

# Performance Anxiety Coping Skills Seminar: Is It Effective in Reducing Musical Performance Anxiety and Enhancing Musical Performance?

## Chapter 1: Introduction

Anxiety impairs performance across a wide variety of situations: school examinations, job interviews, athletic performance, sexual performance, public speaking, musical performance, and social situations (Barrell, Medeiros, Barrell, & Price, 1985). The problems caused by anxiety are not limited just to a hampered performance, but may lead to the loss of health or a job. A multitude of symptoms are common with various anxiety disorders: chest pain, hyperventilation, tachycardia, palpitations, tremulousness, dizziness, lightheadedness, faintness, headache, paresthesias (burning or prickling of the skin), nausea, vomiting, diarrhea, abdominal pain, and sexual dysfunction (Walley, Beebe, & Clark, 1994).

Performance anxiety is prevalent among amateur and professional musicians. A survey of 2,212 professional classical musicians indicated that 24% had a problem with performance anxiety, and 16% of these described their problem as severe. Stage fright was the most prevalent medical problem reported. Prescribed medication was the most frequently tried treatment for severe stage fright, followed by psychological counseling and aerobic exercise. More than 25% of the 2,212 musicians reported using beta-blocking drugs, and most reported using them without a physician's prescription (Fishbein, Middlestadt, Ottati, Straus, & Ellis, 1988). Given the high proportion of musicians using beta blocking drugs and the inconclusive evidence of their long and short-term effects (Lehrer, 1987; Troutman, 1986; Nies, 1986; Nube, 1991), it seems that musicians need to be equipped with safer alternatives to cope with their performance anxiety. "Drugs are very much a desperation measure and should be used only as a 'stop-gap' until psychological coping methods can be learned... the use of drugs often sets back the development of self-mastery" (Wilson, 1994, p. 202-203).

Given the seriousness and extent of the problem musicians have with debilitating performance anxiety, the fact that most of them do not seek professional help, and the high percentage of musicians using beta-blocking drugs without a physician's prescription, it becomes apparent why the problem still needs to be addressed. Since the careers of music performers and their enjoyment of performing are dependent on their ability to get performance anxiety under control, it seems that a readily accessible collection of coping skills needs to be taught at the college level.

It is obvious that some performers don't seem to have a problem with performance anxiety, or have learned how to keep it under control and even make it work to their advantage (Hamann & Sobaje, 1983; Hamann, 1985; Wolfe, 1989). This was my intent in developing the Performance Anxiety Coping Skills Seminar --- to provide easily appropriated coping skills to help performers get control of performance anxiety and make it work to their advantage. The purpose of this experimental study, therefore, was to test the effectiveness of the seminar. Would the seminar help reduce performance anxiety and enhance the quality of musical performance of music majors at Taylor University?

My Performance Anxiety Coping Skills Seminar contained key elements of cognitive and behavioral therapies adapted to augment a college music department's traditional music skills training. I developed the seminar with ideas gleaned from reading, personal experience, observation, and from coaching music students for 22 years. Admittedly, the seminar was a relatively small intervention, compared to many other therapeutic interventions. It was, however, relatively non-invasive into the time of busy teachers and students, and offered student performers tools that could possibly help them get performance anxiety under control and enhance the quality of their performances.

### Definitions and Scope of the Problem

#### Anxiety

Anxiety is “a vague, uncomfortable feeling of fear, dread or danger from an unknown source. For some it may be a one-time episode; other persons become constantly anxious about everything. A certain amount of anxiety is normal and helps improve our performance and allows people to avoid dangerous situations” (Griffith, 1995, p. 1).

Symptoms of anxiety may include:

- Feeling that something undesirable or harmful is about to happen (edginess and apprehension).
- Dry mouth, swallowing difficulty, and hoarseness.
- Rapid breathing and rapid heartbeat, palpitations.
- Twitching or trembling.
- Muscle tension; headaches; backache.
- Sweating.
- Difficulty in concentrating.
- Dizziness or fainting.
- Nausea; diarrhea; weight loss.
- Sleeplessness.
- Irritability.
- Fatigue.
- Nightmares.
- Memory problems.
- Sexual impotence.

Symptoms most likely are caused by the “activation of the body's defense mechanisms for “fight or flight”. Excess adrenaline is discharged from the adrenal glands, and adrenaline breakdown products (catecholamines) eventually affect various parts of the body. Attempts to avoid the anxiety lead to more anxiety” (Griffith, 1995, p. 1-2).

#### Panic Attack

According to DSM-IV (American Psychiatric Association, 1994), a panic attack is a discrete period of intense fear or discomfort that is accompanied by at least 4 of 13 somatic or cognitive symptoms. The attack has a sudden onset and builds to a peak rapidly (usually in 10 minutes or less) and is often accompanied by a sense of imminent danger or impending doom and an urge to escape... Blushing is common in situationally bound panic attacks related to social or performance anxiety. The anxiety that is characteristic of a panic attack can be differentiated

from generalized anxiety by its intermittent, almost paroxysmal nature and its typically greater severity. (p. 394)

### Social Phobia (Social Anxiety Disorder)

According to DSM-IV (American Psychiatric Association, 1994):

The essential feature of social phobia is a marked and persistent fear of social or performance situations in which embarrassment may occur... The diagnosis is appropriate only if the avoidance, fear, or anxious anticipation of encountering the social or performance situation interferes significantly with the person's daily routine, occupational functioning, or social life, or if the person is markedly distressed about having the phobia... In feared social or performance situations, individuals with social phobia experience concerns about embarrassment and are afraid that others will judge them to be anxious, weak, 'crazy,' or stupid... The person with social phobia typically will avoid the feared situation. (p. 411-412)

According to Liebowitz (1989):

It is useful to distinguish between two forms of social phobia (discrete and generalized). Discrete performance anxiety arises in situations that involve public speaking (excessively feared by at least 20 percent of adults), auditioning, acting, or otherwise performing before an audience. People can avoid these situations and still lead normal social lives, although the disability may limit their careers. The second type of social phobia is generalized social anxiety. This seriously affects both work and social life by causing the victim to avoid a wide variety of activities – meeting new people, attending parties and conferences, talking to employers or colleagues, and so on. In extreme cases victims fear contact with anyone outside their families. Alcoholism and depression are common consequences. (p. 1)

### Trait Anxiety (free-floating anxiety)

Trait anxiety is a generalized disposition to feel threatened by a wide range of non-harmful conditions. Persons who are high in trait anxiety tend to be anxious in many situations (Gage, 1984). Persons with trait anxiety may need professional help to overcome it (Lehrer, Goldman, & Strommen, 1990).

### State Anxiety (situational)

State anxiety is related to specific and particular environmental situations such as: public speaking, musical performance, job interview, spiders, snakes, flying in an airplane, shooting free throw baskets, or taking a test. One's feelings of apprehension are focused and localized (Gage, 1984). Situational anxiety such as this can be managed by specific behavioral strategies that are included in a performer's musical performance education (Lehrer, Goldman, & Strommen, 1990). It was the purpose of this study to test the effectiveness of one such model of instruction in overcoming the debilitating effects of maladaptive performance anxiety.

### Performance Anxiety

Performance anxiety is a state of anxiety or stage fright prior to and / or during a performance. According to DSM-IV, it should not be diagnosed as social phobia “unless the anxiety or avoidance leads to clinically significant impairment or marked distress” (American Psychiatric Association, 1994, p. 416). Studies at Ohio State University found performance anxiety to be “a function of audience size, audience status, and the number of performers” (Jackson & Latane, 1981, p. 73).

Conferences involving professionals in the field of psychology, physiology, medicine, music, and education have been held in London, Princeton, New York, Denver, and Aspen to address the problem of tension in performance. There is now an International Society for the Study of Tension in Performance, based in London, with annual meetings, and frequent workshops around the world. The ISSTP publishes the *Journal of the International Society of Tension in Performance* (Lehrer, 1987).

### Measurement of Performance Anxiety

Performance anxiety can be assessed by self-report or with laboratory equipment measuring the various physiological symptoms: heart rate, blood pressure, skin conductance, skin temperature, and muscle tension. Studies using self-reported measures of performance anxiety include: Lund, 1972; Zemore, 1975; Weissberg, 1977; Leglar, 1978; Foa, Jameson, Turner, and Payne, 1980; Jackson and Latane, 1981; Kendrick, Craig, Lawson, and Davidson, 1982; Steptoe, 1989; Abel and Larkin, 1990; Clark and Agras, 1991; Fredrikson and Gunnarsson, 1992. Studies measuring heart rate as an indicator of anxiety include: Wardle, 1969; Appel, 1976; Leglar, 1978; Brantigan, Brantigan, and Joseph, 1982; James, Burgoyne, and Savage, 1983; James and Savage, 1984; Troutman, 1986; Abel and Larkin, 1990; Clark and Agras, 1991; Fredrikson and Gunnarsson, 1992; Tartalone, 1992; Rice, Blanchard, and Purcell, 1993; LeBlanc, Hin, Obert, and Siivola, 1994. Studies using biofeedback to measure muscle tension, skin conductance, or skin temperature as indicators of anxiety include: Carnahan, 1981; McKinney, 1984; Rice, Blanchard, and Purcell, 1993.

One of the problems with physiological measures is the possible distraction they may cause the performer, perhaps even adding to his anxiety. This may have been a problem in the study by LeBlanc (1997), particularly with self-conscious female adolescents, where a heart monitor is strapped to the chest, and must be in contact with the bare skin. Another problem with physiological measures is that persons reporting performance anxiety manifest different physiological symptoms. Physiological arousal is not necessarily a measure of anxiety; it may just reflect the excitement in the music or the tempo of the music being performed. “Studies comparing anxious and non-anxious musicians have found that both groups show increased physiological activity when performing, without differences between them” (Steptoe & Fidler, 1989, p. 4). Since we are defining performance anxiety as a feeling of apprehension and nervousness prior to and during a performance, it seems that self-report is the best measurement we can make of those feelings at this time.

Auerbach’s study (1981) and the success of his “do-it-yourself” treatment program, provided this researcher with encouragement to develop an easily accessible treatment program for music students that used self-report measures of performance anxiety.

Because elaborate measure of students' responses (e.g., psychological monitoring, videotape recording, audience or professor evaluation) could impart their own demand characteristics, the measures of results were kept simple and unassuming. The participants evaluated themselves after each talk on a 5-point scale of how successful the program was in alleviating their stage fright and of how easy it was to follow the program... Students do not, presumably, seek help in order to be able to handle galvanic skin response (GSR) electrodes, cardio tachometers, trained judges, or questionnaire batteries. Surely what they do want is an easy-to-follow and inherently logical regimen that will allow them to speak in public with less discomfort than before. It may be unnecessary to measure more than that. (Auerbach, 1981, p. 107-108)

### Musical Performance Anxiety

“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). His review of the literature supports the following four general statements concerning the nature and treatment of MPA (musical performance anxiety):

1. MPA comprises a loosely correlated constellation of physiological, behavioral and cognitive variables.
2. The physiological component of MPA reflects arousal associated with the autonomic nervous system, which, largely through conditioning, has become excessively associated with fear.
3. The anticipation of stressful events, musical or otherwise, can evoke as much (if not more) anxiety than the event itself.
4. Psychotherapeutic interventions for MPA appear to be successful to the degree that they address specific components (cognitive, physiological, behavioral) of the overall profile of anxiety. (Salmon, 1990, p. 3-4, 6, 8)

### Maladaptive (Debilitating) Performance Anxiety

Maladaptive performance anxiety is debilitating to performance (Wolfe, 1989), and is therefore, of major interest to this study. Performers who are well prepared and skilled to perform well in private, but perform badly in public, have what is termed maladaptive performance anxiety. At the 12<sup>th</sup> International Trumpet Competition in France, many of the outstanding competitors performed below their level of expertise, reportedly due to debilitating performance anxiety. Leading professional trumpeters and judges present at this competition, Philip Jones, Roger Voisin, Timofei Doksichidzer, Roger Delmotte, and Jean-Pierre Mathez, expressed their concern for this problem. Mathez suggested, “Why not devote half or more of one's practice time to exercises in self-control and relaxation” (Hedwig, 1987, p. 116)?

Maladaptive performance anxiety is a problem for many performing musicians. A survey of 2,212 professional classical musicians indicated that 24% had a problem with performance anxiety, and 16% described the problem as severe (Fishbein, Middlestadt, Ottati, Straus, & Ellis, 1988). Undergraduate music students reportedly have higher performance anxiety than professional or amateur musicians (Steptoe & Fidler, 1987). In a survey of 154 amateur and student musicians, 70% indicated that anxiety was the most

common of five reported performance impairments (Salmon, Cook, Lombart, & Berensen, 1995).

Sixty-five professional musicians in the Royal Philharmonic Orchestra and in the London Philharmonic Orchestra reported using the following to cope with tension in performance: 21% used sedatives, 32% used some form of meditation, and 51% used alcohol before a performance (Steptoe & Fidler, 1987, p. 242). Vladimir Horowitz declined public performance for 15 years due to terrible stage fright. Pablo Casals revealed that "the thought of a public concert always gives me nightmares" (Sweeney & Horan, 1982, p. 486).

One study (Lehrer, Goldman, & Strommen, 1990) found that worry about anxiety and its effects on performance has the most consistent relationship with independent measures of debilitating performance anxiety, whereas planning to cope with anxiety symptoms is least consistently related to measures of debilitating performance anxiety. A questionnaire completed by 178 musicians suggests that planning for coping with various stress-related performance problems may render stage fright facilitative, a major goal of my seminar. The study also supported the notion that overly rigid and judgmental assessment of one's own performance tends to exacerbate anxiety. Two additional factors emerged as contributing to debilitating performance anxiety: concern about the reactions of important others and concern about distraction. The former is consistent with the argument that an overriding desire to please others can lead to maladaptive anxiety experiences. This study identified worry as the "quintessential cognitive characteristic of anxiety," and defined worry as "the mental activity involved in contemplating the unpleasantness of possible unfortunate events" (Lehrer, Goldman, & Strommen, 1990, p. 12).

Thirty organists at Indiana University participated in an experimental study in which they each performed a single composition under six different conditions: solitary performance with and without the score, performance in the presence of a critic with and without the score, and performance in the presence of a critic and professional peers with and without the score. Measurement of anxiety levels under these six varying conditions of musical performance indicated that the removal of the score (memorization) and the size of the critical audience were factors which increased anxiety. High anxiety levels tended to result in poorer performance levels (Leglar, 1978).

Most studies confirm that performance anxiety can be debilitating to musical performance. Performers who are well-prepared musically and can perform the solo well in private, but then perform badly in public, have what is called maladaptive or debilitating performance anxiety (Appel, 1976; Kendrick, 1982; Kessler, 1981, 1983; Steptoe, 1987).

### Reactive Performance Anxiety

Much of our performance anxiety is what Borkovec labeled "reactive anxiety," the natural result of inadequate preparation, lack of skills, or lack of performing experience. According to his theory, this is a problem that won't be resolved with therapy, but requires practice, musical skills development, and positive performing experiences (Sweeney & Horan, 1982). Reactive anxiety cannot be effectively treated with therapies or anxiety coping skills. Adequate musical preparation is essential for successful musical performance.

### Adaptive (or Facilitating) Performance Anxiety

Adaptive anxiety enhances or facilitates performance (Wolfe, 1989). This form of anxiety is obviously desirable for musical performance, and the goal of both treatments in my study. “Many artists argue that they ‘need’ to be aroused physiologically in order to perform well, and that stress is an integral component of good performance.” (Steptoe & Fidler, 1989, p. 4) Alpert and Haber coined the terms "facilitating" and "debilitating" anxiety in 1960 to refer to these two effects of emotional arousal on test performance (Lehrer, Goldman, & Strommen, 1990).

Hamann's studies (1982; 1983) with music students at the University of North Carolina at Greensboro assessed the musical quality of performances under enhanced and reduced anxiety performance conditions. The results indicated that anxiety could facilitate the performance of better-trained musicians. Lehrer (1985) presented in a paper to the National Association of Schools of Music that anxiety can improve or interfere with one's performance on various tasks. He said that excess muscle tension and excess anxiety can severely impair performance and that anxiety can have both positive and negative effects on the performance of a variety of tasks.

Debilitating anxiety worsens performance, whereas facilitating anxiety improves performance. “In reality, it is a heightened state of arousal – not anxiety – that performers attempt to optimize, and which psychologists have conceived of as a biologically-based, motivating force” (Salmon, 1990, p. 3). Whether we label it “heightened state of arousal”, adaptive anxiety, or facilitating anxiety, this is what excellent performers use to their advantage. Both treatments in my study were attempts to help college music majors get performance anxiety under control and use it to their advantage in performance.