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The influence of solo performance opportunities on self-reported levels of musical performance anxiety among undergraduate college music majors

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THE INFLUENCE OF SOLO PERFORMANCE OPPORTUNITIES ON SELF-REPORTED LEVELS OF MUSICAL PERFORMANCE ANXIETY AMONG UNDERGRADUATE COLLEGE MUSIC MAJORS

A Thesis

Submitted to the Graduate Faculty of the Louisiana State University and Agricultural and Mechanical College in partial fulfillment of the requirements for the degree of Master of Science

in

The Department of Human Resource Education and Workforce Development

by

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ABSTRACT

Musical performance anxiety (MPA) is a concern for most college age musicians. While low to moderate levels of MPA may enhance performances for some musicians, too much “stage fright” can seriously hinder the quality of solo performances. Musicians use several techniques to manage MPA. One of these, desensitization, involves repeated exposure to solo performance opportunities. The purpose of this study was to determine if a relationship existed between the number and type of public solo performances completed and the level of self-reported performance anxiety among students pursuing baccalaureate degrees in music at a research extensive university in the southern United States.

A researcher designed survey included eight questions: five items solicited demographic characteristics; two scaled items asked respondents to rate their self-assessed levels of MPA at both the time of admission as a music major and at the current time; and the final item was an open-ended question that asked students to fill in the number of times they had performed public solos in a variety of listed venues since admission to the School of Music. The surveys were administered during a designated course with a 72% rate of return (n = 226).

Analysis of the data revealed that students’ self-assessed levels of MPA declined slightly while pursuing their undergraduate degrees in music. The researcher concluded that a significant correlation was found between the change in MPA levels and three particular types of public solo experiences: solos performed in jury and barrier examinations; solos performed in studio classes, master classes, and Recital Hour; and solos performed during small and large ensemble concerts. Based on this conclusion, an increase in the number of these types of solo performances is recommended.
CHAPTER 1: INTRODUCTION

Rationale

“Musical performance is a fundamental part of human existence” (Rink, 2002, preface). Our daily lives are filled with music, whether or not we actively seek it. We encounter music as a part of our primary and secondary education, while in elevators, while on hold on the telephone, and as background music in advertisements heard on television, radio, and even on our computers. We seek musical experiences for relaxation, as a part of our religious practices or to advance appreciation of a particular cultural heritage. According to Leonard Bernstein, twentieth century composer and conductor, “Life without music is unthinkable” (Lisk, 1996, p. 95).

As a “universal human behavior” (Clayton, Herbert, & Middleton, 2003, p. 19), music “has been at the heart of all human societies” (Da Silva, Blasi, & Dees, 1984, p. vii). In fact, “a society without music has never been discovered” (Clayton et al, 2003, p. 263). The cave paintings found in Ariege, France, for example, brought many aspects of human ancestor’s lives to light including his participation in music. An image of a Paleolithic era man scraping a musical bow to an audience of reindeer can be clearly seen among these cave drawings (Rink, 2002, p. 5). Forty thousand years ago, therefore, “man was making music” (Rink, 2002, p. 5).

Music engaged the attention of Classical era philosophers Plato and Aristotle. They “regarded musical training as of special educational value” (Rink, 2002, p. 5). Aristotle provided a veritable catalog of the possible aims of music and concluded that it makes a contribution to the cultivation of minds and the growth of moral wisdom (Alperson, 1986, p. 5). Music was incorporated into the services of the Catholic church in the Middle Ages and the Renaissance brought many important developments in musical practice that continue to be utilized in
contemporary music. Thus, the relationship between music and society has been, and continues to be, “fundamental in the world of human beings” (Da Silva et al, 1984, p. vii).

While music and music making is a “universal feature of human society, it is by no means universally undertaken by every individual in a society” (Green, in Clayton, 2003, p. 263). It is “listened to and enjoyed by many but practiced by only a few” with a “relatively small percentage of the adult population engaged in active music making” (Green, in Clayton, 2003, p. 263). Music is a performing art involving “a committee of composer, interpreter, and listener” (Da Silva et al, 1984, p. 4). It lives through interpretation by the musician as he/she brings the composer’s written score to life for the listener (Dorian, 1971, p. 23). Unlike other art forms (e.g. painting, poetry) where people serve as their own interpreters, “in music…the interpreter is of paramount importance” (Dorian, 1971, p. 23).

What is it that these interpreters, or musical performers, actually do? According to Rink (2002), “they produce physical realizations of musical ideas whether these ideas have been recorded in written notation, passed on aurally, or freely improvised” (p. 59). “Musical performance at its highest levels demands a remarkable combination of physical and mental skills” (Rink, 2002, p. 59). To these, Lisk (1996) adds visual skills coupled with perceptive decision-making and asserts that performing music “is one of the most complex skills an individual can pursue” (p. 1). Therefore, “it is not an easy task to become a performer, least of all a soloist” (Rink, 2002, p 150).

Professional musicians find work in a variety of settings including live performance venues, educational institutions, places of worship, and in the recording industry. In 2002, there were 215,000 musicians, singers, and related workers employed in the United States with median annual earnings of $36,290 (U.S. Department of Labor, 2004-2005). In fact, the creative
industries employed more workers in 2001 than any single manufacturing sector (Motion Picture Association of America, 2002). While comprising only one percent of the Gross Domestic Product (GDP), the total contribution of the arts and entertainment industry to the GDP was 106.6 billion dollars in 2003, up from 76.8 billion dollars in 1998 (U.S. Department of Commerce, 2004). The recording industry alone generated a 32 billion dollar segment of the GDP in 2002 (Sherman, 2003). Professional musicians are an integral part of the growing arts and entertainment industry.

“Musical performance anxiety (MPA) is a wide-ranging debilitating problem among professional musicians” (Rife, Lapidus, & Shnek, 2000, p. 161). MPA, also called “stage fright”, can be defined as excessive concern about performing in public due to fear of negative evaluation. In one national survey of 2,212 professional musicians in the United States, 40% rated MPA as a moderate to severe problem (Rife et al, 2000, p. 161). Similar findings were reported in a study of musicians in the Netherlands, where 59% reported MPA at levels that seriously affected their professional careers (Rife et al, 2000, p. 161).

A steady hand and voice are needed for optimal musical performances (Parncutt & McPherson, 2002, p. 48). However, MPA symptoms such as rapid heartbeat, trembling, dry mouth, shortness of breath, nausea, and sweating may precipitate mistakes by musicians during performances (Rife et al, 2000, p. 161). While low to moderate levels of MPA may be desirable for some musicians to insure optimal performances (Rife et al, 2000, p. 165), too much pessimistic self-talk and panic seriously hinder it (Parncutt & McPherson, 2002, p. 49). In fact, high levels of anticipatory anxiety were reported to have caused musicians to avoid performance opportunities and even interrupt actual performances (Parncutt & McPherson, 2002, p. 48).
Musical performance anxiety impacts the quality of performances, has potentially negative effects on musical careers, and is therefore a serious problem in the performing arts.

The effects of MPA are highly individualized – no two performers experience the phenomenon in exactly the same fashion. According to Kruger (1993), “There is not just one performance anxiety; instead there are as many different varieties of it as there are human beings” (p. 50). The roots of MPA can be found in the “fight or flight” response present within all Homo sapiens as a result of perceived danger (Farnbach, 2001, p. 19).

Performers, like all humans, experience the “fight or flight” response after appraising situations and concluding that there is potential danger therein (Latane & Harkins, 1976, p. 482; Salmon & Meyer, 1998, p. 128;). For musicians, the greatest fears are those of exposure and vulnerability in a creative act as well as that one’s performance will be judged lacking by the listener (Kruger, 1993, p. 76; Reubart, 1985, p. 15). The anxiety that results from this fear manifests itself in four primary types of reactions: emotional, cognitive, physiological, and behavioral (Kruger, 1993 p. 53; Farnbach, 2001, p. 18).

Most of the symptoms associated with MPA are highly subjective in nature. According to Salmon and Meyer (1998), “Anxiety is a state of acute subjective distress” (p. 15). For an observer, “the inherent meaningfulness of such subjective experiencing cannot ever be completely revealed” (Kruger, 1993, p. 52). Physiological reactions such as increased heart rate could be monitored but to do so during performances would be awkward (Reubart, 1985, p. 9). Objective observations could be made of technical proficiency deficits that might occur as a result of MPA (Salmon & Meyer, 1998, p. 31) but most behavioral manifestations of anxiety are “unwieldy and imprecise from both the standpoint of statistics and meaningful evaluation” (Reubart, 1985, p. 10). As Kruger (1993) states, “Data, statistics, and measurements can be
helpful but for a comprehensive understanding of what goes on inside each individual when he is befallen by performance anxiety they are not worth much” (p. 49). Since anxiety originates in the thoughts and feelings of a performer, the best measure of MPA therefore is not what can be observed and quantified but how a performer feels (Salmon & Meyer, 1998 p. 139).

“Subjective assessment concerns how a performer feels while performing” (Salmon & Meyer, 1998, p. 31). Particularly important is the use of self-assessment techniques by performers (Salmon & Meyer, 1998, p. 29) since “it is quite possible for a musician to be extremely anxious…and for others not to notice anything is wrong” (Farnbach, 2001, p. 23). Salmon and Meyer (1998) used self-assessment in a study conducted with musicians who were asked to retrospectively assess their anxiety prior to and during performances. Farnbach (2001) proposes a “subjective unit of discomfort scale” that measures discomfort as the person feels it, not as others might observe it (p. 23). Self-assessment, therefore, “is the most relevant focus for effective stress management” of musical performance anxiety (Salmon & Meyer, 1998, p. 25).

Post-secondary education, whether at a conservatory, college, or university, typically forms the basis of professional training for musicians in this country. Research has shown MPA to be of concern for up to 66% of college musicians in the United States (Rife et al, 2000, p. 161). Steptoe and Fidler found levels of MPA among professional musicians to be significantly lower than those of music students, and these findings were associated with poorer musical performance among the students (Rife et al, 2000, p. 165). Music is a competitive occupational field, requiring consistently high levels of performance for professional success. In order to become competitive, therefore, music students’ training should include numerous opportunities to learn and perfect MPA management techniques during performance.
An additional benefit of repeated performance opportunities made available throughout the training of an aspiring musician includes learning if they will be able to manage their anxiety levels sufficiently to be professionally successful. These early solo performance opportunities, a type of “field experience”, are similar to the internships sought by students in other pre-professional curriculums in that they provide a glimpse into the requirements and stresses of the profession in question. For a musician, exposure to the demands of a soloist may help the student decide if continuing the pursuit of music as a profession is wise. If management of performance anxiety within acceptable levels proves to be impossible during these early performance opportunities, this researcher feels that the student may gain valuable insight with which to decide if another career choice might be preferable.

Musicians utilize a variety of techniques in attempting to reduce high levels of MPA including thorough mastery of the work(s) to be performed, relaxation techniques, imagery and visualization exercises, psychological approaches, and the use of prescription drugs (Harris, 1988, p. 15). Reduction of MPA levels can also be accomplished by desensitization techniques (Parncutt & McPherson, 2002, p. 52) such as repetitive exposure to the fear-inducing event (Salmon & Meyer, 1998, p. 13). Desensitization techniques for musicians involve maximizing opportunities for frequent performances. Repeated performance exposure itself may not eliminate MPA (Parncutt & McPherson, 2002, p. 52). However, if reduction of MPA to the low to moderate level tolerated by some successful professional musicians is possible through repeated solo performance opportunities, it is critical that musicians in training be provided with such (Rife et al, 2000, p. 166).
Purpose and Objectives

For undergraduate music majors at one southern university, numerous public solo performance opportunities are available throughout the four-year curriculum. Solos are performed in large and small ensembles, studio classes, master classes, and the weekly recital class. Solo performances are required during auditions for admission to the music program, ensemble placement auditions, concerto competitions, summer opportunities, graduate school, and military bands. Finally, student musicians play solos during jury and barrier examinations, for solo competitions on state, regional, and national levels, and while pursuing paid and unpaid musical gigs (jobs). The primary purpose of this study was to determine if a relationship existed between the number of public solo performances completed and the level of self reported performance anxiety among students pursuing baccalaureate degrees in music at a research extensive university in the southern portion of the United States.

Objectives

Specific objectives formulated to guide the research include:

1. To describe undergraduate music majors at a research extensive university in the South on selected demographic characteristics including age, gender, degree, concentration, and number of total completed semesters as music majors.

2. To determine the level of self-assessed musical performance anxiety (MPA) experienced by undergraduate music majors at the time of their admission as music majors.

3. To determine the current level of self-assessed musical performance anxiety (MPA) experienced by undergraduate music majors.
4. To describe undergraduate music majors at a research extensive university based on the number of public solo performances of all types experienced following their admission to the School of Music.

5. To determine if a relationship existed between the levels of musical performance anxiety and the number of public solo performances experienced by undergraduate music majors at a research extensive university.

Significance

Members of the music faculty at the institution being studied vary in the emphasis they place on solo performing opportunities for undergraduates. Some faculty members require the students in their studio to perform at least once during their college career at the weekly recital class; some do not. Some encourage participation in solo contests to a greater extent than others. A consensus of opinion among the faculty regarding the value of solo performance opportunities for music undergraduates does not appear to be in place at this institution.

The results of this study could prove valuable by affecting the teaching of musical performance anxiety management techniques to this population of students. If a relationship is found between the number of solo performances and levels of MPA, for example, the music faculty might be inspired to require increased numbers of solo performances in order to fulfill degree requirements. The additional information gathered as to the possible effects of age, gender, concentration, and number of semesters as a music major may also prove interesting to the faculty as they strive to improve the level of pre-professional educational experience for their students. Finally, the results of this study may prove of value to faculty at other similar institutions in designing curricular requirements for music majors that better prepare them for the rigors of a career as a professional musician.
CHAPTER 2: REVIEW OF LITERATURE

What is Music?

It is customary to begin any discussion of a particular subject by defining the basic concept in question. Thus, one might here expect a succinct definition of “music”. But according to the literature, such a definition proves elusive. Da Silva et al (1984) state, “Music does not stand outside of consciousness so as to allow for an objective definition…rather, music is located inside the very consciousness which would do the defining” (p. 1). They continue by saying, “Music is subjective; it is not existent in the social world as an object” (p. 7) and “it is precisely the subjective nature of music which makes it impossible for us to define” (p. 3). In fact, the question of what music is “cannot be settled at the outset of an inquiry and [is] unlikely to be settled at its end” (Alperson, 1986, p. 45). Even Aristotle observed, “It is not an easy matter to determine the nature of music” (as quoted in Alperson, 1986, p. 28). Music is therefore not readily definable, however several researchers were found to have made attempts to do so.

Alperson (1986) concluded that, “Music is primarily something to which one listens” (p. 3) and “a musical art is an art that depends on, or consists of, producing and listening to sounds other than those that are merely incidental to the production of linguistic messages” (p. 45). Firth (2003) stated that music is “that organization of sounds that could be distinguished from noise” (p. 93) and Sparshott (1986) contended that people who produce music have the “intention to produce some specific sort of controlled sound” (p. 43). When distinguishing musical sounds from those “which are the mere accompaniment or vehicle for linguistic utterances tone, a sound unit recognized as musical, becomes fundamental” (Alperson, 1986, p. 11). The system of musical tones is “ordered according to pitch…with discriminable qualities of pitch in song and in speech” (Alperson, 1986, p. 11). Sparshott (1986) concurred, stating that the “importance of
pitch was derived from the contrast between the singing and the speaking voice” (p. 47) To hear music is largely to hear tones in terms of a system of mathematically related pitches (Sparshott, 1986, p. 46). To be considered music, these pitches must be connected in a pattern (i.e., a melodic form) as well as by a perceptible pattern of duration and stress (i.e., a rhythmic form) (Cone, 1986, p. 134). Music, therefore, can be said to be sounds interpreted by a listener through accepted schemes of melody, harmony, and rhythm (Da Silva et al, 1984; Scruton, 1986).

Melody, harmony, and rhythm alone, however, do not make music. The expressive performance of music goes beyond the written notes that direct these three basic elements. “The space that exists between a mechanical response with [musical] notation and an artistic expression is quite large” (Lisk, 1996, p. 6). The secret of making music “lies in interpreting and projecting feeling through the nuance and inflection of notes to create…meaning…for the musical event” (Lisk, 1996, p. 8). Music has an innate expressiveness (Alperson, 1986; Cone, 1986) that allows for the expression of emotion and forms an “important aspect of music meaning” (Alperson, 1986, p. 17). Not only can emotions such as happiness, sadness, fear, and anger be expressed through music but descriptions (i.e., the sea, birds, battles) and values (i.e., good, bad, ugly, beautiful) can also be evoked (Da Silva et al, 1984, p. 11).

In expressing emotions, music becomes a mode of communication between composers, performers, and listeners (Da Silva et al, 1984, p. 26). Music serves to “establish connections among humans” (Da Silva et al, 1984, p. 5) and is in fact a worldwide phenomenon in that people of all cultures can be observed making music of one kind or another (Alperson, 1986, p. 43). What “counts as music [is] determined by…culture” (Sparshott, 1986, p. 52) and therefore what music is about “can vary from context to context, within a context, and from individual to individual” (Cross, 2003, p. 23). Music is a form of social expression that in fact “transcends the
individual” (Da Silva et al, 1984, pp. 6). According to Pablo Casals, famed cellist, “We can never exhaust the multiplicity of nuances and subtleties which make the charm of music” (as quoted in Lisk, 1996, p. 29).

The Importance of Music

“No culture is without music in some form or another” (Alperson, 1986, p.3). For the ancient Greeks, “music was inextricably bound to the fabric of social life” (Alperson, 1986, p. 28). Archeologists, in fact, have located a musical pipe that “predates almost all known visual art” suggesting that, “human musicality is ancient” (Cross, 2003, p. 21). “Not only is music ancient, but musicality may be universal for all members of the human species” (Cross, 2003, p. 21). As such, it may be said that, “Music is the universal language…the language of emotions” (Alperson, 1986, p. 3).

The value of music is found in its ability to serve “as a means of communication and as a form of sociability” (Firth, 2003, p. 100). Music is an art of the people and is found in many arenas of common life (e.g. churches, theaters, workplaces, ballrooms, public and private gatherings) and in many forms (Scruton, 1986 p. 355). It has been “associated with the divine in the context of magical incantations and dances and sacred music” (Alperson, 1986, p. 195). Music functions as emblems, such as national anthems, theme songs, and school fight songs (Da Silva et al, 1984, p. 8). It evokes mystical power through ancient stories such as that of the Sirens, Orpheus, and the Pied Piper (Firth, 2003, p. 100). In recent decades, music has even served as an expression of “cultural and political opposition and renewal” (Shepard, 2003, p. 70). Thus, “music is one of the forms in which societies become evident to their members” (Da Silva et al, 1984, p. 1).
As an abstract art form, music establishes a connection with life and does so in at least three ways: it presents patterns and forms through sound, it expresses emotion, and it “involves the dynamic movement of sound in time and ‘aural space’” (Davies, 1986, p. 319). It is through this third aspect, with the interaction of meter, pulse, and rhythm, that music is “highly evocative of a coordinated, physical response in bodily movement” and “encourages the control and regulation of motor responses” (Davis, 1986, p. 319). Music has also been shown to be of benefit in neurological development. “The playing of an instrument requires a greater portion of the brain’s activity than most other disciplines a child may experience while learning” (Lisk, 1996, p. 11). Zigler, Finn-Stevenson, and Hall (2002) referred to numerous studies that found increases in IQ scores among children and college students who spent time listening to and/or performing music, a phenomenon commonly known as the “Mozart Effect” (p. 147-148). Involvement in music therefore provides “critical pathways through life” (Firth, 2003, p. 100).

Music has appeal for people everywhere and “has been at the heart of all human societies” (Da Silva, 1984, p. vii). The relationship between music and society therefore is “fundamental in the world of human beings” (Da Silva, 1984, p. vii). People not only listen to music, but “what is equally remarkable is the sheer amount of music making in which people are engaged…and that these musical activities are central to their understanding of who they are” (Firth, 2003, p. 100). Encounters with music, either as a performer or listener, are not commenced in order to survive but rather to enhance the enjoyment of life (Davies, 1986, p. 315). Music is valued as an art form that “renews the sense of community without which life is neither tolerable nor wholly lived” (Alperson, 1986, p. 26). It “is an integral part of everyday life” (Alperson, 1986, p. 26) and [music] “just matters more than any other medium” (Firth, 2003, p. 100).
The Music Profession

“The music field is an exciting mosaic of unique opportunities” (Gerardi, 1997, p. ix). Indeed, it is a multi-billion dollar industry (Field, 1990; Gerardi, 1997) with job opportunities across all musical genres: opera, classical, jazz, country, pop, rock, religious, gospel, and musical theater. But while “the well-publicized solo artists, conductors, and singers represent the popular conception of what a musician does” (Belgarian, 1985, p. 65), a career as a performer is by no means the only available option in music. In fact, one source listed at least eighty-four (84) career opportunities in the music industry (Field, 1990, p. 1). All who aspire to work in the field, however, have one common desire: to create music (des Pres & Landsman, 2000, p. v).

The numerous career opportunities in music (Belgarian, 1985; Field, 1990; Gerardi, 1997) can be grouped into ten main categories: performing; recording; radio, television, and films; retailing; instrument manufacture and repair; education; church music; organization and facility management; composing and writing; and those who work in the business end of the industry. It is not unusual for music professionals to work simultaneously in more than one category at some point in their careers (Jankowska, 1981, p. 31). In fact, of music conservatory graduates surveyed five years after graduation, only twenty-three (23) percent “worked exclusively at one full time or part time job” in the music field (Jankowska, 1981, p. 31). Among professional musicians however, the performers are perhaps the group with the highest public profile (Belgarian, 1985; Chasins, 1981).

Renowned composers Mozart and Beethoven struggled to earn a living in music, unable to obtain full-time employment with regular paychecks (Belgarian, 1985, p. 63). Most performing musicians in the United States today continue to be “freelance artists” working as “independent entrepreneurs” (Belgarian, 1985, p. 64). While there are several hundred
professional orchestras in this country (Belgarian, 1985; Gerardi, 1997), and perhaps fifty (50) opera companies (Belgarian, 1985, p. 63), only a very small percentage are able to offer full-time employment to conductors, instrumentalists and singers (Belgarian, 1985, p. 63). The majority of those who are musical performers “earn the largest portion of their livelihood from teaching privately and performing sporadically” (Chasins, 1981, p. 22). Performers find work in: classical orchestras, opera and ballet companies, chamber groups of various sizes, vocal ensembles (e.g. Robert Shaw Chorale, Fred Waring Chorus), musical theater “pit” orchestras, religious institutions (organists, cantors, and choir directors), armed forces ensembles, theme parks, and with pop musicians on tour, to name just a few performing venues (Belgarian, 1985; Bjorneberg, 1990; Chasins, 1981; Gerardi, 1997; Oberlin College, Conservatory of Music, 1955).

Most performing musicians begin the study of their craft at a young age (Gerardi, 1997, p. 21), and often commence playing “gigs” (professional performances) in their early teens (Jankowska, 1981, p. 31). A career as a successful solo artist is perhaps that to which most budding musicians aspire but few actually achieve (Gerardi, 1997, p. xiv). A survey of graduates of a music conservatory found that only sixteen (16) percent were actually working as soloists five (5) years after graduation (Jankowski, 1981, p. 32). “Always there is a tiny quota of superstars who monopolize the headlines and command vast fees for appearances” (Chasins, 1981, p. 22). The solo concert performers, though small in number, “can and do alter our views and perceptions of music” by “setting the tone and character of the public’s understanding of what the art of music is” (Belgarian, 1985, p.66).

Musical performers and composers have found professional opportunities for centuries but, “there’s much more to the music business than just the bright lights” (Gerardi, 1997, p. 2). The advent of electronic communications has greatly expanded career opportunities in music.
Technology…offers rich opportunities to those alerted to films, radio, TV, recordings, and computers” (Chasins, 1981, p. 23). The entertainment industry (i.e. film, television, music videos) is a major employer of studio musicians, conductors, composers, publishers, arrangers, copyists, and other personnel (Belgarian, 1985; des Pres & Landsman, 2000; Gerardi, 1997; Weismann, 1997). Opportunities in radio include positions as deejays, program directors, and engineers (Johnson, 1997). The recording industry employs persons such as publicists, promoters, distributors, retailers, producers, and studio engineers (Bjorneberg, 1990; des Pres & Landsman, 2000; Gerardi, 1997; Johnson, 1997). All of these areas need the services of songwriters, arrangers/orchestrators, agents, and business managers (Bjorneberg, 1990; des Pres & Landsman, 2000; Gerardi, 1997; Johnson, 1997).

The business aspect of music offers a multitude of career paths. In retail sales, there are opportunities in the manufacturing of instruments and accessories, performance clothing and uniforms, sheet music, and the myriad of additional items needed by performers and associated professionals (Bjorneberg, 1990; Gerardi, 1997; Oberlin College, Conservatory of Music, 1955). In organization and facility management, there are positions available in Development (fundraising), Marketing and Public Relations, Education Outreach, and Business Management (Bjorneberg, 1990; des Pres & Landsman, 2000). A relatively recent career path is that of “Arts Administration”, with numerous universities offering degree level certification. These professionals “manage and run symphony orchestras, opera companies, and community arts projects” (Gerardi, 1997, p. 133). Finally, additional opportunities in the business of music include that of music attorney, music critic, music librarian, music therapist, and instrument tuner and technician (Bjorneberg, 1990; Gerardi, 1997; des Pres & Landsman, 2000; Oberlin College, Conservatory of Music College, 1955).
Musicians are frequently involved in teaching, whether on a private level or in educational institutions. A career in music education is challenging, “offering a large measure of personal stimulation and gratification” (Bjorneberg, 1990, p. 23). Opportunities are available at every level, from primary through university, and in both classroom settings as well as supervisory/administrative positions (Belgarian, 1985; Field, 1990; Gerardi, 1997; Oberlin College, Conservatory of Music, 1955). Since music has been shown to be “an important basic component in the development and training of children” (Gerardi, 1997, p. 107), musical artists who are also music educators are “a prime influence on the musical vitality of a community and the nation” (Bjorneberg, 1990, p. 23).

According to Gerardi (1997), “American music is more creative and inventive today than ever before” (p. xiii). But music is also a multi-billion dollar industry (Gerardi, 1997, p. xi) and as in any business, the successful musical professional needs “talent, training, and experience along with confidence, personality, and determination” (Gerardi, 1997, p. xiii). The pathway to a professional career in music can be circuitous. However, it is “the love of music, the desire to create it, [that] drives people to make it the main priority in their lives” (des Pres & Landsman, 2000, p. v). The joy and passion communicated by professionals throughout the music business enrich the lives of individuals and global society on a daily basis.

Factors of Performance

A number of different factors influence the perceived “success” (or lack thereof) of solo musical performances. Performances are shaped by the size, location, and acoustics of the performing environment as well as the nature of the audience (Rink, 2002, p. 66). Factors that affect individual musicians include personal characteristics, practice and preparation
techniques, expertise in musical expression, and physical and emotional health (Clarke, 2002; Salmon & Meyer, 1998). All of these factors contribute to musical performance experiences.

Performance venue options are endless, ranging from street corners to school gymnasiums and from church sanctuaries to elegant concert halls. “Performers frequently play in halls over which they have no control” (Hagberg, 2003, p. 75). Dirty or cluttered stage conditions can distract the audience from the perceived musicality of the performance. A stage is a “visual context for [the] concert” and as such, all efforts must be made to keep it a “distraction-free environment in which [the] audience can concentrate on the music (Hagberg, 2003, p. 75). The transmittal of sound is also extremely important in performance venues. “Acoustics can be perfect, too dead, [have] too much reverberation or [be] simply unacceptable” (Lisk, 1996, p. 83).

“Without the audience, there can be no performances” (Hagberg, 2003, p. xiii). Acceptable mores of audience response vary with the culture, the venue, and the type of music being performed. “At most classical concerts today we expect the audience to remain silent in rapt attention” whereas “a freely responding audience is…more characteristic of a pop concert” (Lawson, 2002, p. 3). Whatever the type of music being performed or the venue of the performance, “musicians need to make their audiences receptive and to give them a lasting, positive impression” (Hagberg, 2003, p. xiii). Great performers have “an uncanny ability to connect with their audience” and produce successful performances regardless of surrounding circumstances (Hagberg, 2003, p. xiv).

The skills required of a successful solo musician include stage presence, technical skills and preparation, interpretation and “connection” with the audience, and effective stress management (Davidson, 2002; Hagberg, 2003; Lisk, 1996; Salmon & Meyer, 1998). Stage
presence is “the visual aspect of a live musical performance” and includes the physical movements and behavioral mannerisms of the performer, condition of equipment, and the mechanics of smooth stage management (Hagberg, 2003; Salmon & Meyer, 1998). Poor stage presence, such as apparent nervous habits or reacting to mistakes, inappropriate dress or mannerisms, and poor grooming, is “painfully obvious” (Hagberg, 2003, p. 2). Good stage presence, however, goes largely unnoticed as “it allows listeners to concentrate on the music throughout the performance without distractions” (Hagberg, 2003, p. 2). It can be the “key element in the making or breaking of a concert, no matter how well the musicians play” (Hagberg, 2003, p. 2).

It is a fairly recent phenomenon that public performances of classical music have become widespread and that a career as a professional musician has become a feasible option (Salmon & Meyer, 1998, p. 2). With this trend has come an emphasis on solo musical virtuosity (Salmon & Meyer, 1998, p. 2). Technical musical virtuosity develops from long years of practice and preparation during which “conscious acts become subconscious acts” (Reid, 2002, p. 104). Musicians use repetition and memorization to perfect the technical aspects of their performances (Clarke, 2002; Salmon & Meyer, 1998; Williamon, 2002). According to Salmon and Meyer (1998), the development of musical skills “exceeds many others in complexity, level of refinement, capacity for expression and preparatory rigor” (p. vii).

When a musical pattern is performed with exactness, “it frequently results in an unmusical performance with questionable appreciation from the audience” (Lisk, 1996, p. 6). Instead, musicians must “negotiate between the processes required in formulating interpretations and in developing the appropriate technical skills” (Reid, 2002, p. 108). “The notes alone do not make music. The secret lies in projecting feeling through the nuance and inflection of notes”
Musicians must go beyond what is explicitly provided by the score notation and actually deviate from rigid rhythms and dynamics to be expressive (Clarke, 2002, p. 65). It is through expressive abilities that musicians reveal themselves and make meaning of the music by transmitting feelings and emotion through their performances (Clarke, 2002; Lisk, 1996). Expressive musical performances are the “conscious and deliberate attempts by performers to make their interpretations audible” (Clarke, 2002, p. 65). Visual aspects of expression have been shown to be of value as well (Davidson, 1991 as quoted in Davidson, 2002 p. 146). Audiences use bodily movements and gestures by musicians to assess and clarify meaning (Davidson, 2002, p. 146). Expression, technical virtuosity, and stage presence are thus fundamental aspects of musical performance that contribute to successful musical communication between performer and audience (Clarke, 2002; Davidson, 2002).

The final component of musical performances to be discussed in this paper is the physical and emotional health of the performer. Overall good physical health is vitally important to all performing musicians. This is particularly true for vocalists who utilize a number of bodily organs to produce and support sound. “The recent establishment of performing arts clinical treatment centers signals an awareness of their [musicians] specific physical and mental health needs” (Salmon & Meyer, 1998, p. viii). It is only fairly recently that attention has been turned specifically to the effects of stress and anxiety in musical performance skills (Salmon & Meyer, 1998, p. vii). While the adrenaline produced by pre-concert excitement can actually help performers do their best (Davidson, 2002; Hagberg, 2003), over-arousal “can cause thoughts of self-doubt and worry” (Davidson, 2002, p. 150) leading to a condition known as musical performance anxiety.
Musical Performance Anxiety: Definition and Extent

To assure financial success in the chosen field, a professional musician must be able to consistently perform exceptionally well before audiences of varying sizes and levels of musical discrimination. Musical performance anxiety (MPA), also called “stage fright”, can be defined as excessive concern about performing in public due to fear of negative evaluation (Wilson & Roland, 2002). MPA is experienced either prior to and/or during a performance (Currie, 2001).

The literature on MPA contains references to anxiety as having both positive and negative effects for performers. Low levels of anxiety are “an integral part of an everyday requirement of human growth and development” according to Hamann and Sobaje (1983, p. 37). Mild tension can add positive electricity to performances (Wilson & Roland, 2002), but higher levels can be debilitating to performers and have been categorized as a form of social phobia (Picard, 1999; Wilson & Roland, 2002). For the most part, researchers agree that MPA is a wide-ranging problem among professional musicians (Currie, 2001; Harris, 1988; Rife et al, 2000; Wilson & Roland, 2002). A national survey of 2,212 professional musicians in the United States revealed that forty percent rated MPA as a moderate to severe problem (Rife et al, 2000). A study of Dutch musicians showed fifty-nine percent reporting MPA at levels that seriously affected their professional careers (Rife et al, 2000). A review of the literature revealed the existence of numerous domestic and international studies that provide evidence of wide-ranging concern about the topic.

Characteristics of MPA

Physical symptoms of MPA may include rapid heartbeat, trembling, dry mouth, shortness of breath, nausea, excessive perspiration, etc. (Steptoe & Fidler, 1987; Wilson & Roland, 2002; Rife et al, 2000). Depending on the chosen instrument of the performer, a steady hand, voice,
and/or proper breath support are needed for optimal musical performance (Wilson & Roland, 2002). Physical symptoms of MPA may precipitate mistakes by musicians during performance (Rife et al., 2000). High levels of anticipatory anxiety, excessive pessimistic self-talk, and panic are common cognitive characteristics of MPA (Rife et al., 2000; Wilson & Roland, 2002) and have been reported to cause musicians to avoid performance opportunities and even interrupt actual performances (Wilson & Roland, 2002). MPA can thus “adversely impinge on the quality of musical performance and seriously affect careers in music” (Rife et al., 2000, p. 161).

Management Techniques

Musicians employ a variety of techniques in attempting to manage MPA including thorough mastery of the work(s) to be performed, relaxation techniques, imagery and visualization exercises, psychological approaches, and the use of prescription drugs (Harris, 1988). A review of the literature reveals that research conducted on the subject of MPA can be categorized into one of three groups: anxiety reduction and control through behavior modification techniques, anxiety reduction and control through beta blocking drugs, and assessment of anxiety under stressful situations (Hamann & Sobaje, 1983). This study will focus on one particular behavior modification technique: systematic desensitization.

Since the career success of a musician depends at least partly on the ability to manage performance anxiety, several researchers contended that the teaching of coping skills should be an important part of the curriculum at the post-secondary level (Currie, 2001; Lehrer, 1985; Picard, 1999). Lehrer’s (1985) four recommendations for training professional musicians on this subject included: instruction in stress management, coursework in recognizing problems of tension and anxiety, instruction in progressive relaxation, and opportunities to practice performance. It is through the use of this final recommendation, the practicing of performing,
that desensitization through repetition can be utilized to manage or even reduce anxiety (Appel, 1974; Norton et al, 1978; Salmon & Meyer, 1998). Harris (1988) believed in the value of providing performance experience in front of other students and teachers, an opinion shared by Rife et al (2000), who further recommended that “musicians be provided with frequent opportunities to perform in many different types of solo/ensemble situations” (p. 162).

Desensitization techniques for musicians involve maximizing opportunities for frequent performance experiences so as to reduce the effects of the phobia. Repeated performance exposure itself may not eliminate MPA (Wilson & Roland, 2002) but studies have shown that it can help (Nagel, Himle, & Papsdorf, 1989; Reubart, 1985; Wilson & Roland, 2002). It is therefore important that performance experience be provided to aspiring musicians (Rife et al, 2000). In discussing systematic desensitization, behavioral therapists recommended a progressive exposure to the hierarchy of fear-inducing events (Wilson & Roland, 2002). In the case of MPA, Wilson and Roland (2002) suggested that students should encounter critical audience situations in step-wise stages during their pre-professional training. Reubart (1985) suggested the frequent use of performance opportunities in front of student rehearsal gatherings as an early step in systematic desensitization training, finding that they are less anxiety producing performance venues than other types in front of more critical audiences.

Summary

The findings of the studies on desensitization techniques mentioned herein suggest that practice opportunities in all types of performances are critical to a music student's training in managing performance anxiety. Solo performances appear to create the highest levels of MPA among all musicians. This study therefore inquired as to the numbers of different types of solo performance opportunities experienced by the population being studied. As for measuring levels
of MPA, Currie (2001) states that there are two methods of assessment: self-report and laboratory measurement of the various physiological symptoms. Her conclusion is that self-report is the best measurement to be made of feelings of musical performance anxiety. This study therefore employed a scale of self-reported MPA measurement by the study participants both in retrospect at the time of their admission to the music curriculum as well as a current self-reported assessment.
CHAPTER 3: METHODOLOGY

Population and Sample

The target population for this study included all undergraduate music majors enrolled in a degree program at four-year universities in the southeast United States. The accessible population included all undergraduate students enrolled in a degree program in the School of Music at one research extensive university in the southern United States. The research sample in this study consisted of a 100% sample of the defined accessible population. Therefore, the drawn sample in the study was a census of the accessible population. The sampling frame that included this population was obtained from the Associate Dean of the College of Music and Dramatic Arts and included three hundred twelve students.

Instrument

The instrument that was administered for this research was a researcher-designed survey consisting of eight questions. Five closed-ended questions solicited selected demographic characteristics including age, gender, degree being pursued, concentration, and number of semesters completed as a music major. In the case of these five questions, respondents were asked to circle the most appropriate response or category of those provided for each item.

In order to address objectives two and three, two scaled items asked respondents to rate their self-assessed levels of MPA. The first asked for the rating at the time of the student’s admission to the School of Music and the second asked for a current self-assessed rating of MPA. These ratings of MPA were shown on a scale of one to ten, with one described as “Minimal symptoms” and ten as “Performance impossible”. Respondents were asked to circle a number from one to ten indicating their self-assessed levels of MPA at the two different time
periods. These two survey questions were separated on the actual instrument with the retrospective assessment appearing earlier than the current assessment.

The researcher considered several methodologies for the self-assessed measurement of MPA levels by students. First, a longitudinal study was considered but the constraints of time precluded this option. Second, the study of two different student groups, one consisting of entering students and the other fourth year students, would have been undesirable due to the likelihood that the groups would be too dissimilar for accurate comparison. The use of retrospective self-assessment, therefore, was considered by the researcher to be the best alternative available for the measurement of MPA levels upon entrance into the music curriculum.

Numerous researchers across a wide range of disciplines have utilized retrospective self-assessments. In the area of medicine, for example, Carnrike (1984) used retrospective self-reporting methodologies when assessing nausea in cancer patients. Joyce, Kaestner, and Korenman (2002) utilized retrospective assessments when investigating women’s level of intentionality (or lack thereof) regarding pregnancy. In the area of psychology, Todd, Tennen, Carney, Armeli, and Affleck (2004) used retrospective assessment in their study of stress coping strategies. When studying organizational change in business information system development, Huber (1995) utilized retrospective histories and assessments.

Since this study took place in an educational arena, particular effort was made to locate other researchers who have used retrospective self-assessments in school settings. Coward (1978) used retrospective assessments when studying the process of change in rural schools. Weaver (1993) did so when studying whole language strategies for elementary students. Maryland University (1990) used retrospective assessments when conducting a study of factors
associated with undergraduate persistence to graduation. Finally, previous studies of musical performance anxiety among college students have also used self-reporting measures (Liston, Frost, & Mohr, 2003; Reitman, 2001; Spahn, 2001; Tartalone, 1992). The available literature, therefore, supported the use of retrospective self-assessments in this study of undergraduate levels of musical performance anxiety (MPA).

One additional survey question was an open-ended completion question that asked students to fill in the number of times they had performed public solos in a variety of listed venues since admission to the School of Music. Responses were measured in the following categories: solos during large and small ensemble concerts; solos during studio classes, master classes, and weekly recital class; audition solos including admission to the School of Music, ensembles, concerto competitions, graduate schools, military bands, or summer opportunities; jury and barrier examinations; solo competitions on state, regional and/or national levels; paid or unpaid solo gigs; and a final category listed as “other” with space for students to fill in the nature of any unlisted solo opportunities. A copy of the instrument is attached in Appendix A.

The content validity of the study instrument was established through a review by a panel of experts. The panel consisted of three faculty members at a research extensive university. Two of the faculty members have extensive experience supervising music students at the undergraduate level, and both of these are successful research scholars in their field. Additionally, one of the two panel members in the music field is currently actively involved in research specifically in the area of musical performance anxiety among undergraduate music students. The third member of the panel is an experienced faculty member with expertise in the area of survey instrument design. Input received from the members of the validation panel was
carefully reviewed, and appropriate revisions were made in the instrument as suggested by the panel.

Data Collection

Several steps were taken to collect data for this study. Permission was first obtained from the Associate Dean of the School of Music to conduct this survey. The instructor of record was contacted for permission to conduct this survey during the Recital Hour course, a required curriculum class that meets weekly and in which most members of the accessible population were enrolled. The instrument was administered during a particular class session to all students in attendance. The students were informed that the purpose of the survey was to obtain their input in hopes of potentially improving the quality of musical performance preparation at the institution. The only additional instructions given prior to administration was a request that students complete all items, seriously consider their responses, and do so without consultation with other students. The researcher stated all information and instructions verbally. The survey was then distributed, and when all respondents had completed it, the researcher collected the surveys. The instrument was administered one week later to any students who stated upon entering class that they were not in attendance during the initial survey administration.

The students not enrolled in this class were identified by a comparison of the accessible frame with that of the roster of students enrolled in the specified course. These students were contacted via email on the date of the initial survey classroom administration by the researcher and given the same information about the purpose of the survey as those in attendance at the class. The survey was sent with the email as an attachment. The students were given three options for completing the survey: 1. Print the attachment, complete the survey, and return to the researcher’s mailbox; 2. Respond via email with a listing of their answers to each numbered
question (the researcher transferred these answers to blank survey sheets); or 3. Pick up a blank survey in the researcher’s office, complete it, and return to the researcher’s mailbox. The deadline for completion was listed as four days later. A second email was sent one day after this deadline again requesting survey completion if the students had not already done so. A “deadline extension” of four more days was listed in this second email appeal. The “subject” section of the second email read, “IMPORTANT - SECOND REQUEST”. All completed surveys collected by this final deadline, both those administered in class as well as those completed as a result of email request were included in the final data.

Data Summary/Analysis

Selected demographic characteristics were compiled and described to meet objective number one. In order to meet objective number two, the researcher calculated the mean level of self-assessed MPA reported by all sampled respondents upon their admission to the School of Music. To meet objective number three, the current mean level of MPA experienced by undergraduates at the chosen university was determined. Objective number four was met by determining the mean number of solo performances experienced by current undergraduates since admission as music majors.

To determine if a relationship existed between self-reported levels of MPA and total number of solo performances as stated in objective number five, the researcher first compared mean levels of MPA upon admission to the School of Music with current mean levels of MPA and recorded any difference. A relationship was then sought between this result and the mean of total solo performances to identify any possible correlation.
CHAPTER 4: FINDINGS

Results

The target population for this study consisted of all undergraduate music majors enrolled in a degree program at four-year universities in the southeast United States. The accessible population included 312 undergraduate students enrolled in a degree program in the School of Music at one research extensive university in the southern United States. The research sample in this study consisted of a 100% sample of the defined accessible population. Of the accessible population of 312 music students, 273 were enrolled in a weekly recital class. The survey instruments were administered to the students enrolled in this class during a designated class session with a follow-up administration the next week for those absent during the initial administration. Surveys were also emailed to the remaining thirty-nine music majors not enrolled in the class with one follow-up email. Of the thirty-nine surveys emailed, ten were completed. Of the surveys administered to the 273 students enrolled in the weekly recital class, 216 were completed. A total of 226 surveys were returned for an overall return rate of seventy-two percent.

An outlier analysis was conducted on the responses received from these completed surveys. This analysis revealed that six of the completed surveys included responses on one or more of the items regarding the number of solo performances experienced that were substantially beyond the possible maximum. For example, there are finite numbers of opportunities for students to perform juried solos, and where the number reported by the respondents was well beyond this reasonable limit, the researcher judged that something had caused a measurement error in the data. Each of the problematic outliers was examined individually and six were
eliminated from the study. The study was completed using the data provided by the remaining 220 respondents.

Objective One

Objective number one was to describe undergraduate music majors at a research extensive university in the South on selected demographic characteristics including age, gender, degree, concentration, and number of total completed semesters as music majors using responses from the demographic questions on the survey. The first variable on which study participants were described was age. Respondents were asked to circle the category that represented their age from the following options: “18-19”, “20-21”, “22-24”, and “25+”. The majority of respondents (n = 112 students, 50.9%) indicated that their age was in the “18-19” category. Only seven (3.2%) reported their age was “25+”. The complete information regarding age of respondents is presented in Table 1.

Table 1

<table>
<thead>
<tr>
<th>Age Category</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>18-19</td>
<td>112</td>
<td>50.9</td>
</tr>
<tr>
<td>20-21</td>
<td>77</td>
<td>35.0</td>
</tr>
<tr>
<td>22-24</td>
<td>24</td>
<td>10.9</td>
</tr>
<tr>
<td>25+</td>
<td>7</td>
<td>3.2</td>
</tr>
<tr>
<td>Total</td>
<td>220</td>
<td>100.0</td>
</tr>
</tbody>
</table>

The second variable on which study participants were described was gender. Respondents were asked to circle the category that represented their gender. The majority of respondents (n = 114, 52.3%) indicated that their gender was male and 104 (47.7%) were female. Two participants did not respond to this item.
Study participants were also asked to report the degree they were pursuing in the program. Possible responses included the following: Bachelor of Music (BM); Bachelor of Music Education (BME); and Bachelor of Arts in Music (BA). In addition, some students reported multiple degrees indicating that they were pursuing a double major. The largest group of respondents \((n = 87, 42.6\%)\) reported that they were pursuing the Bachelor of Music (BM) degree. Almost an equal number \((n = 86, 42.2\%)\) indicated that they were pursuing the Bachelor of Music Education (BME) degree. The degree reported by the smallest group of respondents was the Bachelor of Arts (BA) in Music with only 14 (6.9%) indicating this as their degree. The complete information regarding degree pursued is presented in Table 2.

Table 2
Degree Pursued by Currently Enrolled Undergraduate Music Majors at a Research Extensive University

<table>
<thead>
<tr>
<th>Degree</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bachelor of Music</td>
<td>87</td>
<td>42.6</td>
</tr>
<tr>
<td>Bachelor of Music Education</td>
<td>86</td>
<td>42.2</td>
</tr>
<tr>
<td>Double Major</td>
<td>17(^a)</td>
<td>8.3</td>
</tr>
<tr>
<td>Bachelor of Arts in Music</td>
<td>14</td>
<td>6.9</td>
</tr>
<tr>
<td>Total</td>
<td>204(^b)</td>
<td>100.0</td>
</tr>
</tbody>
</table>

\(^a\) All but one participant reported being Bachelor of Music/Bachelor of Music Education double majors. The remaining participant reported being a Bachelor of Music/Bachelor of Arts in Music double major.  
\(^b\) Sixteen study participants did not respond to this item.

The fourth variable on which study participants were described was the concentration being pursued as a part of their music studies. Respondents were asked to circle their concentration from the following options: “Voice”; “Piano/Organ”; “Brass”; “Woodwind”; “Percussion”; “Composition”; and “Strings”. The largest group of respondents reported that they were pursuing the “Voice” concentration \((n = 60, 28.0\%)\) while the smallest number of
respondents reported that they were pursuing the “Composition” or “Piano/Organ” concentrations with 12 responses each (5.6% each). Additionally, 2 respondents indicated that they were pursuing majors in two different concentrations (n = 2, .9%). The complete information regarding concentration is presented in Table 3.

Table 3

**Concentration Pursued by Currently Enrolled Undergraduate Music Majors at a Research Extensive University**

<table>
<thead>
<tr>
<th>Concentration</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Voice</td>
<td>60</td>
<td>28.0</td>
</tr>
<tr>
<td>Brass</td>
<td>45</td>
<td>21.0</td>
</tr>
<tr>
<td>Woodwind</td>
<td>45</td>
<td>21.0</td>
</tr>
<tr>
<td>Strings</td>
<td>23</td>
<td>10.7</td>
</tr>
<tr>
<td>Percussion</td>
<td>15</td>
<td>7.0</td>
</tr>
<tr>
<td>Piano/Organ</td>
<td>12</td>
<td>5.6</td>
</tr>
<tr>
<td>Composition</td>
<td>12</td>
<td>5.6</td>
</tr>
<tr>
<td>Double</td>
<td>2^a</td>
<td>.9</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>214^b</td>
<td>99.8^c</td>
</tr>
</tbody>
</table>

^a One participant indicated voice and composition concentrations; the second indicated brass and strings concentrations.

^b Six participants did not respond to this question.

^c Percentages do not total 100 due to rounding error.

The final variable on which study participants were described was the total number of completed semesters as music majors. Possible responses included: “0-1”; “2-3”; “4-5”; “6-7”; and “8+”. The largest group of respondents (n = 77, 35.2%) indicated they had completed 0-1 semesters as music majors followed closely by the 64 respondents (29.2%) who reported having completed 2-3 semesters. Together, these two groups constituted almost two-thirds of the survey respondents. Only 14 (6.4%) reported having completed 8+ semesters as music majors. Complete information regarding semesters completed as music majors is presented in Table 4.
Table 4

Semesters Completed as Music Majors by Currently Enrolled Undergraduates at a Research Extensive University

<table>
<thead>
<tr>
<th>Semesters Completed</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-1</td>
<td>77</td>
<td>35.2</td>
</tr>
<tr>
<td>2-3</td>
<td>64</td>
<td>29.2</td>
</tr>
<tr>
<td>4-5</td>
<td>43</td>
<td>19.6</td>
</tr>
<tr>
<td>6-7</td>
<td>21</td>
<td>9.6</td>
</tr>
<tr>
<td>8+</td>
<td>14</td>
<td>6.4</td>
</tr>
<tr>
<td>Total</td>
<td>219(^a)</td>
<td>100.0</td>
</tr>
</tbody>
</table>

\(^a\) One study participant did not answer this question.

Objective Two

Objective number two was to determine the level of self-assessed musical performance anxiety (MPA) experienced by the undergraduate students at the time of their admission as music majors. A scaled item requested respondents to rate their MPA upon admission by circling a number ranging from “1” (“minimal symptoms”) to “10” (“performance impossible”). The mean of their responses was 4.96 (S.D. = 2.07) and the responses ranged from 1 (the lowest possible value) to 10 (the highest possible value). To summarize this data, the researcher grouped the participant’s responses into five categories. More than one-third of respondents (n = 75, 34.1%) indicated levels of MPA upon admission of 3 or 4. Nearly equal numbers of respondents reported MPA levels of 5 or 6 (n = 58, 26.3%) and 7 or 8 (n = 55, 25.0%). Together, those respondents indicating MPA levels upon admission from 5-8 constituted the majority (51.3%). MPA levels upon admission reported by the smallest number of respondents were those at the extreme ends of the scale: 26 respondents (11.8%) indicated MPA levels of 1 or 2 while only 6 respondents (2.8%) reported MPA levels of 9 or 10. The complete information regarding self-assessed levels of MPA upon admission is reported in Table 5.
Table 5

Self-Assessed Levels of Musical Performance Anxiety upon Program Admission among Undergraduate Music Majors at a Research Extensive University

<table>
<thead>
<tr>
<th>MPA Level</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-2</td>
<td>26</td>
<td>11.8</td>
</tr>
<tr>
<td>3-4</td>
<td>75</td>
<td>34.1</td>
</tr>
<tr>
<td>5-6</td>
<td>58</td>
<td>26.3</td>
</tr>
<tr>
<td>7-8</td>
<td>55</td>
<td>25.0</td>
</tr>
<tr>
<td>9-10</td>
<td>6</td>
<td>2.8</td>
</tr>
<tr>
<td>Total</td>
<td>220</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Note: Mean = 4.96, SD = 2.07, Range 1-10. Based on a response scale of 1 to 10 where 1 = minimal symptoms and 10 = performance impossible.

Objective Three

Objective number three was to determine the current level of self-assessed musical performance anxiety (MPA) experienced by the undergraduate music majors. A scaled item identical to that used in objective two was presented on the survey. The mean of the responses was 4.55 (S.D. = 2.08) and the responses ranged from 1 (the lowest possible value) to 10 (the highest possible value). To further summarize this data, the researcher grouped the students’ responses into five categories identical to those used in reporting the responses for objective number two. The largest group, approximately one-third of respondents ($n = 71, 32.4\%$), reported current MPA levels of 3 or 4 followed closely by the 66 respondents (30.1\%) who indicated MPA levels of 5 or 6. Almost one-fifth of respondents ($n = 42, 19.2\%$) indicated current MPA levels at the lowest extreme of 1 or 2, while only 9 (4.2\%) reported current MPA levels at the highest extreme of 9 or 10. The complete information regarding current self-assessed level of MPA is reported in Table 6.
Table 6

Current Self-Assessed Levels of Musical Performance Anxiety among Undergraduate Music Majors at a Research Extensive University

<table>
<thead>
<tr>
<th>MPA Level</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-2</td>
<td>42</td>
<td>19.2</td>
</tr>
<tr>
<td>3-4</td>
<td>71</td>
<td>32.4</td>
</tr>
<tr>
<td>5-6</td>
<td>66</td>
<td>30.1</td>
</tr>
<tr>
<td>7-8</td>
<td>31</td>
<td>14.2</td>
</tr>
<tr>
<td>9-10</td>
<td>9</td>
<td>4.2</td>
</tr>
<tr>
<td>Total</td>
<td>219</td>
<td>100.1</td>
</tr>
</tbody>
</table>

Note: Mean = 4.55, SD = 2.08, Range 1-10. Based on a response scale of 1 to 10 where 1 = minimal symptoms and 10 = performance impossible.

a One study participant did not respond to this question.
b Percentages do not total 100 due to rounding error.

To further analyze the data, current self-assessed levels of musical performance anxiety were subtracted from those levels reported upon admission. The intent was to determine if a change had occurred and if so, the level of change. With this analysis, a positive numeral result indicated a decrease in self-assessed levels of MPA since admission. A negative numeral result indicated higher current MPA than at the time of admission. The mean of the change observed was .40 (SD = 1.82) with results ranging from –7.00 to +5.00.

To report this data, the researcher grouped the change rates into nine categories ranging from “large increase” to “large decrease”. More than twice as many respondents indicated a decrease in MPA (n = 97, 44.3%) than did those reporting an increase in MPA (n = 45, 20.6%). Seventy-seven respondents (35.2%) reported no change in MPA. Complete information regarding level of changes in MPA is reported in Table 7.
Table 7

Changes in Musical Performance Anxiety among Undergraduate Music Majors at a Research Extensive University

<table>
<thead>
<tr>
<th>Level of Change</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Large Increase (-8 to -9)</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td>Moderate Increase (-5 to -7)</td>
<td>5</td>
<td>2.3</td>
</tr>
<tr>
<td>Small Increase (-2 to -4)</td>
<td>21</td>
<td>9.6</td>
</tr>
<tr>
<td>Negligible Increase (-1)</td>
<td>19</td>
<td>8.7</td>
</tr>
<tr>
<td>No Change (0)</td>
<td>77</td>
<td>35.2</td>
</tr>
<tr>
<td>Negligible Decrease (+1)</td>
<td>46</td>
<td>21.0</td>
</tr>
<tr>
<td>Small Decrease (+2 to +4)</td>
<td>46</td>
<td>21.0</td>
</tr>
<tr>
<td>Moderate Decrease (+5 to +7)</td>
<td>5</td>
<td>2.3</td>
</tr>
<tr>
<td>Large Decrease (+8 to +9)</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>219</strong></td>
<td><strong>100.1</strong></td>
</tr>
</tbody>
</table>

Note: Mean change level = .40, SD = 1.82, range of change scores –7 to +5.
Note: MPA measurements based on response scale of 1 to 10 where 1 = minimal symptoms and 10 = performance impossible.

<table>
<thead>
<tr>
<th>Level of Change</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Large Increase (-8 to -9)</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td>Moderate Increase (-5 to -7)</td>
<td>5</td>
<td>2.3</td>
</tr>
<tr>
<td>Small Increase (-2 to -4)</td>
<td>21</td>
<td>9.6</td>
</tr>
<tr>
<td>Negligible Increase (-1)</td>
<td>19</td>
<td>8.7</td>
</tr>
<tr>
<td>No Change (0)</td>
<td>77</td>
<td>35.2</td>
</tr>
<tr>
<td>Negligible Decrease (+1)</td>
<td>46</td>
<td>21.0</td>
</tr>
<tr>
<td>Small Decrease (+2 to +4)</td>
<td>46</td>
<td>21.0</td>
</tr>
<tr>
<td>Moderate Decrease (+5 to +7)</td>
<td>5</td>
<td>2.3</td>
</tr>
<tr>
<td>Large Decrease (+8 to +9)</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>219</strong></td>
<td><strong>100.1</strong></td>
</tr>
</tbody>
</table>

Note: Mean change level = .40, SD = 1.82, range of change scores –7 to +5.
Note: MPA measurements based on response scale of 1 to 10 where 1 = minimal symptoms and 10 = performance impossible.

Objective Four

Objective number four was to describe undergraduate music majors at a research extensive university based on the number of public solo performances of all types experienced following their admission to the School of Music. Seven different types of solo opportunities were listed on the survey and respondents were asked to fill in the number experienced of each type. The largest number of reported solos were performed during studio classes, master classes, or Recital Hour (mean = 7.89, SD = 11.04) followed by solos performed during paid and/or unpaid gigs (mean = 6.00, S.D. = 16.89). Respondents reported almost equal numbers of solos performed in two different categories: solos performed during auditions (mean = 4.20, S.D. = 4.13) and solos performed during ensemble concerts (mean = 4.10, S.D. = 7.10).

The categories with the fewest numbers of reported solos performed were: solos during jury and/or barrier examinations (mean = 2.45, S.D. = 2.45), solos performed during
competitions (mean = 1.00, S.D. = 1.90) and solos of all other types (mean = .51, S.D. = 2.47).

When the reported solos experienced of all types were totaled, the mean was 25.54 (S.D. = 27.35) with a range from 1 to 173. The complete information regarding number of solos performed since admission is reported in Table 8.

Table 8

Number of Selected Solo Performances Since Program Admission Reported by Undergraduate Music Majors at a Research Extensive University

<table>
<thead>
<tr>
<th>Performance Setting</th>
<th>n</th>
<th>Minimum Reported</th>
<th>Maximum Reported</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Studio, Masterclasses, Recital Hour</td>
<td>214</td>
<td>0</td>
<td>100</td>
<td>7.89</td>
<td>11.04</td>
</tr>
<tr>
<td>Paid or Unpaid Gigs</td>
<td>205</td>
<td>0</td>
<td>156</td>
<td>6.00</td>
<td>16.86</td>
</tr>
<tr>
<td>Auditions</td>
<td>219</td>
<td>0</td>
<td>35</td>
<td>4.20</td>
<td>4.13</td>
</tr>
<tr>
<td>Large or Small Ensembles</td>
<td>217</td>
<td>0</td>
<td>50</td>
<td>4.10</td>
<td>7.10</td>
</tr>
<tr>
<td>Jury/Barrier Examinations</td>
<td>219</td>
<td>0</td>
<td>10</td>
<td>2.45</td>
<td>2.45</td>
</tr>
<tr>
<td>Competitions</td>
<td>219</td>
<td>0</td>
<td>10</td>
<td>1.01</td>
<td>1.90</td>
</tr>
<tr>
<td>Other</td>
<td>208</td>
<td>0</td>
<td>30</td>
<td>0.51</td>
<td>2.47</td>
</tr>
<tr>
<td>Total</td>
<td>219</td>
<td>1</td>
<td>173</td>
<td>25.54</td>
<td>27.35</td>
</tr>
</tbody>
</table>

Note: One participant did not respond to this item.

Of the 25 respondents who reported one or more “other” solos, seven listed solos during recitals; six listed solos performed as a part of church choir or orchestra jobs; five listed solos during chamber group performances; two listed solos performed in musical theater roles; one listed solos performed in class; one listed solos performed while teaching lessons; three respondents did not specify type of solo.

Objective Five

Objective number five was to determine if a relationship existed between the levels of musical performance anxiety and the number of public solo performances experienced by undergraduate music majors at a research extensive university. To accomplish this objective, the researcher correlated the levels of MPA change with the number of individual types of solo experiences reported and the total number of solos experienced. The changed levels of MPA were important to this analysis in determining which types of solo performances might have had the greatest impact on any changes in the self-reported levels of MPA. Pearson Product Moment
Correlation Coefficients were used to examine these relationships. For interpretation of correlation coefficients, Davis’ proposed set of descriptors was used (Davis, 1971). The coefficients and their descriptions are as follows:

<table>
<thead>
<tr>
<th>Coefficient</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>.70 or higher</td>
<td>very strong association</td>
</tr>
<tr>
<td>.50 to .69</td>
<td>substantial association</td>
</tr>
<tr>
<td>.30 to .49</td>
<td>moderate association</td>
</tr>
<tr>
<td>.10 to .29</td>
<td>low association</td>
</tr>
<tr>
<td>.01 to .09</td>
<td>negligible association</td>
</tr>
</tbody>
</table>

When the relationships between the number of various types of solo performances and changes in MPA were examined the highest relationship ($r = .19$, $p = .006$) was found between solos performed in jury or barrier examinations and changes in MPA levels. Based on Davis’ descriptors, there was a low positive association between solos performed in these settings and change in student’s self-assessed levels of MPA. A low positive association was also found with solos performed in studio classes, master classes, and Recital Hour ($r = .18$, $p = .009$) as well as solos performed during small and large ensemble concerts ($r = .14$, $p = .047$). The other associations between types of performances and change in MPA were not significant. The complete information regarding the relationship between the numbers of solo performances of various types experienced and change in MPA is reported in Table 9.
Table 9

Relationship Between Number of Selected Solo Performances and Change in MPA Levels Among Undergraduate Music Majors at a Research Extensive University

<table>
<thead>
<tr>
<th>Type of Solo Performed</th>
<th>n</th>
<th>r^a</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Solo Jury and/or Barrier Exams</td>
<td>218</td>
<td>.19</td>
<td>.006</td>
</tr>
<tr>
<td>Solo Studio/master classes, Recital Hour</td>
<td>213</td>
<td>.18</td>
<td>.009</td>
</tr>
<tr>
<td>Solo Small or Large Ensembles</td>
<td>216</td>
<td>.14</td>
<td>.047</td>
</tr>
<tr>
<td>Solos Total</td>
<td>218</td>
<td>.13</td>
<td>.052</td>
</tr>
<tr>
<td>Solo Competitions</td>
<td>218</td>
<td>.11</td>
<td>.092</td>
</tr>
<tr>
<td>Solo Auditions</td>
<td>218</td>
<td>.08</td>
<td>.264</td>
</tr>
<tr>
<td>Solo Other</td>
<td>207</td>
<td>.05</td>
<td>.512</td>
</tr>
<tr>
<td>Solo Gig</td>
<td>204</td>
<td>-.01</td>
<td>.841</td>
</tr>
</tbody>
</table>

^aPearson Product Moment Correlation Coefficient
CHAPTER 5: SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

Summary: Purpose and Objectives

The purpose of this study was to determine if a relationship existed between self-reported levels of musical performance anxiety and numbers of solo musical performances among a group of undergraduate music majors at one research extensive southern university. Performance anxiety has been shown to be a subject of concern among many musicians. For some, mild levels of anxiety provide an extra element of “electricity” to their performances and the phenomenon is therefore a positive enhancement to their professional careers. For most musicians, however, higher levels of performance anxiety can have detrimental effects. Some researchers have found that desensitization techniques, such as repeated performance exposure, have value in reducing the negative effects of MPA. The objectives of this study were:

1. To describe undergraduate music majors at a research extensive university in the South on selected demographic characteristics including age, gender, degree, concentration, and number of total completed semesters as music majors.

2. To determine the level of self-assessed musical performance anxiety (MPA) experienced by undergraduate music majors at the time of their admission as music majors.

3. To determine the current level of self-assessed musical performance anxiety (MPA) experienced by undergraduate music majors.

4. To describe undergraduate music majors at a research extensive university based on the number of public solo performances of all types experienced following their admission to the School of Music.
5. To determine if a relationship exists between the levels of musical performance anxiety and the number of public solo performances experienced by undergraduate music majors at a research extensive university.

Summary: Methodology

The target population for this study included all undergraduate music majors enrolled in a degree program at four-year universities in the southeast United States. The accessible population included all undergraduate students enrolled in a degree program in the School of Music at one research extensive university in the southern United States. The instrument was a researcher-designed survey consisting of eight items. Five closed-ended items solicited selected demographic characteristics including age, gender, degree being pursued, concentration, and number of semesters completed as a music major. Two scaled items asked respondents to rate their self-assessed levels of MPA: the first asked for the rating at the time of the student’s admission to the School of Music and the second asked for a current self-assessed rating of MPA. These ratings of MPA were shown on a scale of one to ten, with one described as “Minimal symptoms” and ten as “Performance impossible”. Respondents were asked to circle a number from one to ten indicating their self-assessed levels of MPA at the two different time periods. These two survey questions were separated on the actual instrument with the retrospective assessment appearing earlier than the current assessment. The final survey question was an open-ended completion question that asked students to fill in the number of times they had performed public solos in a variety of listed venues since admission to the School of Music.

The survey was administered during Recital Hour, a required curriculum course in which most members of the accessible population were enrolled. For those students not in attendance on the initial date of administration, the survey was administered again one week later. Music
majors not enrolled in Recital Hour were determined by a comparison of the course roster and the accessible frame. These students were contacted via email with instructions for completing and returning the survey, which was sent as an attachment. A reminder email was sent to those who did not respond within four days. All completed surveys collected by the final deadline, both those administered in class as well as those completed as a result of email request, were included in the final data.

Summary: Findings

The accessible population for this study included 312 undergraduate students enrolled in a degree program in the School of Music at one research extensive university in the southern United States. From this population, a total of 226 completed surveys were returned for an overall return rate of seventy-two percent. After an outlier analysis was conducted, six of the surveys were eliminated from the study because of responses that were known to be beyond the possible maximum in the area of solo performances completed. The study was completed using data provided by the remaining 220 respondents, an overall usable response rate of seventy-one percent.

Responses to demographic questions revealed that the majority of students ($n = 112$, 50.9%) were in the 18-19 year old category, the majority of students were male ($n = 114$, 52.3%), and an almost equal number of respondents were pursuing the BM degree ($n = 87$, 42.6%) as were pursuing the BME degree ($n = 86$, 42.2%). Respondents listing themselves as voice majors predominated ($n = 60$, 28%), followed by brass and woodwind majors ($n = 45$ each, 21% each). Finally, almost two-thirds of respondents ($n = 141$, 64.4%) stated they had completed 0 –3 semesters as music majors.
As regards self-assessed levels of musical performance anxiety, the majority (n = 119, 54.1%) of respondents listed levels of MPA upon admission to the program in the 5 – 8 range (on a scale of 1 – 10 where one indicated “no symptoms” and 10 indicated “performance impossible). When reporting current levels of self-assessed performance anxiety, however, only 106 (48.5) indicated levels in the 5 – 8 range. An analysis of the change in MPA was conducted and resulted in findings that more than twice as many respondents indicated a decrease in MPA between admission to the program and the time of survey administration (n = 97, 44.3%) versus those who reported an increase in MPA (n = 45, 20.6%).

The mean of total solos performed by respondents was 25.54, with the most solos reported in the areas of studio classes, master classes and Recital Hour (mean = 7.89), followed by solos performed during gigs (mean = 6.00). Respondents also reported an almost equal number of solos performed during auditions (mean = 4.20) and ensemble concerts (mean = 4.10). The researcher correlated the levels of MPA change with the number of individual types of solo experiences reported and the total number of solos experienced. Pearson Product Moment Correlation Coefficients were used to examine these relationships and Davis’ Descriptors were used for interpretation. The highest relationship (r = .19, p = .006) was found between solos performed in jury and/or barrier examinations and changes in MPA. Based on Davis’ descriptors, there was a low positive association between solos performed in these settings and the change in student’s self-assessed levels of MPA. A low positive association was also found with solos performed in studio classes, master classes, and Recital Hour (r = .18, p = .009) as well as solos performed during small and large ensemble concerts (r = .14, p = .047). The other associations between types of performances and changes in MPA were not significant.
Conclusions and Recommendations

A number of conclusions can be made from the findings of this study. The researcher has chosen to include those that may be of greatest interest to institutions involved in the training of professional musicians.

The first conclusion of this study is that the number of female undergraduate music majors was nearly equal to the number of male undergraduate music majors. This conclusion is based upon study findings indicating that 114 respondents were male (52.3%) and 104 were female (47.7%). The researcher made an examination of enrollment records from this institution in five-year increments since 1950. In the twelve periods thus analyzed, female music major enrollment exceeded male enrollment during the majority of these time periods (66%, n = 8). The gender distribution of respondents in this study, therefore, is not representative of the majority of years’ enrollment data for music majors at this institution. The study of professional musicians conducted by Rife et al (2000) included 47% females, a figure almost identical to the percentage of female undergraduate participation in this study. They concluded that this percentage, larger than that reported in previous studies of professional musicians by other researchers, might be more representative of the greater percentage of women performing in present-day orchestras (p. 165). The researcher recommends further study in order to determine if a similar trend is taking place at the graduate level.

The second conclusion of this study is that the number of respondents pursuing the Bachelor of Music Education degree is nearly equal to the number pursuing the Bachelor of Music degree (42.6%). Respondents who indicated pursuit of the BM (music performance) degree numbered 87 (42.6%) while respondents who indicated pursuit of the BME (music education) degree numbered 86 (42.2%). This finding represents a shift in majors chosen by
students at this institution over recent decades. An examination of enrollment records from this institution since 1985 indicated that the number of students who pursued the BME degree increased while on average, the number of students who pursued the BM degree in the same time period remained constant. This research indicates an upward trend in the proportion of students choosing the BME degree program over the BM. The researcher recommends, therefore, that music administrators should evaluate the situation to determine if resources are being appropriately allocated to meet the needs of students choosing either major.

The third conclusion of this study was that the majority of participants reported levels of musical performance anxiety (MPA) upon admission to the School of Music in the moderate to high levels. This conclusion is based on the finding that 54.1% of respondents indicated self-reported MPA levels upon admission in the 5-9 range on a scale of 1-10, where one indicated “no symptoms” and 10, “performance impossible”. This finding is supported by Harris (1988) who found that “over 50 percent” of music students have “significant tension interfering with performance” (p. 15). Further study is recommended regarding student’s MPA levels upon admission to the program. A longitudinal study, for example, could be conducted with levels of MPA measured on the actual day of the audition for incoming music majors. Levels of MPA could also be assessed several times throughout a student’s musical studies in order to discern any pattern therein and gain more direct measurements of MPA levels.

The fourth conclusion of this study was that there was a reduction in self-reported levels of MPA between admission to the School of Music and the time of administration of the survey instrument. The mean level of current MPA was lower than the mean of MPA upon admission (4.55 versus 4.96) and more than twice as many students reported a decrease in MPA (97) over those who reported an increase (45). In fact, when reporting current levels of MPA, 48.5% of
respondents reported MPA in the moderate to high levels (5-9 on a 1-10 scale), a reduction of 10.3% from the number reporting moderate to high levels of MPA upon admission to the program. While reflecting a smaller reduction in MPA than perhaps would have been desired, this finding is significant and suggests a need for further study. For the purposes of this research, only solo performance experiences were investigated for their impact on performance anxiety. Further research should be conducted to determine additional factors that might have had an impact on the reduction of MPA levels for this population.

While some degree of performance anxiety may be experienced by professional musicians, MPA has been shown to be of greater concern among undergraduate music majors than professional or amateur musicians (Steptoe & Fidler, 1987). It is imperative, therefore, that music program curriculums properly prepare aspiring musicians with practice in the available techniques of performance anxiety management. Numerous researchers support this conclusion. Currie (2001) contends that “a readily accessible collection of [musical performance anxiety] coping skills needs to be taught at the college level; Picard (1999) concluded that MPA “should be thoroughly discussed among teachers and students” (p. 71); and Rife et al (2000) concluded that “future research should focus on the implementation of educational programs that are specifically designed to help budding professional musicians cope with the effects of musical performance anxiety” (p. 166). Lehrer’s (1985) four recommendations for the training of professional musicians include: opportunities for performance practice, instruction in stress management, coursework in recognizing problems of tension and anxiety, and instruction on progressive relaxation. Administrators of music programs for aspiring musicians should therefore carefully consider inclusion of curriculum elements on the subject of MPA. For example, a study of the issues surrounding performance anxiety could be required as a part of
studio performance lessons and studio classes. Speakers on the topic could be brought in to address techniques of performance anxiety management just as guest performers conduct performance master classes. An open discussion of all aspects of musical performance anxiety should be of prime importance to administrators and faculty at institutions training aspiring undergraduate musicians.

The fifth conclusion of this study was that repeated solo performance opportunities were shown to be effective in reducing music student’s self-assessed levels of musical performance anxiety. This finding is supported by the studies of Appel (1974) and Norton et al (1978) wherein desensitization was shown to be an effective technique in the training of professional musicians. In this study, solos performed in jury and barrier examinations had the greatest impact on the reduction of MPA. An analysis of the data indicated that the highest correlation \( r = .19 \) between changes in MPA levels and types of solo performances occurred with this type of solo.

The findings of this study indicating those types of solos that had the greatest effect on the reduction of MPA among music majors has important potential implications for institutions that train aspiring musicians. In the opinion of the researcher, the significant finding of the value of jury and barrier examinations in reducing MPA is a reflection of the similarity of these types of solos to audition situations. Professional musicians face the prospect of highly competitive auditions throughout their musical careers. In preparing and performing jury and barrier examinations, students gain valuable practice in audition simulations. Since the findings of this study indicate this type of solo to be the most effective in lowering self-assessed levels of MPA, it is recommended that additional opportunities for jury and barrier examinations be offered. For example, rather than jury examinations being held only at the end of each semester, the exams might also be required at mid-term. Instead of the faculty panel that currently hears semester-end
jury and barrier examinations, a single faculty member might hear the mid-term examinations of each student, preferably a faculty member who does not regularly teach the student. By increasing the opportunities for this type of juried examination situation, students’ levels of MPA might be further reduced prior to graduation.

Solos performed during studio classes, master classes, and Recital Hour also had significant impact on the reduction of MPA levels among respondents. For these types of solos, study findings indicated a correlation coefficient of $r = .18$. These types of solos are generally performed for groups of peers with faculty members in attendance. Currently, no specific performance expectations are included as a part of curriculum requirements for music students at this institution other than the senior recital required of performance majors. With findings indicating a significant impact on reduction of self-assessed levels of MPA as a result of these types of solos, additional opportunities could be required as part of the curriculum. For example, applied faculty members might require annual performances in Recital Hour by music performance majors and at least one performance by music education majors prior to graduation. In addition, faculty might be encouraged to offer solo performance opportunities to the maximum number of students during weekly studio classes. Harris (1988) concluded that music students should be “encouraged to perform as much as possible” (p. 16).

In addition, solos performed during small and large ensemble concerts had a significant impact on reduction of MPA levels. Study findings indicated a correlation coefficient of $r = .14$ for these types of solos. Solos in large ensemble concerts are assigned to those deemed most capable of performing at a high level. Institutions might add additional large ensembles and/or performances of existing large ensembles in order to give more aspiring musicians these solo opportunities. The same recommendations could be applied to small ensembles, such as chamber
groups. Chamber groups might be required to perform publicly at least twice per semester, if not more. Also, repertoire selections for both large and small ensemble concerts might be made with an eye toward scores with larger numbers of solo opportunities. Harris (1988) reported on the “particular stresses encountered by advanced music students preparing for juries, recitals, auditions, concert solos and master classes” and recommends “desensitization procedures in performing” (p. 16).

The final conclusion of this study is that solos experienced during paid gigs (performances conducted outside of curriculum requirements on a paid or unpaid basis) had the least impact on reduction of MPA levels. In fact, the Pearson correlation was $r = -.01$, indicating a very slight increase in performance anxiety reported by those performing gigs. Since this was the only category of solo performance opportunities listed on the survey that occurred outside of the requirements of the curriculum, one might surmise that gig opportunities were not available to all student respondents. The finding of the research concerning gigs and the relationship to change in MPA levels poses several interesting questions for administrators of music programs: How do music majors view gig opportunities? Do the students view gigs as a part of their overall musical education or simply as a part-time job? Do gigs actually help or hinder the progress of an aspiring musician with regard to the management of performance anxiety and general professional preparation? It may be found that the potential benefits of gigs, which can serve as on-the-job training for professional musicians, actually outweigh any possible negative aspects. Gig performances can either be encouraged or discouraged by faculty. It is recommended, therefore, that further study be conducted to investigate the impact of gigs on music students’ levels of MPA.
REFERENCES


*Careers in music: presenting a series of informal talks on various opportunities in the music profession*. (1955) Oberlin College, Conservatory of Music, Oberlin, OH.


ATTENTION: You must be eighteen (18) years or older to participate in this study.

For the purposes of this survey, musical performance anxiety (MPA) is defined as excessive concern about performing in public due to fear of negative evaluation.


2. Circle gender: Female  Male

3. Circle degree: BM  BME  BA

4. Circle concentration: Voice  Piano/Organ  Brass  Woodwind  Percussion  Composition  Strings

5. Circle number of total COMPLETED semesters as a Music major at LSU:
   0-1  2-3  4-5  6-7  8+

6. What was your average level of MPA when performing solos UPON ADMISSION AS A MUSIC MAJOR AT LSU? Circle appropriate number:
   1  2  3  4  5  6  7  8  9  10
   Minimal  Performance
   Symptoms  impossible

7. Since applying as a Music major at LSU, HOW MANY TIMES have you performed each of the following (include all performance opportunities, on and off campus, including summers):
   #__________ Solo passages performed in concert as member of large and/or small ensembles
   #__________ Solos during studio classes, master classes, and Recital Hour
   #__________ Auditions including admittance to the School of Music, ensembles, concerto competitions, graduate school, military bands or summer opportunities
   #__________ Jury and/or barrier examinations
   #__________ Solo competitions on state, regional, and/or national levels
   #__________ Paid and/or unpaid solo gigs:
   #__________ Other: ________________________________

8. What is your CURRENT average level of MPA when performing solos? Circle appropriate number.
   1  2  3  4  5  6  7  8  9  10
   Minimal symptoms  Performance impossible
VITA

Carol W. Larsen was born on a dairy farm in southern Wisconsin and raised in Milwaukee. Following a family move, she graduated from high school in Jackson, Mississippi, and in 1973, received a Bachelor of Music Education degree from Louisiana State University. While at LSU, she was a four-year member of the Tiger marching band, the final two years serving as the band’s first Color Guard Captain. Following a return to academia as a non-traditional student, Carol will receive her Master of Science degree in Human Resource Education and Workforce Development with a minor in Educational Leadership, Research, and Counseling from LSU in May 2005. Carol presented her first graduate research paper, “Re-Entry Women: Non-traditional Academic Journeys” at two conferences: Research on Women in Education (AERA), New Orleans, Louisiana in 2002 and Women’s and Gender Studies Annual Conference, Louisiana State University in 2004.

Carol’s professional career began in New Orleans where she worked in personnel recruiting, training, and bankcard management with First National Bank of Commerce as a Banking Officer. She was then recruited to serve as the first Personnel Manager for the law firm of Phelps, Dunbar, Marks, Claverie and Sims. While working in New Orleans, she served as an officer in the American Society for Training and Development and has the distinction of being the first female member and officer of the New Orleans Jaycees. Following the birth of her two children, she returned to Baton Rouge and taught for eleven years at Trinity Episcopal Day School. She also owned her own business producing custom-made hand-smocked clothing for children and currently works as an independent contractor producing audio recordings. In 1997, Carol was hired as the first Educational Specialist for the ADD Center in Baton Rouge. In this role, she advised educators, individuals, and families on life management and educational
strategies for those diagnosed with Attention Deficit Disorder. Carol returned to the LSU campus in 2000 to serve as the Academic Counselor for the College of Music and Dramatic Arts. She continues to proudly serve all undergraduates in music and theatre while also being responsible for numerous administrative duties on behalf of the College.