomenon among musicians, seems to facilitate preparation prior to any juried musical event. However, extreme performance anxiety can keep musicians from pursuing a performing career (Nagel, 1990). Fortunately, most physicians and psychologists are realizing that increasing hours of practice alone will not help performers cope with their anxiety enough to ensure more successful performances (1990). In a national survey of 48 members of the International Conference of Symphony and Opera Musicians (ICSOM), 27 percent reported daily or occasional use of beta blockers to reduce performance anxiety. Nineteen percent of these musicians used beta blockers daily, and 11 percent of them used them occasionally; for these musicians, the medications were obtained through prescriptions by physicians. Surprisingly, 70 percent of musicians used beta blockers occasionally without a physician's prescription. This use of powerful drugs is of substantial concern to health care professionals (Fishbein, Middlestadt, Ottait, Straus, & Ellis, 1988). In a prevalence study of problems experienced by ICSOM musicians, 24 percent of those musicians surveyed mentioned that performance anxiety was their biggest problem, and 16 percent of them reported its intensity as severe. Of the musicians who reported experiencing severe performance anxiety, prescribed medication was the most frequently attempted treatment. Forty percent of musicians had tried a prescription medication; 92 percent of these reported it was effective. Twenty-five

percent of them had undergone psychotherapeutic interventions, and 60 percent had found these effective. Seventeen percent of ICSOM musicians had tried aerobic exercise to treat severe performance anxiety, and a large proportion of these respondents, 70 percent, experienced it as effective. Unfortunately, 11 percent of the surveyed musicians had consulted a general practitioner for help with severe performance anxiety, and only 27 percent of them reported that these contacts were helpful (1988).

Lehrer (1987) discussed an urgent need to prevent or treat performance anxiety severe enough to cause medical problems or to affect performance adversely. He proposed that non-pharmacological therapeutic techniques were needed to reduce anxiety and enhance musical performance, since drug therapies can have long-term detrimental side effects. Some of these techniques, primarily those dealing with relaxation, are now being incorporated by musicians as coping strategies because they lead to better performances and auditions. For example, musicians have incorporated imaging and meditative techniques utilized by athletes, and these have enhanced relaxation, allowing greater concentration and intensity for the performance tasks (Wolfe, 1990). Teaching these techniques and applying them in a form that musicians can use to facilitate practicing and/or performing could help them to deal effectively with performance anxiety. Consequently, numerous non-pharmacological treatment methods have been utilized over the years to reduce or treat performance anxiety faced by many musicians on a daily basis. These interventions include cognitive/behavior therapy, relaxation techniques, biofeedback, and guided imagery. Research in the past ten years (Brodsky, 1996) has shown cognitive and behavioral therapies can be more effective than

medications in boosting confidence and decreasing anxiety.

A study by Kendrick, Craig, Lawson, and Davidson (1982) also found that cognitive therapy is an effective treatment for performance anxiety. Their therapeutic intervention attempted to modulate performers' thought patterns. In order to compare the efficiency of cognitive-behavior therapy, including self-instruction and attention-focusing techniques with behavioral rehearsal in the treatment of performance anxiety, 53 pianists with extreme performance anxiety were selected to receive both therapies. Reductions in musical performance anxiety in these groups were contrasted with those in a wait-list control group. Cognitive therapy appeared to be more effective than the behavioral rehearsal program, even though both interventions were found to be effective in reducing performance anxiety.

To validate the effects of a psychological program for treatment of musical performance anxiety, another cognitive-behavior therapy, which included progressive muscle relaxation, cognitive therapy, and temperature biofeedback training, was utilized based upon the presumption that performance-anxious musicians with multiple treatments would report greater reductions in performance anxiety than members of a wait-list control group (Nagel, Himle, & Papsdorf, 1989). Among 20 volunteer undergraduate music students with complaints of debilitating anxiety while playing an instrument in public, 12 students were randomly assigned to a treatment group while the other 8 were assigned to a wait-list control group. After the completion of a six week program of group therapy, a comparison of pre and post treatment anxiety scores showed the performance anxiety of the treatment group was greatly reduced when compared with

the anxiety of the wait-list control group. Trait anxiety in the treatment group was also reduced. This study showed that performance anxiety of musicians could be reduced with cognitive-behavioral interventions.

Another study conducted by two physicians, Clark and Agras (1991), involved laboratory assessment of subjective and physiological responses to a musical performance in a double blind, placebo-controlled study. The study compared the effects of buspirone (an anxiety reducing drug with fewer undesirable side effects than benzodiazepines), cognitive-behavior therapy, and a mixture of both treatments on performance anxiety. Thirty-four participants were randomly assigned to one of four treatments: (a) 6 weeks of buspirone, (b) 6 weeks of placebo, (c) 5 weekly sessions of cognitive-behavior therapy sessions with buspirone, and (d) 5 weekly sessions of cognitive-behavior therapy with placebo. Among the four treatments, cognitive-behavior therapy with placebo showed the greatest reduction in subjective anxiety, improved quality of musical performance, and improved performance confidence; buspirone did not significantly contribute to improvement on any measure.

Another study evaluated the separate and combined effects of complementary counseling intervention modalities that include cue-controlled relaxation (CCR) and cognitive restructuring (CR) (Sweeney & Horan, 1982). Forty-nine music major participants were randomly assigned to five different treatment conditions: (a) cue-controlled relaxation (CCR); (b) cognitive restructuring (CR); (c) CCR plus CR; (d) standard-treatment control (musical analysis training) (Appel, 1976; McNabb, 1951); and (e) wait-list control (WLC). Anxiety was measured using the *Achievement Anxiety Test*

Scale (AATS). To collect valid state anxiety data, a public recital was scheduled for each participant prior to and after treatment. Participants also completed a series of self-report questionnaires as pre- and post-test measures. The study showed that CCR was the more useful therapy and that CR had its positive effect solely on the behavioral measure of anxiety. The authors concluded that CCR and CR alone or in combination appeared to be significantly more effective than the standard treatment or the wait-list control in reducing performance anxiety.

The effectiveness of biofeedback training for reducing performance anxiety has been reported in relatively few experimental studies. In one such study, Niemann, Pratt, and Maughan (1993) used an integrated approach, involving biofeedback training, selected coping strategies, and musical relaxation interventions to treat performance anxiety. They discovered that these interventions played a significant role in decreasing anxiety prior to performance situations. More evidence for the effectiveness of biofeedback training for reducing performance anxiety is needed before its true effects can be known.

Music Therapy and Performance Anxiety

The psychoanalytic literature views performance anxiety as not only a symptom but also as a complex array of attitudes, traits, and unconscious conflicts based upon a fear of failure that interfere with performance (Nagel, 1990). Dews and Williams (1989) have shown that most musicians who are willing to engage in counseling or cognitive psychotherapy are actually afraid that they might not be well understood by some physicians or psychotherapists or that their ability to perform might deteriorate once

therapy begins. They found that a majority of musicians look for specialized counselors with the ability to relate to the unique problems of musicians and who possess knowledge of the music profession (1989). Lehrer, Goldman, and Strommen (1990) believe musicians face performance anxiety on a regular basis. They postulate that coping skills and other techniques, such as relaxation therapy, desensitization, and performing frequently, are effective in reducing performance anxiety.

To determine the effects of music-assisted coping systematic desensitization on music performance anxiety, 18 musicians with no significant medical or psychiatric history were randomly assigned to three groups: (a) verbal coping systematic desensitization; (b) music assisted coping systematic desensitization; and (c) a wait-list control group (Reitman, 2001). Both experimental therapy groups experienced reductions in performance anxiety as measured by heart rate and surface electromyography (EMG) on the frontalis muscle.

In two experimental studies Montello, Coons, and Kantor (1990) found an integrated group music therapy treatment significantly increased musicians' confidence while reducing their performance anxiety. The integrated intervention also had a dramatic positive effect on performance quality. This study consisted of 2 experiments. In the first experiment, 12 weekly one-and-half hour music therapy sessions were structured into four music therapy interventions: (1) a warm-up, including relaxation and breathing exercises; (2) an unstructured group musical improvisation; (3) verbal, free association among individuals and group members; and (4) individual and/or group music therapy. Twenty freelance, volunteer musicians were split into two groups, an experimental

therapy group and a wait-list control group, to determine the effect of group music therapy in treating performance anxiety as measured by their responses on the *Personal Report of Confidence as a Performer (PRCP) Scale*, the *Spielberger Trait Anxiety Inventory (STAI-Trait Form)*, the *Spielberger State Anxiety Inventory (STAI-State form)*, and a *Bipolar Adjective Checklist*. The results indicated that the experimental group became significantly more confident in their performance and were less anxious and more optimistic.

The second experiment was conducted to validate the results of the first and to determine the effects of music therapy on narcissistic characteristics, a personality trait which could affect the participants' defenses against anxiety. Narcissism was measured using the *Narcissistic Personality Inventory (NPI)* to explore the effects of treatment on both performance self-involvement and the relationship between self-involvement and responsiveness to treatment. In this study, an attentional-control group (N= 6) was added to control for the Hawthorne Effect, since extreme self-involvement could be a contributing factor in performance anxiety and in its treatment. Participants in the second study included members of the experimental therapy group, which involved 8 members of the wait-list control group from the first experiment along with two new individuals, and a new control group (N= 10). To determine if treatment could improve musicality in performance (anesthetically pleasing and technically proficient musical products), both groups were asked to prepare two musical selections to share with other members of their respective groups during the experimental and attentional control group sessions. The videotaped sessions were independently reviewed, and scales for observable signs of

performance musicality (PM), performance stress symptoms (PSS), and performance self-involvement (PSI) were used as dependent measures. It was concluded that group music therapy was significantly effective in treating performance anxiety. The second experiment also replicated the *PRCP* and *STAI* findings of the first.

These two studies demonstrated that music therapy was effective in improving participants' musical performance; the second also suggested that group music therapy may be inappropriate for musicians with high narcissism scores; and the authors suggested that group music therapy should not be utilized until narcissistic defenses have been resolved through other therapeutic means.

Montello (1992) explored the effectiveness of behavioral techniques, such as breath awareness, relaxation training, cognitive restructuring, and psychodynamic techniques, on transforming musicians' fear into a creative force by deepening their connection with the music. The music therapy intervention focused mainly on here-and-now experiences, including musical improvisation, performance, self-awareness techniques, and verbal processing, as vital factors for communication, change, and personality integration. Montello found that eight key components extracted from her qualitative research could be related to performance anxiety and that music, itself, utilized as a self-reflecting and transformational tool, could help musicians obtain greater self-awareness, deal with their own performance anxiety, and realize their creative potential. The eight key components she extracted from this study were: (a) the presence of an inner critic, (b) ambivalent associations with the primary instrument, (c) inadequate preparation for performance, (d) lack of commitment to performance, (e) underdeveloped

will and lack of focus related to performance, (f) discomfort in sharing one's music with an audience, (g) a weak sense of self, and (h) an ambivalent relationship with the audience.

Brodsky and Sloboda (1997) compared music-enhanced therapeutic modalities with standard traditional verbal counseling and psychotherapy to evaluate a potentially attractive therapeutic option especially designed for musicians. Fifty-four symphony orchestra musicians were matched on relevant traits and then randomly assigned to one of three treatment interventions: (a) traditional psychotherapeutic counseling, (b) counseling supplemented with music, or (c) counseling supplemented with music plus vibrotactile sensations. The results indicated that music-enhanced therapies were just as effective as traditional counseling in reducing career stress and music performance anxiety among professional orchestral musicians.

In another study Brotons (1994) investigated the differences in performance anxiety between non-jury (studio practice) and jury conditions. She also studied the differences in physiological and psychological responses of musicians under open and double-blind juried (audio-recorded) conditions. Sixty-four college students, 59 instrumentalists and one vocalist, were studied in a pre-test/post-test experimental and control-group design. The results revealed that the juried condition was perceived as more stressful than the non-juried condition, and there were no significant differences in performance quality ratings between the open and double-blind juried groups.

Recently, medical and psychological treatments for musicians with performance anxiety are attracting greater attention, but some researchers believe that using drugs,

eating a special diet, or undergoing sessions with psychiatrists do not address the real problem. Medications and special diets may well have overall beneficial effects on general anxiety but may have very little to do with addressing performance anxiety. The music therapist may have better understanding of the role of music related to personality development of musicians and be in a potentially advantageous position to offer musicians a unique form of treatment. Rider (1987) studied the effectiveness of music therapy treatment upon the medical and psychological problems associated with performance anxiety. He focused on the connections between muscle fatigue and performance anxiety and provided a guide for effectively working with such disorders. In the case presented, a 34 year old cellist from a local symphony orchestra, who complained of performance anxiety and muscle fatigue in the shoulders, participated in five music therapy sessions. These included music psychotherapy, biofeedback, systematic desensitization, and cognitive restructuring. An Electromyographic (EMG) unit and a Skin Temperature unit were utilized to measure changes in EMG reading and skin temperature throughout the sessions. The results revealed that the subject experienced a reduction in shoulder tension, increased positive performance attitudes, and improved self-esteem and performance quality.

Preferred Music and Anxiety

Preferred music has been used as a modality for treating anxiety-related problems by relieving tension and increasing relaxation. Davis and Thaut (1989) measured physiological and psychological responses and found that state anxiety in college students was reduced and perceived relaxation increased when participants listened to

preferred relaxing music. Eighteen students were selected for analysis of physiological and psychological data, and results revealed that state anxiety was reduced and relaxation was increased between pre-test and post-test measures. In another study, Thaut and Davis (1993) found listening to preferred music was effective in decreasing anxiety and enhancing relaxation. Significant differences in anxiety scores were found between preferred music listening and music plus visualization, as well as between silence and preferred music conditions, even though no significant difference was found in the physiological measurements across conditions.

Guided Imagery and Performance Anxiety

Several studies have demonstrated that the use of imagery can reduce anxiety in specific performance situations, such as test taking and sports. Imagery has also been adapted and modified by musicians to reduce the symptoms of performance anxiety. Speck (1990) examined the effect of guided imagery upon the anxiety of baccalaureate level nursing students learning to perform their first injections. Measures of anxiety in the study included the *State-Trait Anxiety Inventory* (Spielberger, Gorsuch, & Lushene, 1970), the *Biodot stress dot* (Biodot International, 1986), performance time, and a performance score. The quasi-experimental post-test design involved 26 baccalaureate nursing students in treatment (imagery) and control groups. All students received the same instruction for the injection unit. The guided imagery cassette tape, which consisted of relaxation, focus on the topic, imagery of the procedure for the injection, and imagery of successful completion, was administered to the experimental group during the seventh week of the semester. Their performance evaluation for the first injection was scheduled

during the eighth week. Results revealed that participants who received guided imagery perceived their anxiety to be lower than those who did not receive the guided imagery treatment.

Esplen & Hodenett (1999) investigated the effects of guided imagery on reducing performance anxiety among student musicians. A one-group pre-test/post-test design was used for the study. Twenty-one music students who received the guided imagery intervention were involved. In addition, descriptive data from 45 other students, who declined the intervention for several reasons, also provided information about their experiences with performance anxiety. The guided imagery intervention was conducted by the researcher prior to a scheduled, evaluated performance, and the participants listened to a guided imagery cassette tape at least once per day for one week prior to the evaluation date. The author reported that the guided imagery intervention produced a significant decrease in anxiety levels. Also, most students reported that guided imagery affected their performances positively and stated that they experienced fairly high levels of satisfaction with their performances.

Summary

This literature review provides evidence that both professional musicians and college music students suffer from some degree of performance anxiety which is severe enough to affect their performing careers negatively. In the last decade, performing arts medicine, a new medical area dealing with a variety of medical problems of performers, has begun to look at these problems more closely. Several treatment modalities which had positive effects on reducing performance anxiety have been studied, and the results

of these studies have been discussed in this review. The techniques described included cognitive/behavior therapy, relaxation methods, biofeedback, drug therapy, music therapy, and guided imagery. Many of these investigations have shown that some of these therapeutic methods are being used by musicians as successful coping strategies for dealing with performance anxiety.

Although music therapy programs are located in music departments, few studies have been conducted by music therapists on the effects of anxiety reduction techniques on the performance anxiety of music students to determine if music therapy techniques for helping performers play more expressively or overcome their performance anxiety are viable options. (Brotons, 1994). One study involving the use of guided imagery as a coping method for performance anxiety in music students has shown that this technique is effective.

CHAPTER III

Method

Participants

The 18 volunteer participants for this study met the following criteria: (a) they were music students, male or female at Texas Woman's University; (b) they were scheduled to play a jury examination on their applied musical instrument in Fall 2001; and (c) they were not involved in any form of psychological treatment or therapy. The researcher posted flyers containing her phone number and email address on a bulletin board at Texas Woman's University and announced the study in the introduction to music therapy class in order to solicit volunteer participants. Those who were interested in the study contacted the researcher either by phone or email, and the researcher responded using the same means of contact. Although 20 participants were recruited for this study, 2 participants dropped out before its conclusion, one because of a time conflict and the other because of an emergency situation. Each participant indicated that the reason for leaving the study was unrelated to the study itself.

Setting

The experimental treatment was administered individually; the time was scheduled by agreement between the researcher and each participant. Preferred music chosen by each participant from a list of four different musical selections was used as the musical condition. Each of the four selections met the criteria for "small container music," as described by Cohen (N. Cohen, personal communication, February 17, 2000).

The experimental treatment for both groups was conducted in the Music Therapy Clinic located on the second floor of the Music Building at Texas Woman's University in Denton, TX. The Music Therapy Clinic is equipped with a variety of musical instruments and a cassette player; participants were seated in a comfortable, reclining lounge chair. The lighting in the room could be dimmed to a level preferred by each participant. A guided imagery script, developed by the researcher and recorded on cassette tape by a native English speaker (see Appendix A), was used for both groups. No music was played during the guided imagery portion of the treatment session. The guided imagery script included the following sequential elements: (a) instructions to facilitate entering a relaxed state; (b) imagery depicting the participant's waiting outside the room just prior to the jury examination, along with focused affirmations; (c) imagery depicting the participant's entering the jury room and approaching the jury panel; (d) instructions for the participant to focus on the music and gather his or her thoughts together, along with positive affirmations; (e) imagery of the participant's actually performing music for the jury panel; and (f) focused affirmations regarding feelings of mastery over the completed performance.

Procedure

The participants were randomly divided into two groups: (a) the experimental group, which underwent the guided imagery plus preferred music listening treatment, and (b) the control group, which experienced the guided imagery plus silence condition. Approval for the procedures used in the study was obtained from the Internal Review Board at Texas Woman's University. During the initial meeting, all participants

completed the approved consent forms (see Appendix D), and the researcher briefly explained the study. Each participant in the experimental group listened to four different selections of music considered by the researcher to be "small container" in nature. After hearing all four selections, the participant chose his or her most preferred music. The selections used for this procedure were: (a) *Oboe Concerto in D minor: Adagio* by Albinoni, from the CD, *Plaintive* (1996), (b) *Bygone Days* by Eileen Ivers, from the CD, *Thanksgiving* (1998), (c) *Song for the Morning Star and Daybreak Vision* by R. Carlos Nakai, from the CD, *Canyon Trilogy* (1989), (d) *Green and Golden* by Ralph Towner, from *Solo Guitar* (1997). The experiment was conducted in the two weeks prior to jury exams during the Fall Semester, 2001. The researcher met with each participant for approximately 15 minutes, twice a week, for 2 weeks. Participants in both groups completed *Alpert and Haber's Achievement Anxiety Test*, adapted by Sweeney (1981), as a pre-test/post-test measure. After completing the pre-test, participants in both groups listened to the guided imagery tape, which lasted approximately 10 minutes. The participants in the experimental group listened to the preferred relaxation music tape they had chosen for 5-6 minutes. No specific verbal instructions were given during the music treatment. The strategy for the control group was the same, except that the participants remained quiet without music for 5 minutes and 30 seconds after hearing the guided imagery tape. No headphones were used for any of the listening; instead, each participant was given the opportunity to approve the loudness level of the tapes. The participants in both groups were also given a tape to take home and asked to practice for 15 minutes, at least once daily, during the two weeks period of the study. These practice tapes were

exactly the same as those used for each individual during the treatment of control session. The researcher also strongly recommended that they practice under conditions similar to those in the experimental environment (i.e., quiet, without interruptions, comfortable loudness level, relaxed body posture). After participants completed their jury examinations, members of both the experimental and the control groups completed the *Alpert and Haber's Achievement Anxiety Test*, adapted by Sweeney again, along with the *Sweeney Piano Performance Anxiety Scale* (1981), as post-test measures.

Design

The design of this study was a pre-test/post-test control group design (Hanser & Wheeler, 1995). Guided imagery plus preferred music listening (experimental group) versus guided imagery plus silence (control group) was used as the independent variable.

Dependent variables

The *Alpert and Haber's Achievement Anxiety Test*, adapted by Sweeney (1981), and the *Sweeney Piano Performance Anxiety Scale* (Sweeney, 1981) were used as the dependent variables (see Appendices B & C). The *Alpert and Haber's Achievement Anxiety Test* (1960) is a trait anxiety scale consisting of two separate scales, one measuring debilitating anxiety and the other measuring facilitating anxiety. Sweeney revised this measure and modified it to study the anxiety involved in musical performance, rather than in academic performance. The debilitating anxiety scale consists of ten different items which ask questions such as "Nervousness, while playing in public, hinders me from performing well." The facilitating scale has nine items which ask questions such as, "I perform most effectively under pressure, as when the recital is very

important.” Wolfe (1989) reported reliability data on the facilitating anxiety scale of $r = .73$ and on the debilitating anxiety scale of $r = .81$, while Wolfe (1990) and Niemann, Pratt, and Maughan (1993) reported reliability data on the facilitating anxiety scale of $r = .75$ and on the debilitating anxiety scale of $r = .84$.

The *Sweeney Piano Performance Anxiety Scale* (1981) has been modified by the researcher to apply to performance in any musical medium, vocal or instrumental. The *Sweeney Piano Performance Anxiety Scale* consisted of two subscales, a 13-item *Cognitive-Attentional Subscale (CAS)* and an 11-item *Emotional-Attentional Subscale (EAS)*. The *CAS* measured disruptive cognitions, such as “I thought about how poorly I was playing,” and the *EAS* measured feelings related to one’s physiology, such as “I could feel my heart beating fast.” These scales were used in the present study to measure state anxiety promptly after juries. Wolfe (1989) reported reliability data on the *Cognitive-Attentional Subscale (CAS)* of $r = .84$ and on the *Emotional-Attentional Subscale (EAS)* of $r = .86$. Wolfe (1990) reported reliability data on the *Cognitive-Attentional Subscale (CAS)* of $r = .72$ and on the *Emotional-Attentional Subscale (EAS)* of $r = .86$. All reliability data indicated that the scales used were moderately reliable, which is predictable with state anxiety scales because these measure changing emotional states from moment to moment.

Data Analysis

The data were analyzed using a related measures *t*-test to compare the debilitating and facilitating anxiety pre-test/ post-test scores of both groups on the *Alpert and Haber’s Achievement Anxiety Test*, adapted by Sweeney. Independent *t*-tests were used to

compare the post-test scores of the experimental and control groups on the cognitive and emotional subscales of the adapted *Sweeney Piano Performance Anxiety Scale*.

Null Hypotheses

H₀ 1 : There will be no significant difference between pre-test and post-test scores on the Debilitating Anxiety scale of the *Alpert and Haber's Achievement Anxiety Test* for the experimental group.

H₀ 2 : There will be no significant difference between pre-test and post-test scores on the Debilitating Anxiety scale of the *Alpert and Haber's Achievement Anxiety Test* for the control group.

H₀ 3 : There will be no significant difference between pre-test and post-test scores on the Facilitating Anxiety scale of the *Alpert and Haber's Achievement Anxiety Test* for the experimental group.

H₀ 4 : There will be no significant difference between pre-test and post-test scores on the Facilitating Anxiety scale of the *Alpert and Haber's Achievement Anxiety Test* for the control group.

H₀ 5 : There will be no significant difference between the post-test scores of the experimental and control groups on the adapted *Sweeney Piano Performance Anxiety Scale-- Cognitive-Attentional Subscale*.

H₀ 6 : There will be no significant difference between the post-test scores of the experimental and control groups on the adapted *Sweeney Piano Performance Anxiety Scale--Emotional-Attentional Subscale*.

CHAPTER IV

Results

Data Analysis

T-tests for repeated measures were used to analyze null hypotheses one through four. *T-tests* for independent means were used to analyze null hypotheses five and six. All analyses were conducted using the SPSSx subprogram, *T-Test* (Decuir, 1995).

No significant difference was found between the pre-test and post-test means for the experimental group on the Debilitating Anxiety Subscale of the *Alpert and Haber's Achievement Anxiety Test*. Therefore, H_0^1 is accepted. However, a significant difference was found between the pre-test and post-test means for the control group on the Debilitating Anxiety Subscale of the *Alpert and Haber's Achievement Anxiety Test*. Therefore, H_0^2 is rejected. These results are summarized in Tables 1 and 2, respectively.

Table 1

T-test for Repeated Measures Comparing Pre-test and Post-test Means for the Experimental Groups on the Debilitating Anxiety scale (N=18)

Source	n	M	SD	df	t	2-tail Sign
Pretest		30.33	7.599			
	9			8	1.77	.114
Posttest		27.33	7.714			

* $p > .05$.

Table 2

T-test for Repeated Measures Comparing Pre-test and Post-test Means for the Control Groups on the Debilitating Anxiety scale (N=18)

Source	n	M	SD	df	t	2-tail Sign
Pretest		31.78	7.207			
	9			8	2.38	.044*
Posttest		24.00	8.573			

* $p < .05$.

No significant difference was found between the pre-test and post-test means for the experimental group on the Facilitating Anxiety Subscale of the *Alpert and Haber's Achievement Anxiety Test*. Therefore H_0^3 is accepted. However, a significant difference was found between the pre-test and post-test means for the control group on the Facilitating Anxiety Subscale of the *Alpert and Haber's Achievement Anxiety Test*. Therefore, H_0^4 is rejected. These results are summarized in Table 3 and 4, respectively.

Table 3

T-test for Repeated Measures Comparing Pre-test and Post-test Means for the Experimental Groups on the Facilitating Anxiety scale (N=18)

Source	n	M	SD	df	t	2-tail Sign
Pretest		21.889	4.226			
Posttest	9	25.444	6.616	8	-2.25	.055

* $p > .05$.

Table 4

T-test for Repeated Measures Comparing Pre-test and Post-test Means for the Control Groups on the Facilitating Anxiety scale (N=18)

Source	n	M	SD	df	t	2-tail Sign
Pretest		21.78	5.495			
Posttest	9	26.33	9.069	8	-2.32	.049*

* $p < .05$.

No significant difference was found between the post-test scores of the experimental group and the control group on the adapted *Sweeney Piano Performance Anxiety Scale-- Cognitive Subscale*. In addition, no significant difference was found between the post-test scores of the experimental group and the control group on the adapted *Sweeney Piano Performance Anxiety Scale-- Emotional Subscale*. Therefore, both H_0^5 and H_0^6 are accepted. These results are summarized in Tables 5 and 6, respectively.

Table 5

*T-test for Independent Means Comparing Post-test Scores between the Experimental and the Control Groups on the Adapted Sweeney Piano Performance Anxiety Scale--
Cognitive Subscale (N=18)*

Source	n	M	SD	df	t	2-tail Sign
Experimental Group	9	32.89	9.968			
				16	1.23	.235
Control Group	9	27.22	9.497			

* $p > .05$.

Table 6

*T-test for Independent Means Comparing Post-test Scores between the Experimental and the Control Groups on the Adapted Sweeney Piano Performance Anxiety Scale--
Emotional Subscale (N=18)*

Source	n	M	SD	df	t	2-tail Sign
Experimental Group	9	27.78	5.403			
				16	1.30	.213
Control Group	9	22.78	10.232			

* $p > .05$.

CHAPTER V

Summary, Conclusions, and Recommendations

Summary

The purpose of this study was to determine the effect of guided imagery and preferred music listening versus guided imagery and silence on musical performance anxiety.

Eighteen volunteer music students were randomly divided into two groups: (a) the experimental group (N=9), which underwent the guided imagery plus preferred music listening treatment, and (b) the control group (N=9), which experienced the guided imagery plus silence condition. The experiment was conducted in the two weeks prior to jury exams during the Fall Semester, 2001. The researcher met with each participant for approximately 15 minutes, twice a week, for 2 weeks. The experimental treatment was administered individually and was conducted in the Music Therapy Clinic. Participants in both groups listened to the guided imagery tape, which lasted approximately 10 minutes. The participants in the experimental group listened to the preferred relaxation music tape they had chosen for 5-6 minutes. No specific verbal instructions were given during the music treatment. The strategy for the control group was the same, except that the participants remained quiet without music for 5 minutes and 30 seconds after hearing the guided imagery tape. The participants in both groups were also given a tape to take home and asked to practice for 15 minutes, at least once daily, during the two weeks period of

the study. During the experiment, participants in both groups completed pre and post-test assessments.

Dependent variables for the study were The *Alpert and Haber's Achievement Anxiety Test*, adapted by Sweeney (1981), and the *Sweeney Piano Performance Anxiety Scale* (Sweeney, 1981). Preferred music chosen by each participant from a list of four different musical selections was used as the musical condition. A guided imagery script, developed by the researcher and recorded on cassette tape by a native English speaker (see Appendix A), was used for both groups. No music was played during the guided imagery portion of the treatment session.

T-tests for repeated measures were used to analyze null hypotheses one through four. *T-tests* for independent means were used to analyze null hypotheses five and six. All analyses were conducted using the SPSSx subprogram, *T-Test*.

H₀ 1: There will be no significant difference between pre-test and post-test scores on the Debilitating Anxiety scale of the *Alpert and Haber's Achievement Anxiety Test* for the experimental group.

H₀ 3: There will be no significant difference between pre-test and post-test scores on the Facilitating Anxiety scale of the *Alpert and Haber's Achievement Anxiety Test* for the experimental group.

H₀ 5 : There will be no significant difference between the post-test scores of the experimental and control groups on the adapted *Sweeney Piano Performance Anxiety Scale-- Cognitive-Attentional Subscale*.

H₀ 6: There will be no significant difference between the post-test scores of the experimental and control groups on the adapted *Sweeney Piano Performance Anxiety Scale--Emotional-Attentional Subscale*.

Null hypotheses one, three, five and six were accepted, since no significant treatment effects were found at an alpha level of $p > .05$.

H₀ 2 : There will be no significant difference between pre-test and post-test scores on the Debilitating Anxiety scale of the *Alpert and Haber's Achievement Anxiety Test* for the control group.

H₀ 4 : There will be no significant difference between pre-test and post-test scores on the Facilitating Anxiety scale of the *Alpert and Haber's Achievement Anxiety Test* for the control group.

Null hypotheses two and four were rejected since significant treatment effects were found at an alpha level of $p < .05$.

Results of these analyses can be summarized as follows:

1. The music treatment was not successful in reducing pre-post test debilitating anxiety in the experimental group, but silence did significantly reduce this anxiety in the control group.
2. The music treatment was not successful in reducing pre-post test facilitating anxiety in the experimental group, but silence did significantly reduce this anxiety in the control group.

3. No significant difference between the two groups was found on the Adapted *Sweeney Piano Performance Anxiety Scale*, either on the *Cognitive Subscale* or on the *Emotional Subscale*.

During the experiment, many participants in the two groups stated verbally that they enjoyed the sessions, and they shared their opinions with the researcher in each session. Some examples of their feedback and comments follow:

1. Some participants had difficulty relaxing and breathing at first, but once they got used to the tape through daily practice, they were able to follow it easily.
2. The more participants practiced with the tape, the more they improved in confidence, decreased their nervousness, and increased their positive thoughts and imagination.
3. The music facilitated participants' ability to visualize a safe place or jury exam situation.
4. Some participants mentioned that it was hard to schedule their individual sessions and practice treatments so close to the final exam period, even though this was a time when they would potentially need the most stress reduction intervention.

Conclusions

This study showed that silence may be more effective for reducing anxiety than music in some clients. Either music or silence may be effective, so it is crucial to let clients choose one based on their preferences. It is interesting that in this study music was not found to be a more effective intervention even though the participants preferred to be assigned to the music group. It may be that the music brought up distressing images

because of its power to tap into the unconscious. In addition, neither music nor silence was successful in affecting scores on the *Adapted Sweeney Piano Performance Anxiety* assessment, which is a measure of state anxiety related to musical performance.

The participants in the music group, who were all majoring in an area which included study of classical music, chose either the new age or the jazz genre as their preferred music for relaxation/stress reduction. It is believed that most people prefer a music intervention over silence because music is often more pleasant than silence. If clients believe the intervention is more pleasant, they are more likely to be compliant with a practice schedule. It is possible that anxiety reduction will be greater the more practice an individual undertakes during the period just prior to jury examinations, so that a tape with guided imagery and music might actually be used more than one with guided imagery and silence.

Recommendations

Clinical Applications

1. Since neither the music intervention nor the silence intervention was shown to be more effective than the other in reducing state anxiety scores on the *Sweeney Adapted Performance Anxiety Scale*, it is important to let clients choose their preferred condition as a way of increasing their potential for compliance with the protocol.
2. It is also important to offer those clients who choose to use music with options for the type of music to be included so that the experience of treatment and practice will be as inviting as possible.

Further Research

Based on the results of this study, future projects involving the guided imagery plus music or silence as a way to reduce musical performance anxiety may focus on: (a) the effectiveness of affirmations/guided imagery alone, (b) the effectiveness of affirmations with background music, (c) the effectiveness of guided imagery with music prior to the instructions, (d) the effectiveness of music alone, and (e) the effectiveness of imagery alone. Each of these interventions should be investigated to determine if their single or combined effects add to their ability to reduce performance anxiety in musicians.

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APPENDIX A
Guided Imagery Script

Allow yourself to feel comfortable. Close your eyes. Loosen up a bit more and relax your body. Raise your shoulders to your ears, and then relax them. Take a deep breath and hold it while counting slowly to 3 . . . 1, 2, 3. Now let it out slowly. Take another deep breath 1, 2, 3, and let your breath flow all the way out. Relax. Breathe deeply and slowly--in and out. In and out. Deeply and slowly. Continue relaxing, breathing slowly in and out, while I give you descriptions of several images.

First, imagine yourself waiting outside the room just prior to your jury. You are feeling relaxed and calm, just the way you are feeling now. You can hear someone else's music in the jury room. You can imagine the jury panel hearing that music and see how much they like it. Hear the music and feel how beautiful it is. Feel confident that you can master your own music when you are performing for the jury. You are feeling very confident and comfortable. . . and you know how well you've prepared for this jury. You know the musical score completely. You've been preparing for this for a long time. You're eager to go in there to perform what you've prepared, and the jury is anxious to hear your progress. Now say to yourself, "I am calm and relaxed, and I'm going to play well." Continue repeating these affirmations to yourself--"I am calm and relaxed, and I'm going to play well." "I am calm and relaxed, and I'm going to play well.'

Now picture yourself going into the jury room and approaching the jury panel with a smile on your face. Feel how pleased they are to see you again. Visualize yourself and notice how comfortable you are with your instrument or your voice. Turn back time and remember the first time you performed or sang well. You have a very close relationship with your instrument or voice, and you feel you are one with it. You don't have to control anything or be controlled. . . you are free to throw yourself into this performance, letting the music flow out of you naturally.

Now it's time to focus on your music and gather your thoughts together. Take a deep breath--very slowly--in and out. You remember the music--it's in your heart and head. Everything here is familiar to you, just like your hometown. You have no worries. You can do this easily.

Now repeat to yourself, "I am calm and relaxed, and I'm going to play well." Continue repeating these affirmations to yourself--"I am calm and relaxed, and I'm going to play well." Again--"I am calm and relaxed, and I'm going to play well.

Now imagine you are performing for the jury panel. You make contact with your instrument or feel a sense of your voice reaching out to them. You hear the beautiful music. . . coming out of you. Now you feel the music...in your spine and in your brain. You are thrilled and amazed. It is continuously flowing out of you and back into you again. The music is united now with you like an old friend. You're in the music, and the music is in you.

All of a sudden, you are finished, and there is silence. You have stopped and feel pleasure and positive emotions. You can see a positive reaction in the faces of the jury panel.

Now you have left the jury room. You feel very satisfied and confident about what you have accomplished. . . You feel peace. . . love. . . happiness. . . pleasure... Now say to yourself, "I am calm and relaxed, and I have played well." Continue repeating these affirmations to yourself--"I am calm and relaxed. I can play well. I am calm and relaxed. I can play well."

Continue feeling your relaxation. Take a deep breath and let your breath out slowly. Again, breathe deeply and slowly. Relax and focus on the thoughts, "I am calm and relaxed. I can play well" while you are listening to the calming music/relaxing in the calming silence.

Now count to three. 1, 2, 3. Slowly open your eyes. . . 1, 2, 3 and continue to focus on relaxing. Take in a deep breath; now let it out slowly. Allow yourself to come back slowly to an awareness of your surroundings.

APPENDIX B

DEBILITATING/FACILITATING ANXIETY SCALES

APPENDIX C
PERFORMANCE ANXIETY SCALE

Cognitive Items

Please rate the following statements on a scale from 1 to 5:

1. I thought about how poorly I was playing.

1	2	3	4	5
Hardly ever				Nearly always

2. I thought about how I should play more expressively.

1	2	3	4	5
Hardly ever				Nearly always

3. I wondered what the audience was thinking of me.

1	2	3	4	5
Hardly ever				Nearly always

4. I thought about how much longer I had to play.

1	2	3	4	5
Hardly ever				Nearly always

5. I thought about how others have played.

1	2	3	4	5
Hardly ever				Nearly always

6. I thought about being the center of attention.

1	2	3	4	5
Hardly ever				Nearly always

7. I thought about my level of ability.

1	2	3	4	5
Hardly ever				Nearly always

8. I thought about how I would feel if I were told how well I performed.

1	2	3	4	5
Hardly ever				Nearly always

APPENDIX D

Consent Forms

TEXAS WOMAN'S UNIVERSITY
SUBJECT CONSENT TO PARTICIPATE IN RESEARCH--MUSIC GROUP

Title: The Effect of Guided Imagery and Preferred Music Listening versus Guided Imagery and Silence on Musical Performance Anxiety

Investigator: Ms. Soo Kim972/436-6232
Advisor: Nancy Hadsell, Ph.D.....940/898-2514

You are being asked to participate in a research study for Ms. Kim's master's thesis at Texas Woman's University. The purpose of this research is to determine the effect of guided imagery and preferred music listening versus guided imagery and silence on musical performance anxiety. You will be randomly assigned to one of two groups: (a) a group which will undergo the guided imagery treatment and preferred music listening and (b) a group which will experience the guided imagery and silence condition.

You have been randomly assigned to the guided imagery and music group. You will be asked to complete the Alpert and Haber's Achievement Anxiety Test, adapted by Sweeney, both at the beginning and at the end of the relaxation time. This is a paper and pencil test which asks about various feelings you may have before, during, and after a musical performance. After completing this pre-test (approximately 3-4 min.), you will listen to the guided imagery tape for approximately 10-15 minutes while seated in a comfortable, reclining lounge chair. You will then relax and listen to music which you have selected from 4 choices (classical, new age, ethnic, or jazz) for about 5-6 minutes. No specific verbal instructions will be given during the music listening period.

You will be asked to repeat this treatment with the researcher a total of 4 times, twice a week for 2 weeks (a total of 1 hrs. and 20 mins.). You will also be given a tape to take home and asked to practice at least once daily for about 20 minutes, for two weeks (a total of 4 hrs. and 40 mins.). At the end of the experiment, you will perform your jury, which will be scheduled for final performance exam, as you normally do and repeat the Alpert and Haber's Achievement Anxiety Test, adapted by Sweeney (approximately 3-4 min.). A jury is a musical performance in front of a faculty panel which functions as a final exam in an applied music course. In addition, you will be asked to complete the Sweeney Piano Performance Anxiety Scale (approximately 3 min.). The second test is another pencil and paper test which asks about your feelings before, during, and after your jury. Your total time commitment for participation in this study is approximately 6 hours and 10 minutes.

Certain minor risks may be involved in this project, but the experimenter has taken precautions to minimize them. The first of these is that confidential information or information about you could be released without your consent. Confidentiality will be protected to the extent that is allowed by law through the following steps. The treatment will be administered individually and scheduled by agreement between the researcher and the participants. The treatment will be conducted in Music Therapy Clinic, located on the second floor of the Music Building at Texas Woman's University in Denton. Codes, rather

than names, will be used on the anxiety scales you complete, so that your name will never be associated with them. The data will be stored in a locked filing cabinet in the researcher's residence with access granted only to the researcher. Once the study has been completed and analyzed, all data and information will be kept safely locked up and shredded in August 1, 2005. The data will be published in a thesis and possibly in a journal article. However your name and other identifying information will not be included in any publication.

Another risk is that you might have preferred the silence condition. If you wish, after the study is completed you can be provided with a practice tape that does not include music. Other possible risks could include a negative reaction to the guided imagery, although the imagery used is designed to be very neutral in its content and the statements included are positive and affirming. You will be reminded that participation is voluntary, and you may stop at anytime.

You will be allowed to ask questions at any point during the study and will also ask questions during initial meeting with the researcher.

Direct benefits from participation in this study could be improvement in your performance anxiety. In addition, a summary of the results will be mailed to you upon request after the study is completed.

If you have any questions about the research study you should ask the researchers: their phone numbers are at the top of this form. If you have questions about your rights as a participant in this research or the way this study has been conducted, you may contact Ms. Tracy Lindsay in the Office of Research & Grants Administration at 940-898-3377 or e-mail HSRC@TWU.EDU.

The researchers will try to prevent any problem that could happen because of this research. You should let the researchers know at once if there is a problem and they will help you. However, TWU does not provide medical services or financial assistance for injuries that might happen because you are taking part in this research.

Participation in this study is completely voluntary and you may withdraw at any time without penalty. If you have any questions, please contact the investigators at the above phone number. You will be given a copy of this dated and signed consent form to keep.

Signature of Participant

Date

The above consent form was read, discussed, and signed in my presence. In my opinion, the person signing said consent form did so freely and with full knowledge of its contents.

Signature of Investigator

Date

Check here if you would like to receive a summary of the results of this study and list below the address to which this summary should be sent.

Check here if you do not wish to receive a summary of the results of this study.

TEXAS WOMAN'S UNIVERSITY
SUBJECT CONSENT TO PARTICIPATE IN RESEARCH--SILENCE GROUP

Title: The Effect of Guided Imagery and Preferred Music Listening versus Guided
Imagery and Silence on Musical Performance Anxiety

Investigator: Ms. Soo Kim972/436-6232
Advisor: Nancy Hadsell, Ph.D.....940/898-2514

You are being asked to participate in a research study for Ms. Kim's master's thesis at Texas Woman's University. The purpose of this research is to determine the effect of guided imagery and preferred music listening versus guided imagery and silence on musical performance anxiety. You will be randomly assigned to one of two groups: (a) a group which will undergo the guided imagery treatment and preferred music listening and (b) a group which will experience the guided imagery and silence condition.

You have been randomly assigned to the guided imagery and silence group. You will be asked to complete the Alpert and Haber's Achievement Anxiety Test, adapted by Sweeney, both at the beginning and at the end of the relaxation time. This is a paper and pencil test which asks about various feelings you may have before, during, and after a musical performance. After completing this pre-test (approximately 3-4 min.), you will listen to the guided imagery tape for approximately 10-15 minutes while seated in a comfortable, reclining lounge chair. You will then relax in silence about 5 minutes. No specific verbal instructions will be given during the silence period.

You will be asked to repeat this treatment with the researcher a total of 4 times, twice a week for 2 weeks (a total of 1 hrs. and 20 mins.). You will also be given a tape to take home and asked to practice at least once daily for about 20 minutes, for two weeks (a total of 4 hrs. and 40 mins.). At the end of the experiment, you will perform your jury, which will be scheduled for final performance exam, as you normally do and repeat the Alpert and Haber's Achievement Anxiety Test, adapted by Sweeney (approximately 3-4 min.). A jury is a musical performance in front of a faculty panel which functions as a final exam in an applied music course. In addition, you will be asked to complete the Sweeney Piano Performance Anxiety Scale (approximately 3 min.). The second test is another pencil and paper test which asks about your feelings before, during, and after your jury. Your total time commitment for participation in this study is approximately 6 hours and 10 minutes.

Certain minor risks may be involved in this project, but the experimenter has taken precautions to minimize them. The first of these is that confidential information or information about you could be released without your consent. Confidentiality will be protected to the extent that is allowed by law through the following steps. The treatment will be administered individually and scheduled by agreement between the researcher and the participants. The treatment will be conducted in Music Therapy Clinic, located on the second floor of the Music Building at Texas Woman's University in Denton. Codes, rather

than names, will be used on the anxiety scales you complete, so that your name will never be associated with them. The data will be stored in a locked filing cabinet in the researcher's residence with access granted only to the researcher. Once the study has been completed and analyzed, all data and information will be kept safely locked up and shredded in August 1, 2005. The data will be published in a thesis and possibly in a journal article. However your name and other identifying information will not be included in any publication.

Another risk is that you might have preferred the music condition. If you wish, after the study is completed you can be provided with a practice tape that includes music. Other possible risks could include a negative reaction to the guided imagery, although the imagery used is designed to be very neutral in its content and the statements included are positive and affirming. You will be reminded that participation is voluntary, and you may stop at anytime. Also, silence may be boring or anxiety producing. You will be reminded that participation is voluntary, and you may stop at anytime.

You will be allowed to ask questions at any point during the study and will also ask questions during initial meeting with the researcher.

Direct benefits from participation in this study could be improvement in your performance anxiety. In addition, a summary of the results will be mailed to you upon request after the study is completed.

If you have any questions about the research study you should ask the researchers: their phone numbers are at the top of this form. If you have questions about your rights as a participant in this research or the way this study has been conducted, you may contact Ms. Tracy Lindsay in the Office of Research & Grants Administration at 940-898-3377 or e-mail HSRC@TWU.EDU.

The researchers will try to prevent any problem that could happen because of this research. You should let the researchers know at once if there is a problem and they will help you. However, TWU does not provide medical services or financial assistance for injuries that might happen because you are taking part in this research.

Participation in this study is completely voluntary and you may withdraw at any time without penalty. If you have any questions, please contact the investigators at the above phone number. You will be given a copy of this dated and signed consent form to keep.

Signature of Participant

Date

The above consent form was read, discussed, and signed in my presence. In my opinion, the person signing said consent form did so freely and with full knowledge of its contents.

Signature of Investigator

Date

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- Check here if you would like to receive a summary of the results of this study and list below the address to which this summary should be sent.*

- Check here if you do not wish to receive a summary of the results of this study.*