

2016

# Music Performance Anxiety and Interventions in Conservatory and Liberal Arts Institution Music Students

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## Recommended Citation

Jimenez, Francesca M., "Music Performance Anxiety and Interventions in Conservatory and Liberal Arts Institution Music Students" (2016). *Scripps Senior Theses*. 779.  
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Music Performance Anxiety and Interventions in  
Conservatory and Liberal Arts Institution Music Students

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Scripps College

A Senior Thesis Submitted in Fulfillment of the Requirements for  
the Degree of Bachelor of Arts in Psychology

Professor Ma

Professor Carlson

December 11, 2015

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### **Acknowledgements**

I would like to thank Professor Ma and Professor Carlson of the Scripps College Psychology Department for their extended mentorship throughout this process. I would also like to thank Scripps College Associated Students Funding Advisory Committee for assisting with additional expense. Finally, I would like to extend my infinite appreciation and thank my family and close friends for their continued emotional support throughout my undergraduate career.

### **Abstract**

Music performance anxiety (MPA) is reported in musicians of all experience, levels, and genre. However, solo classical musicians report MPA more often and at higher levels than performers in other genres because of its formal culture and traditional structure. Within solo classical musicians, collegiate training greatly differs between conservatories that award a Bachelor of Music (B.M.) and liberal arts institutions that award a Bachelor of Arts (B.A.). In 2 studies, the proposed research examines the differences in general anxiety, MPA, and private lesson content between these two groups. Participants will be from the two groups of types of collegiate music students. In Study 1, participants will take the Beck Anxiety Inventory (BAI), Kenny Music Performance Anxiety Inventory (K-MPAI), and a Personal and Musical Background Questionnaire (PMBQ) at 3 times intervals before a public, solo performance in order to assess general connections between anxiety and MPA. In Study 2, participants will partake in weekly session of 1 of 3 interventions (meditation, journal entry, and biofeedback training) in order to determine an effective method for preventing and coping with MPA. Proposed results suggest higher levels of general anxiety and MPA in conservatory music students and lower levels of MPA in participants who undergo biofeedback training. Individuals who report learning about MPA strategies in their lessons will have lower levels of MPA, suggesting the need to consistently address MPA in classical music pedagogy.

*Keywords:* Music performance anxiety, classical music students, conservatory, liberal arts

Public, evaluative performances are an inextricable aspect of a musician's training and professional path. Throughout a musician's training, these pressures and perceived consequences of performing can amount to music performance anxiety. A musician may consistently avoid performing in front of others because they fear negative social evaluation. Music performance anxiety can inhibit musicians at a very early age, thus preventing them from pursuing future studies. Fortunately, music performance anxiety can be managed. In fact, with proper musical preparation and anxiety management interventions, a moderate amount of anxiety or physiological arousal before a performance can be beneficial. The Yerkes-Dodson (1908) inverted-U shaped curve illustrates performance anxiety, the relationship between physiological arousal and fear of social evaluation in performance. Regardless of the individual's level of expertise, too little or too much anxiety can have disastrous effects on completion of the task in question. A moderate amount of arousal can result in an optimal performance when the experience challenges the individual's skill but still remains within their capabilities. Under what circumstances do aspects of a musician's training, background, and preparation effect music performance anxiety levels? Is music performance anxiety mediated by specific interventions leading up to a performance? Does reported general anxiety correlate with music performance anxiety? The current research and proposed study aim to provide insight on these questions and further understand why the relationships between individual and situational circumstances affect music performance anxiety.

## **Literature Review**

### **Social and Evaluative Anxiety**

The DSM-V (APA, 2013) classifies performance anxiety under the higher order of anxiety disorders. Social phobia and social anxiety disorder are also classified underneath this higher order. In social phobia and social anxiety disorder, an individual's fear of social situations can illicit an impairing anxiety in daily situations, actively avoiding social interactions. This impairing anxiety also influences non-social decisions (i.e. "I don't want to study at the library because there will be a lot of people," "I want to work out at the gym, but other people there will judge me."). Fear of social interaction or public evaluation is also a primary characteristic in music performance anxiety. Musicians often tell anecdotes about pre-performance jitters or how stressful it may have been preparing beforehand. Musicians may fear being judged because they are on display. They are expected to entertain and be perfect in their performance delivery, thus causing the individual to be anxious.

In colloquial usage, anxiety and stress are used interchangeably, both suggesting emotional, mental, and physiological arousal. Yet anxiety is more often used as a character descriptor whereas stress is used as the result of external, life circumstances (i.e. work, school, interpersonal relationships). Anxiety can be defined in two aspects, state and trait anxiety. State anxiety focuses on the state of arousal caused by transitory or recurring emotional conditions that are objectively stressful. This type of anxiety commonly refers to instinctive, yet situational "flight or fight" responses. In contrast, trait anxiety defines stable perceptions of anxiety as a personality trait, regardless of the situation. A person characterized with trait anxiety may still perceive danger or negative outcomes in stable situations. State and trait anxiety are characterized by subjective feelings of apprehension and

tension with accompanying arousal of the autonomic nervous system (Kokotsaki & Davidson, 2003). Musicians (as well as other performance artists such as dancers and actors) face these forms of apprehension and tension before a solo performance. A solo performance may further worsen general feelings of anxiety. Thus, examining general aspects of anxiety are important in studying performance anxiety.

### **Performance Anxiety**

Performance anxiety depends highly upon situational and environmental factors that the individual may be experiencing and reacting to. In the context of trait anxiety, performance anxiety concerns the context of the experience. Even if the individual is well prepared, their propensity to be anxious may cause them to think that they are still not going to perform well, thus possibly inciting negative cognitions. Trait anxiety often leads to feeling ashamed, guilty, unable to escape a situation, and unable to escape impending harm in daily life (Sadler & Miller, 2010; Hamann & Sobaje, 1983). Within trait anxiety, there is a propensity to perceive a wide range of stimulus situations as dangerous or threatening (Kokotsaki & Davidson, 2003). For instance, soloists may perceive audience attendance and time of performance as threatening. A performance at the end of the school year may cause more anxiety and stress because there is an expectation that the individual will have made significant progress by that time. Without proper strategies to address the individual's anxiety, physiological symptoms of performance anxiety may override the individual's musical preparation. Physiological symptoms of performance anxiety, music performance anxiety (Wells et al. 2012), and stress include increased heart rate (Osborne & Kenny, 2008), sweaty or clammy hands (Kaspersen & Göttestam, 2002), dry mouth, inability to concentrate (Wells, Outhred, Heathers, Quinana, & Kemp, 2012), trembling (Kaspersen & Göttestam, 2002),



shortness of breath (Wesner, Noyes, & Davis, 1989), and changes in appetite. Although these symptoms are acute, they can occur on a chronic regular basis that inhibits daily functioning and other situations of possible social evaluation.

Performance anxiety, achievement anxiety, and most commonly, stage fright are used interchangeably as a label (Brodsky, 1996; Fehm & Schmidt, 2006), but these terms are not necessarily identical. Performance anxiety is prevalent in other evaluative situations such as test taking, competitive sports, public speaking, sexual relationships, and the performing arts such as acting, singing, dancing, and music making (Kenny & Osborne, 2006). Music performance anxiety can be classified as a subcategory of performance anxiety. However, music performance anxiety is contextualized by the expectation to display mastery of musical technique and artistry while being evaluated in a social or public context.

### **Music Performance Anxiety**

Although there is no consensus among psychological or music research regarding the definition of music performance anxiety, there is agreement on various conceptual characteristics of the phenomenon. Music performance anxiety involves a fear of social evaluation (Cox & Kenardy, 1993; Osborne & Kenny, 2008), worrying about performance, preoccupation with feelings of inadequacy, and heightened somatic and autonomic arousal (Craske & Craig, 1983; Sârbescu & Dorgo, 2014) as a result of evaluation apprehension (Kokotsaki & Davidson, 2003). What differentiates these concepts from general performance anxiety is that the performance in question specifically involves an expectation to exhibit musical skill and a certain level of mastery in a public setting. Like general performance anxiety, perceptions of musical achievement are shaped by extrinsic motivation, intrinsic

motivation, and perfectionism. The actual cognitions of motivation and perfectionism will include situational details only specific to music performance (i.e. “If I mess up my piece because I did not memorize it well enough, the performance will be a failure,” or “I play this instrument because I genuinely enjoy the music.”). Music performance anxiety stresses an individual’s accountability. Even within an ensemble, there is a standard to play soloistic and collectively.

Ensemble music performance potentially does not elicit social facilitation to the extent of athletics because team and group differences. Within competitive sports, there is always a winner and loser. This imminent descriptor of sports exposes athletes to immense stress which can damage their performance and final outcome, winner or loser (Hall & Kerr, 1998). While there are musical competitions, the rhetoric of a musical performance does not generally include “winning” or “loosing.” Musical performance is often so exposed, especially in solo performances. Even in musical ensembles, an individual’s part is identifiable yet dependent on others. In team sports, players are dependent on each other but players of higher levels will get more time on the field or court. In contrast, members of a multi-musician ensemble are always “on the field,” regardless of individual skill level. Compared to athletes, there are no benched players in music. This group dynamic forms a different, more individualistic standard for musicians. All members of a musical ensemble must maintain and develop their own skills knowing that their performance will affect the greater whole. Throughout ensemble and solo performing, music performance anxiety has multiple individual, social, and circumstantial factors that influence its manifestation in all forms of musicians, but primarily in solo classical musicians (Craske & Craig, 1984; Papageorgi, Creech, & Welch; 2007).

**Influencing Factors on Music Performance Anxiety**

Musicians of all proficiency levels, genre, and instrument type experience MPA (Fehm & Schmidt, 2006; Kenny & Osborne, 2006). If experienced at extremely levels, MPA can stifle performance skills and affect the quality of the performance (Cox & Kenardy, 1993; Hamann, 1982). In a study conducted by Clark and Agras (1991), up to 77% of musicians reported avoiding performance due to anxiety and a failure to adequately manage anxiety beforehand. This suggests even with proper private practice, there is a lack of interventions to specifically address music performance anxiety. Kaspersen and Göttestam (2002) found that out of a group of music students pursuing professional careers 74.7% reported a specific level of anxiety. Of this group, positive responses to perceived need for MPA help and presence of other anxieties were significant factors. These findings further suggesting the necessity for MPA interventions and the effect that general anxiety can have on performers. Receiving help in managing MPA alongside other general anxiety are significant factors towards why MPA is so prevalent throughout all musicians of all levels. Alongside these findings, other influencing covariates of MPA could greatly decrease the perceived need for a musician to seek MPA coping strategies or increase general anxiety. Other covariates and influencing factors of MPA include personality traits, years studying instrument, hours of weekly practice, intensity of music making (amateur, hobbyist, or professional), type of musical genre studied, performance setting, age, gender, family involvement, and private lessons (Biasutti & Concina, 2014). The variance within and between these covariates may have a significant the efficacy of MPA interventions.

### **Personality Traits**

Separate personality traits and music making motivation intersect differently depending on the individual's circumstance. Previous research indicates that musical motivation requires synthesis of how aspects of an individual's character dispositions navigate their transitory circumstances (Hallam, 2002). These aspects include personality, temperament, gender, self-esteem, self-efficacy, goals, aspirations, and motivations to behave in particular ways or do particular tasks. For instance, students who pursue undergraduate study of music at a conservatory will have different goals, aspirations, and motivations than those who pursue music at a liberal arts institution. A conservatory awards a Bachelor of Music (B.M.) and liberal arts institutions award a Bachelor of Arts (B.A.). While the research conducted by Hallam (2002) model successfully implements aspects of motivation theory towards music, research on perfectionism, extrinsic motivation, and intrinsic motivation further explores the technical development and music performance anxiety coping strategies of individual musicians.

Personality predisposition for playing a musical instrument is complex because it requires an understanding that one must publicly display a certain level of musical mastery (Kemp, 1996). Kemp (1981) found that introversion, intelligence, and self-sufficiency were characteristics that prevailed in three different levels of musicians, ages 13-70. As an individual acquires more experience, success, and accolades, they gain more independence and agency in their music making. Because professional musicians have already faced criticisms and rejections, but are still successful, they have a wealth of experiences to draw upon in confidently facing new musical ventures. While little research exists on personality

differences between types on instrumentalists, personality traits like extraversion, adjustment, and independence are often used to describe musicians like singers (Kokosatki & Davidson, 2003). These personality differences may shape how an individual still is motivated to perform despite music performance anxiety.

Depending if the individual is intrinsically or extrinsically motivated, music performance anxiety may be a benefit or detriment to the musician. Perfectionism as a personality trait correlates with putting effort towards activities in order to attain a goal (Kobori, Yoshi, Kudo, & Otsuki, 2011). For instance a student will put effort into studying in order to receive a good grade on an exam. A musician will put effort into practicing in order to have a good performance. However, these efforts are extrinsically motivated. Another individual, typically in some sort of authoritative position (i.e. teacher or private instrument instructor), ultimately decides whether or not the exam or performance will be a successful assessment. The example of a driven student or musician putting a lot of effort into their ultimate goal can be divided into two types of perfectionism, social prescribed perfectionism and self-oriented perfectionism. Socially prescribed perfectionism, extrinsically driven perfectionism, is associated with avoidance coping (Kaspersen & Gøttestam, 2002; Kobori et al., 2011). If a musician socially defines their motivations in terms of only external outcomes, it is more likely that they will have maladaptive coping processes.

Negative aspects of perfectionism such as doubts about one's actions, preoccupations about making mistakes, and discrepancies between expectations and results are associated with negative outcomes such as depression, anxiety, and performance anxiety (Kobori et al., 2011; Stoeber & Eismann, 2007). Negative reactions to mistakes (i.e. "I played that passage wrong once, I will never get it right" or "I messed up during my solo and everything I played

after that was terrible”) during practice or performance often indicate that a musician will have maladaptive coping strategies. If a musician can view mistakes during practice or a performance as learning opportunities and chances to further improve their technique, they are more likely to have adaptive coping strategies.

Self-oriented perfectionism is associated with behavioral coping such as practicing more and solving problems actively when distressed. For instance, instead of becoming easily frustrated when making mistakes during private practice, self-oriented perfectionists may instead breakdown the passage by practicing it slower and then working the tempo up to normal speed. Another aspect of self-oriented perfectionism is setting personal standards, which have been associated with positive characteristics and functioning. Because self-oriented perfectionism has been associated with adaptive coping strategies, these personal characteristics may also have an effect on MPA. If a musician is self-oriented, they are more likely to take responsibility for addressing and managing their own symptoms of music performance anxiety. However, over complying with personal obligations for the sake of not burdening mentors or parents is a big cultural difference that should be taken into consideration.

It is important to take into account cultural differences in personality appraisals and help seeking. Kobori et al. (2011) indicate if similar effects of perfectionism in performance anxiety could be replicated with musicians and athletes who have had close relationships with parents and mentors since childhood. Although musical virtuosity can be prescribed to an individual's mastery, the individual may attribute their success different, thus illustrating their personality in a certain way. For instance, musicians from interdependent cultures may attribute successful performances to their private instructor's and relative's support. A

musician from an independent culture may emphasize individual effort put towards long hours practicing when mentioning a successful performance. Furthermore, musicians in collectivist cultures may be seen as more humble for attributing their success to interpersonal relationships whereas musicians in individualistic cultures may be viewed as self-confident. Whether or not a musician will seek help for MPA management will also depend on their current and prior musical experiences.

### **Age**

Research on MPA with adolescents has gained more attention recently because of the implications anxiety has on social development (Kenny & Osborne, 2006; Papageorgi et al., 2007). Musicians younger than university age already can experience a significant amount of performance anxiety (Fehm & Schmidt, 2006; Wesner et al.; 1990). Classical musician training often starts very young; up to 90% of adult musicians begin their musical instruction before age 12 (Kenny & Osborne, 2006). Children who start instrumental studies at an earlier can quickly develop a personal investment in music, which may sooner lead to accustomed success and an inability to receive constructive feedback (Hallam, 2002). Positive cognitions in highly anxious children may create an opposite effect; the positive cognition feedback may remind children that they are in an uncomfortable, anxiety-inducing situation (Osborne & Kenny, 2008). In this example, there are higher reports of negative self-evaluations (e.g. “The others think I’m dumb” and “Everyone is finishing faster than me, they must be better than me.”). MPA in young and adolescent musicians is extremely valuable because it has many implications in early music education and effective pedagogy, possibly having long-term effects on their professional careers (Fehm & Schmidt, 2005; Osborne & Kenny, 2005).

## **Gender**

Current literature strongly suggests that females experience more music performance anxiety and males report physiological arousal more often, suggesting that gender differences may arise from the individual's situation. Females consistently report MPA more frequently and at higher levels (Biasutti & Concina, 2014; Craske & Craig, 1984; Kaspersen & Götestam, 2002; Papageorgi et al. 2007; Sadler & Miller, 2010), so much as two to three times more likely (Kenny & Osborne, 2006). Females are also more frequently than males report performance anxiety as detriment to their performance (Wesner et al., 1989). Anxiety research also points to differences within gender. Males often exhibit greater systolic blood pressure immediately prior to an evaluative jury performance whereas females report greater subjective anxiety (Kotokaski & Davidson, 2003). Males may not report more perceived subjective anxiety because socialized gender roles often preclude men from voicing emotional distress. Higher reports of anxiety and emotional arousal from women may also be highly influenced by socialized gender roles. However, this does not necessarily mean that females experience less autonomic nervous system activation.

## **MPA Research in Classical Music**

The impact of the varying influencing factors on MPA may vary within classically trained musicians; however, a large amount of MPA research, regardless of genre, is conducted retrospectively. This type of research leads to issues with social desirability, primacy effects, and skews in certainty perception. While most MPA research has been conducted with classical musicians, measures have lacked in adequately addressing the



formal culture associated with the genre. For instance, classical music often demands for the musician to memorize copious amounts of complex music, dress in formal clothes that potentially stifle freer body movement. Unlike other genres such as jazz or popular music, classical music also sets very formal expectations on the audience such as staying completely still as to not cause disturbances or distractions during performances, not clapping between movements of a multi-movement piece, and traditional enforcements of being unable to arrive late or leave early during a performance.

Classical musicians face more evaluation in performances because of the genre formality and structured tradition. Depending on how a performance goes, an individual will either undermine, appraise, or and perceived MPA experienced prior to the performance to be a fault for a bad performance (Kobori et al., 2011; Papageorgi et al., 2011). Retrospective perceived quality of a performance also serves as an indicator for future performance quality (Osborne & Kenny, 2008; Papageorgi et al. 2007; Taborsky, 2007). Because MPA occurs before an event or public performance, research conducted on preventative measures and coping mechanisms are immensely valuable in evaluating MPA within the context of musicians still developing their skills.

### **Genre and Instrument**

Most MPA research has focused on classical musicians throughout different forms such as opera, piano, strings, winds, brass, and percussion in their respective group formations. Singers have no physical instrument that separates them from the audience, unlike instrumentalists who train to control an external instrument. Amongst classical musicians, pianists and string players (violin, viola, cello, & bass) most often reported higher

levels of MPA (Kaspersen & Götestam, 2002). The piano and violin are two of the most well-known, commonly referred to classical instruments. The popularization of the piano and violin within and outside classical music may instill instrumentalists with the belief that their playing will always be evaluated within that context. Because string players comprise the majority of an orchestra and are placed in sections by skill, musicians may report more music performance anxiety. This occurrence is possible because of the commonplace tradition of western classical music.

The notion of a music conservatory was to literally “conserve” western music classical tradition. Thus, this trend in practicing in studying classical western music has been perpetuated as the main basis for any music education. MPA may also be more prevalent in classical musicians because classical music has many formal procedures. These include a lack of improvisational encouragement and a requirement to strictly adhere to sheet music (Kobori et al., 2011). In addition, classical music performances are extremely formal. There is a high social code of what is acceptable to wear (as a performer or audience member) and the actual experience of the performance strongly deviates performers and audience members. Classical music as a genre is not as audience interactive or participatory as rock and roll, jazz, or Afrobeat. While most research focuses on classical music, music performance anxiety is still very prevalent in musicians of different genres.

On studies of non-classical genres, jazz musicians report less MPA (Papageorgi, et al., 2011; Kaspersen & Götestam, 2002). In non-classical genres, perfectionism can be associated with positive characteristics and outcomes such as conscientiousness, task-oriented coping, goal attainment, and positive affect (Kobori et al., 2011; Stoeber & Eismann, 2007). Because of the strict formality of classical western music, classical

musicians are less people-oriented and more self-oriented than non-classical performers (Perdomo-Guevara, 2014). These differences across genres may be influenced by the cultural implications of the types of music.

### **Years of Experience and Hours of Weekly Practice**

Anxiety tends to facilitate greater performance achievement in experienced players who have higher levels of training or ability and have learned to control the debilitating effects of anxiety (Hamann, 1982; Hamann & Sobaje, 1983; Kaspersen & Gøtestam, 2002; Kokotsaki & Davidson, 2003; Osborne & Kenny, 2008). In other words, MPA has the potential to help experienced performers. According to Csikszentmihalyi's theory of flow (1975), if a musician is faced with a situation that challenges their current skills, but does not surpass them, they "flow" or an optimum experience. The balance of a challenging experience, moderate anxiety, and appropriate skill would create an optimal performance at the top of the Yerkes-Dodson curve. Flow is the desired state whereas the Yerkes-Dodson serves as a conceptual framework for the relationship between performance and anxiety. Often, more experienced players have positive perceptions of self-efficacy and ability to complete the task. However, higher standards and training conditions may result in individuals to have higher and more frequent rates of MPA.

Admittance into a conservatory program requires a high level of skill at a young age and a steady dedication to pursuing music as a professional, lifetime career. In a study by Kokotsaki & Davidson (2003), 65% of collegiate conservatory music students felt that anxiety had prevented them from performing to their best ability and only 7% felt that anxiety helped improve performance quality. Although these students have had more

rigorous musical training, conservatory students' training implies that the different musical standards of training may negatively affect musical performance. Musical effort is usually measured by the individual's hours spent practicing and achievement through awards won (Kobori et al., 2011). Musical effort is also measured socially through a performance. The individual's technique and artistry development are difficult to objectively measure, potentially increasing their perceived fear of public evaluation and higher music performance anxiety.

### **Performance Setting and Audience**

Because of variability in performance venues, types of performances (recital versus large ensemble concert), and audience variation, research has assessed performance settings through reports of musicians' experiences. Number of audience members and type of audience (familiar with the repertoire, strangers vs. friends, etc.) has frequently been reported as an important factor in setting (Cox & Kenardy, 1993; Kaspersen & Götestam, 2002). Solo performances consistently have higher reports of anxiety compared to group performances (Fehm & Schmidt, 2006; Kaspersen & Götestam, 2002). Classical music performances often occur in very formal settings, possibly further affecting an individual's perceived stress in the surroundings. If an individual knows they have supporters within the audience, this aspect could help in manage negative cognitions and physiological arousal before a performance.

### **Family and Teacher Involvement.**

Family involvement can serve both as a protective factor, resource for support, as well as an additional source of stress (Stoeber & Eismann, 2007). Perceiving pressure from

others would most likely lead to more practice time if the source of pressure were from an audience the individual appraises to be important. Perceived pressure from music instructors, teachers, and parents, is associated with intrinsic motivation (Stoeber & Heismann, 2007, Papageori et al., 2007). However, overwhelming or overbearing external mentor involvement may cause great stress in younger students (Taborsky, 2007). This intense pedagogy may ultimately be effective in producing disciplined musician, but it may discourage more students that inspire. Younger musicians may also be more susceptible to withdrawal from social involvement, perceived laziness, or lack of participation due the type of teaching (Kemp, 1981; Osborne & Kenny, 2005). Positive relationships between the music student, parents, and private instructor can inform how young musicians' motivations are shaped and supported (Kemp, 1981). This occurrence suggests that a young musician with a self-motivated, supported perspective on music making will develop lower levels of MPA as they continue studying

### **Interventions, Treatment, and Coping Strategies**

Treatment and coping strategies vary widely depending on the severity of MPA, yet remained largely untaught in private instruction. Practice, pre-performance routines, and imagery performance preparation are common treatments in less severe cases of MPA. Social support and avoidance strategies have a positive correlation with MPA (Biasutti & Concina, 2014). These techniques are often included in pedagogy since they are very accessible and easy to execute by the individual. Other therapies include cognitive and behavioral therapies for MPA include breathing exercises, the cognitive behavioral therapy (CBT), behavioral therapy, cognitive therapy, mindfulness-based stress reduction, counseling, biofeedback, and

pharmacological treatments (Fehm & Schmidt, 2006; Hall & Kerr, 1990; Kenny, 2011; Wells et al., 2012). The appropriate type of treatment and coping strategy depend on the reported level of music performance anxiety. Even individuals who report little to no music performance anxiety may engage in a pre-performance type ritual.

According to previous research (Wells, Outhred, Heathers, Quintana, & Kemp, 2012; Kenny, 2011), biofeedback training has produced significant results in decreasing music performance anxiety. Breathing exercises and meditation are the most commonly reported and studied coping mechanisms in music performance anxiety (Wells et al., 2012). MPA often arises from a worry of negative social evaluation and heightened awareness to this possibility (Cox & Kenardy, 2014). Thus, physiological awareness may potentially mediate fears of uncontrollable reactions from external sources. Breathing exercises in biofeedback training and mindfulness techniques can increase one's sensitivity to their body and thus manage the physiological arousal associated with MPA.

Within music performance anxiety, pharmacological treatments and self-medication are generally researched as interventions. Current literature brings attention to the risk of substance abuse in those with performance anxiety due to chronic stress that it may induce. Alcohol use is most cited as self-medication and not justifiable for use of performance anxiety reduction (Wesner et al., 1989). The most common drug used to impede performance anxiety symptoms is beta-blockers (Wells et al., 2012; Wesner et al., 1989). Beta-blockers alter somatic and physiological symptoms of anxiety such as palpitations and tremor. They have gained increasing use as an accepted and effective form of treatment. It is difficult to secure an accurate estimate, but several studies indicate that up to 20% to 30% number of musicians have used or consistently use beta-blockers as treatment (Kenny, 2011). Other

reports also point that almost half of students would accept prescription drugs in order to combat performance anxiety (Fehm & Schmidt, 2006; Wesner et al., 1990). Anti-anxiety medications such as buspirone are also used in music performance anxiety intervention research (Clark & Agras, 1991). There is a high amount of risk to overmedicate using prescription drugs in managing music performance anxiety. It is important to consult a physician if physiological symptoms of music performance anxiety should be treated with anti-anxiety medication.

Although not all musicians may not consider their MPA severe enough to address with therapy, the necessity of consistent practice is a treatment and preventative measure in itself. Musical performance anxiety is intertwined with music making, and thus all musicians form some sort of therapy or treatment to some extent. Musicians who claim that anxiety had no effect on their performance still report conscious inward and outward-focused strategies to control feelings of anxiety (Kokotsaki & Davidson, 2003). Fehm and Schmidt (2006) found that therapy interventions that were more readily available during lesson time had better effectiveness and retention. Music performance anxiety interventions are lacking from general music education as well as private practice, but they are not difficult to implement. Individuals would greatly benefit if MPA interventions were addressed through their music education, especially throughout the differences in expected outcomes they may face depending on the institution where they are studying.

### **Conservatory and Liberal Arts Music Students**

Within the U.S., there is an inherent difference between musical performance study at a conservatory and a liberal arts institution (Kaspersen & Götestam, 2002). Metropolitan

cities in the United States (Los Angeles, New York, and Boston) have higher concentrations of music schools for the area, but top ranked institutions are present in more rural areas such as Oberlin, Ohio and Bloomington, Indiana. In Europe, the United Kingdom, Germany, Italy, and France have more established conservatory programs compared to countries like Norway or Poland (Kasperen & Göttestam, 2002), although notable western classical composers and musicians have originated from these nations. Because the U.S. has become an international front runner for musical performance conservatories, the current study aims to further explore the multiple dimensions of a U.S. collegiate music education.

Wesner et al. (1989) utilized students at the University of Iowa School of Music, nationally known as a center for performance and education. 80% of students are performance majors and the remaining 20% are within education. Because of the extended, immersive nature of music conservatory, performances have more impact in the individual's career path. A student's progression within conservatory is carefully tracked; evaluation scores are expected to increase over time with a substantial difference between the first and last years of formal instruction (Kokosatki & Davidson, 2003). The bachelor degrees awarded are also different; performance majors at musical institutes receive Bachelor of Music whereas a student at a non-conservatory program would receive a Bachelor of Arts in music.

Within conservatory students, women also more frequently report that their careers are adversely affected by performance anxiety (Wesner et al. 1989). In a study conducted during mid-year examinations at the Guildhall School of Music in London, females also tend to be more anxious in regards to trait anxiety in the anticipation of a jury setting (Kotokaski & Davidson, 2003). Differences such as these could have further implications within the



world of professional musicians. Females that report subjective anxiety or have stage presence with anxious like tendencies may be unjustly be judged as these traits may overshadow their playing ability, sound quality, or technical tenacity. These higher frequencies of MPA reports by females may be due to unfavorable gender biases. The culture of a professional music training institution may challenge a woman's capability to succeed and thrive. These implications highlight the need to research the nuanced details and culture of a music conservatory and how those aspects affect music performance anxiety levels.

In the context of Patricia Linville's self-complexity theory (1989), liberal arts music students on a more varied educational path arguably have more coping abilities. Academics other than music serve as a cognitive buffer for any music related stress. Because a liberal arts education requires more coursework and evaluations outside of music, an individual's self-evaluation would not solely be based on musical performance quality. A good test exam in a psychology class could mediate a lesson that went over poorly. The reverse effect is also possible. Too many activities can comprise overall performance in each activity. Too many varied activities can also lead to more stress and difficulties in identity formation. In this regard, conservatory music students may experience a strong identity with their musical oriented careers and peers with the same mindset and trajectory.

The formality of classical music culture is lacking from music performance anxiety research. The formal culture focuses heavily on a live performance as an assessment of the musician's technical skill and interpretative abilities. Although many audiences may think that performers are able to play at the level consistently because of an inherent "talent," the complex layers preparation for a performance is rarely addressed in music performance anxiety research. Playing the piece beforehand through solo practice and private lessons are

crucial aspects for performance preparation. Because experience level generally suggests lower levels of MPA, current literature does not address undergraduate conservatory and liberal arts classical musicians' general anxiety and MPA levels in relation to private lesson content and MPA management intervention. The nature of lessons requires a progression after each subsequent session, accelerating the learning process while simultaneously consequences for failure seemingly increase along with technical success (Fullagar, Knight, & Sovern, 2012). The current study seeks to fill the gap of private lesson preparation and pedagogy as an indicator for musical performance anxiety within classically trained musicians. By examining the conceptual significance of private lesson content and its potential to manage general and music performance anxiety, the current study seeks to explore more in depth the difference situational factors on music students in receiving a Bachelor of Music or Bachelor of Arts training.

### **Current Study**

The current study will examine the relationship of general anxiety and music performance anxiety between liberal arts and conservatory undergraduate music students in the United States. Through two separate studies, the proposed research seeks to establish the relationship of general anxiety and music performance anxiety. Study 1 will primarily focus on the relationship of general anxiety and time between MPA in liberal arts and conservatory music students before a performance. Assessments on general anxiety and MPA will be administered at three time intervals before a public, solo performance. At the last time interval, a questionnaire addressing personal and musical background will also be administered. Hypotheses for Study 1 are as follows: MPA and anxiety will be positively

correlated, MPA and anxiety will increase over time as performance date comes closer, conservatory students will have greater scores on MPA and general anxiety than liberal arts students, and there will be a significant interaction between time and the music student's expected degree (B.M. or B.A.) illustrating that B.M. students will have greater increases of MPA at each time interval than B.A. students.

Study 2 will also examine the relationship of general anxiety and time between MPA in liberal arts and conservatory music students before a performance. However, in Study 2, musicians will undergo specific interventions in order to assess successful preventive and coping music performance anxiety strategies. In addition to measuring correlations between general anxiety and music performance anxiety, both studies would examine the components of specific personal and musical background on MPA such as age, gender, years studying, type of instrument, and private lesson content. Hypotheses for Study 2 are as follows: MPA will decrease over time, the intervention of biofeedback will result in the largest decrease of MPA (Wells, Outhred, Heathers, Quintana, & Kemp; 2012), conservatory students will score higher on general anxiety and MPA levels, and there will be an interaction between time and intervention such that there will be more of a decrease in MPA over time for both B.M. and B.A. students.

In addition to these main hypotheses, the proposed study will examine reports on whether or not private lesson content included music performance anxiety coping techniques, in current or prior training. Covariates such as age, gender, instrument, years of playing, type of performance (solo, small ensemble, and large ensemble), and average number of hours practice a week will also be examined.

### Study 1

This study aims to examine the relationship between general anxiety and music performance anxiety.

#### Proposed Method

**Participants.** Participants will include two targeted groups of college music students: 1) music students at liberal arts institutions receiving a Bachelor of Arts (B.A.) in music degree and 2) classical musicians receiving a Bachelor of Music (B.M.). By using a medium estimated effect size, the power analysis revealed that approximately 128 participants would be required. Recruitment for these participants will include contacting music department chairs and studio directors at various liberal arts and conservatory institutions. Possible institutions include, but are not limited to, Scripps College, Pomona College, Williams College, Amherst College, Stanford University, Harvard University, University of California at Santa Cruz, the Bienen School of Music at Northwestern, the Jacobs School of Music at University of Indiana, Bloomington, Manhattan School of Music, Oberlin Conservatory at Oberlin College, and the New England Conservatory in Boston, Massachusetts. Participants would receive \$20 as compensation.

**Materials.** Materials for Study 1 will include the Kenny Music Performance Anxiety inventory (K-MPAI; Kenny, Davis, & Oates, 2004) and Beck Anxiety Inventory (BAI; Beck, Epstein, Brown, & Steer, 1988).

***Kenny Music Performance Anxiety Inventory.*** In the K-MPAI (see Appendix A, Table 1) participants are asked how they generally feel before or during a performance based on the provided statements. Sample statements include “I rarely feel control of my life,”

“During a performance I find myself thinking about whether I’ll even get through it,” and “My memory is usually very reliable” on a 9-point Likert scale extending from -3 *strongly disagree* to 3 *strongly agree*. Depending on whether or not the statement is worded positively or negatively towards MPA, some items are reversed scored. The K-MPAI has an internal reliability of Cronbach’s  $\alpha = .94$  (Kenny et al., 2004).

***Beck Anxiety Inventory.*** The BAI (see Appendix B, Table 2) consists of 21 items and the participant is asked to rate how much he or she has been bothered by each symptom over the past week on a 4-point scale (0 – Not at all to 3 – I could barely stand it). Listed symptoms include numbness or tingling, heart pounding or racing, and sweating not due to heat. The BAI has shown internal consistency ( $\alpha = .92$ ) and test-retest reliability over 1 week,  $r(81) = .75$  (Beck, Epstein, Brown, & Steer, 1988).

***Personal and Musical Background Questionnaire.*** The third, self-designed instrument, Personal and Musical Background Questionnaire (PMBQ) (see Appendix C, Table 3), will draw its contents from Osborne and Kenny (2008) and Sadler and Miller (2010). The original instruments from Osborne and Kenny (2008) and Sadler and Miller (2010) include descriptive questions addressing age, gender, years of study, type of instrument (including voice), performance type, audience, and performing from memory or not. The revised measure will include these components as well as number of years studying instrument, average number of hours practicing per week, and private lesson details. Self-designed questions include “Within a semester (3-4 months), how often do you perform in front of an audience only comprising of your instructor only? The general public? Fellow students? A professional jury?”, “When you perform, do you play more often from memory or a score?”, and “Have any of your private instructors mentioned music performance anxiety

or “stage fright”?” The participants are prompted to enter approximate number of times for questions 1-2 because they ask about the number of times of a certain performance within a semester (3-4 months).

**Procedure.** After providing consent, participants will take the assessments at 3 different time intervals; 2 weeks before public performance, 1 week before public performance, and the day of a public performance. At all 3 intervals, participants will take the BAI and K-MPAI. Only at the last time interval will the PMBQ be administered. After the final assessment is filled at the third time interval, participants will be process debriefed and compensated.

These assessments will be administered by researchers set up at the practice rooms of the institution’s music department for the participants’ convenience. By placing the researchers at the music department practice rooms, the participants would ideally be completing the assessments before or after music related activity. It is assumed that because individuals are at the music department, they will be engaging in music related activity.

### **Proposed Results**

The proposed results would be based on correlational and mixed model ANOVA statistical analyses. First, a Pearson correlational would be used in order to assess the relationship between music performance anxiety and general anxiety. A correlational analysis is appropriate because there is a relationship between the two continuous variables. In the context of this study, anxiety can predict MPA scores and vice versa. After averaging the MPA and general anxiety scores from all 3 time intervals, as hypothesized, a positive

correlation between MPA and general anxiety would be expected as supported by previous literature (Kenny & Osborne, 2006).

To analyze the effects of MPA and general anxiety and their interaction on time and B.M. and B.A degree, a mixed model ANOVA would be conducted. Because time is a continuous, within variable and B.M. or B.A. degree is between participants variable, a mixed model ANOVA would illustrate the possible mean differences of MPA among the different intervals of time and the two different types of bachelor degrees. It was hypothesized that MPA and anxiety would increase over time, students receiving a B.M. degree will have higher scores of MPA and general anxiety than B.A. degree students, and there will be a significant reaction between time and B.M. degree versus B.A. degree.

Additionally, other correlational analyses addressing age, gender, instrument, years of playing instrument, and number of hours of weekly practice would be conducted on music performance anxiety scores. It would be expected that females score higher on MPA (Craske & Craig, 1984; Kaspersen & Götestam, 2002; Papageorgi et al. 2007; Sadler & Miller, 2010). Years of playing instrument and number of hours of weekly practice would have an effect (Kenny 2011; Osborne & Kenny, 2005; Sadler & Miller, 2010). Students who have played their instruments for longer and practice for more hours on a weekly basis will have lower MPA and general anxiety scores. Age and instrument would not have a significant effect on MPA and general anxiety scores as indicated in previous research (Kenny & Osborne 2006; Stoeber, & Eismann 2007).

## **Discussion**

Study 1 findings would suggest that general anxiety and MPA are positively correlated, implying that non-musical aspects of an individual's environment may also affect their MPA level. Study 2 further investigates what a musician could do to control or cope with their surroundings.

## Study 2

Study 2 examines three different interventions and their effect on music performance anxiety.

### Proposed Method

**Participants.** Participants will be recruited in the same way as Study 1. Based off the same power analysis, approximately 128 participants would be needed. However, participants who completed Study 1 cannot also participate in Study 2 due to possible cross-contamination effects between the two studies.

**Materials.** Study 2 will use the same materials as study 1 with the addition of 3 interventions. The first will be a control. Participants will be asked to meditate for 5 minutes without a formal prompt. They will only be told to reflect upon their performance with our recording any of their thoughts. The second intervention will be a comparison intervention, a 15-minute journal entry exercise in which participants are asked write about their current state of emotions. This intervention is intended to implement mindfulness-based stress reduction techniques which have shown decreases in MPA in less extreme cases (Kenny, 2011). The third intervention will be a biofeedback training in which participants will be taught how to control their heart rhythm patterns and focus their thoughts and emotions in the context of managing MPA symptoms before performing.



**Procedure.** Participants will be asked to come into the lab, once a week for three weeks (T1, T2, and T3). Participants will be told that they will be asked to play their piece twice, complete an intervention between performances, and complete two assessments before each run-through of their piece (see Appendix D, Figure 1). At T1, T2, and T3, participants will take the general anxiety and music performance anxiety measures. Only at T3 participants will take the PMBQ. If the participants are pianists, a grand piano will be provided for them. Standard equipment such as a music stand or chair (for cellists) will also be provided. Instrumentalists and vocalists will be asked and expected to bring their instruments.

Participants will be randomly assigned to 1 of 3 conditions that correspond to intervention treatments. The first intervention will be a 5 minute meditation, a baseline procedure thought to have no effect significant effect on music performance anxiety levels. The prompt will be “For five minutes, please meditate. The researcher will notify you when you the time has passed.” In the second intervention, participants will be asked to write a 15-minute reflection journal entry based upon current emotions and cognitions. The prompt conceptually focuses on mindfulness techniques, bringing the participant to an active awareness of the present and their capabilities in that moment (Kenny, 2011) (i.e. “For 15 minutes, please write about any feelings, emotions, or thoughts you may have. The researcher will notify you when the time has passed.”) In the third condition, participants will receive 20-minute biofeedback training. This training will include timed breathing exercises and targeted practices that aim to control heart rate and physiological responses. After the

final assessment is filled at the third time interval, participants will be process debriefed and compensated.

The benefits of this study outweigh the potential risks because it aims to address preventive and pedagogical techniques to managing music performance anxiety based on private lesson content and career trajectory. Through the current study, identifying effective private lesson content in coping with MPA and individual MPA management interventions outweigh the potential risks to participants. The present research may have further possibilities and implications for applied areas such as pre-collegiate training for younger musicians as well as maintaining a progression of maturing skills at higher levels and into professional music careers. By identifying the salient factors of MPA management and coping as they relate to individual music students, the proposed research has future potential for addressing MPA as a developmental, social factor.

### **Proposed Results**

A repeated measures analysis would be conducted on the relationship between time and MPA, intervention differences and MPA, and B.M. or B.A. degree on MPA. Because Study 2 includes three different time intervals for assessing the outcomes of the three different intervention groups, a mixed model analysis is the appropriate statistical analysis to conduct. Intervention and type of degree varies between participants and time varies within participants. MPA would decrease over time for all interventions and for both B.M. and B.A. students. There would be an interaction between time and intervention such that all interventions will have more of an impact over time, reducing MPA at greater levels. Based on previous research, it is expected that the intervention of biofeedback training will have the

most significant effect on levels of music performance anxiety (Wells et al., 2012; Clark & Agras, 1991). There would be no difference between the first and second intervention.

Other analyses concerning the measures on the PMBQ would also be conducted and expected to be similar to Study 1. Females would report higher levels of MPA initially. Years of playing instrument and hours of individual practicing would be associated with lower MPA scores and more intervention affectivity over time for both B.M. and B.A. students.

### **Discussion**

When music students are equipped with coping strategies and interventions, their reported MPA and general anxiety may decrease. This finding further suggests the necessity to address MPA within private lessons and music education.

### **Ethics**

The present study researches music performance anxiety in relation to general anxiety and varying factors of musical study intensity. Participants do not complete the general anxiety and MPA measurements too close to the time of their performance. Thus, completing the measurements does not induce more anxiety for the participants. The present study has minimal risk because participants will be exposed to circumstances that they normally experience in daily life as music students. The study does not involve a protected population, sensitive information, or deception. Participants would volunteer and would be able to leave the study if they feel as if they are unable to complete it due to any personal or external factors. For the participants who complete the study, their data will remain confidential and anonymous. Their instructors will not know what they reported on their assessments as researchers involved in the study would administer and collect the materials. With larger samples, information will also remain inherently anonymous. Identifiable information like

instrument played or school in attendance will not single out individuals. There will be multiple participants with those same attributes within the study (i.e. same institution, same instrument, and same private instructor). Similarly, participants are not obligated to fill out demographics if they are not comfortable doing so or wish to remain even more anonymous to the researchers. The current study maintains anonymity and confidentiality without more than minimal risk, suggesting that the potential findings would be beneficial to the individuals and classical music pedagogy as a whole.

### **General Discussion**

The proposed research extends existing literature on music performance anxiety by seeking to address the culture of classical music and differences in formal training. By addressing the differences in conservatory and liberal arts music trainings, the proposed research hypothesized that general anxiety would be positively correlated with MPA. Non-musical circumstances can affect musical performance positively and negative. The culture of classical music was also addressed through measures on the individual's performance history and whether or not they were B.M. or B.A. students. Although these differences in training have potential effects on music performance anxiety, the proposed research aimed to address the lack of MPA interventions amongst studying musicians. In addition, the proposed research highlighted the importance to apply music performance anxiety interventions in practice and training. All musicians should cultivate an understanding for how they experience musical performance anxiety and can best equip themselves with the proper interventions and coping techniques in order to more consistently achieve an optimal experience.

### **Study Limitations**

Although the current research specifically examines the differences in B.M. and B.A. students, this narrow, targeted group may lead to data that whose ecological validity is not strong. The current research also does not address how these two different groups may shift their career focus to non-music and non-performance, regardless of the institution they are attending.

Methodologically, the current research used two scales that examined very similar constructs, general anxiety and music performance anxiety. Although the aim of the research was to assess the relationship of general anxiety with music performance anxiety, the two scales often seemed to be asking the same question, but applied to the different concepts.

### **Future Directions**

Future research for music performance anxiety should model their experimental designs after those of anxiety studies. This research should examine physiological and cognitive responses before and during the anxiety-inducing event instead of retrospectively. Similarly, musician's physiological responses should be recorded as they are playing. These data could possibly provide further insight to the stress responses as they manifest in musical performance and provide stronger empirical data than retrospective studies. Possible directions for the current proposed research should aim to further bridge the gap between the isolation of conceptual musical learning and live performance application. Bridging this isolation may include experimental procedures involved analyses of mixed media such as live video or recording. Future research may also focus on the experience of music student in a private lesson. This perspective may have further implications in classical music pedagogy in how to give and receive constructive feedback and apply it to specific practice techniques.

### **Conclusion**

Music performance anxiety is clearly prevalent across different levels of musicians. Yet the phenomenon is not always addressed in music education. Levels of MPA relate to a number of variables; general non-music related anxiety, type of training, years studying instrument, weekly hours of practice, and previous musical experiences. The proposed research illustrates the necessity of music performance anxiety education. Instructors at all levels of each should address MPA through private lessons, performance workshops, and providing resources for interventions and coping strategies. Music students can prevent and cope with MPA through proper education, interventions, and individualized counseling in private instruction and school courses. The developmental implications of studying music and public performing may allow more individuals to successfully attain intrinsic musical goals and meet the technical, expected standards of their mentors and evaluators. Integrating music performance anxiety and interventions should be a significant consideration for musical institutions, private instructors, teachers, and performers to address in their role as music educators.

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## Appendix A

**Table 1.***Kenny Music Performance Anxiety Inventory (K-MPAI; Kenny, Davis, & Oates, 2004)*

Below are some statements about how you feel generally and how you feel before or after during a performance. Please circle one number to indicate how much you agree or disagree with each statement.

	strongly disagree <span style="float: right;">strongly agree</span>						
	-3	-2	-1	0	1	2	3
1 Sometimes I feel depressed without knowing why	-3	-2	-1	0	1	2	3
2 I find it easy to trust others	-3	-2	-1	0	1	2	3
3 I rarely feel in control of my life	-3	-2	-1	0	1	2	3
4 I often find it difficult to work up the energy to do things	-3	-2	-1	0	1	2	3
5 Excessive worrying is a characteristic of my family	-3	-2	-1	0	1	2	3
6 I often feel that life has not much to offer me	-3	-2	-1	0	1	2	3
7 The harder I work in preparation for a concert, the more likely I am to make a serious mistake	-3	-2	-1	0	1	2	3
8 I find it difficult to depend on others	-3	-2	-1	0	1	2	3
9 My parents were mostly responsive to my needs	-3	-2	-1	0	1	2	3
10 I never know before a concert whether I will perform well	-3	-2	-1	0	1	2	3
11 I often feel that I am not worth much as a person	-3	-2	-1	0	1	2	3
12 During a performance I find myself thinking about whether I'll even get through it	-3	-2	-1	0	1	2	3
13 Thinking about the evaluation I may get interferes with my performances	-3	-2	-1	0	1	2	3
14 Even in the most stressful performance situations, I am confident that I will perform well	3	2	1	0	-1	-2	-3
15 I am often concerned about a negative reaction from the audience	-3	-2	-1	0	1	2	3
16 Sometimes I feel anxious for no particular reason	-3	-2	-1	0	1	2	3
17 From the beginning of my music studies, I remember being anxious about performing	-3	-2	-1	0	1	2	3
18 I worry that one bad performance will ruin my career	-3	-2	-1	0	1	2	3
19 My parents almost always listened to me	3	2	1	0	-1	-2	-3
20 I give up worthwhile performance opportunities due to anxiety	-3	-2	-1	0	1	2	3
21 As a child, I often felt sad	-3	-2	-1	0	1	2	3
22 I often prepare for a concert with a sense of dread and impending disaster	-3	-2	-1	0	1	2	3
23 I often feel that I have nothing to look forward to	-3	-2	-1	0	1	2	3
24 My parents encouraged me to try new things	-3	-2	-1	0	1	2	3
25 I worry so much before a performance, I cannot sleep	-3	-2	-1	0	1	2	3
26 My memory is usually very reliable	-3	-2	-1	0	1	2	3

## Appendix B

**Table 2.**

*Beck Anxiety Inventory (BAI; Beck, Brown, & Steer, 1988)*

Please rate how much you have been bothered by each symptom over the past week on a 4-point scale ranging from 0 (*Not at all*) to 3 (*Severely – I could barely stand it*).

Items

---

- |                                 |  |
|---------------------------------|--|
| ___ Numbness or tingling        | ___ Hands trembling                      |
| ___ Feeling hot                 | ___ Shaky                                |
| ___ Wobbliness in legs          | ___ Fear of losing control               |
| ___ Unable to relax             | ___ Difficulty breathing                 |
| ___ Fear of the worst happening | ___ Fear of dying                        |
| ___ Dizzy or lightheaded        | ___ Scared                               |
| ___ Heart pounding or racing    | ___ Indigestion or discomfort in abdomen |
| ___ Unsteady                    | ___ Faint                                |
| ___ Terrified                   | ___ Face flushed                         |
| ___ Nervous                     | ___ Sweating (not due to heat)           |
| ___ Feelings of choking         |  |
-

**Appendix C****Table 3.**

*Personal and Musical Background Questionnaire (PMBQ; adopted from Osborne & Kenny, 2008; Sadler & Miller, 2010)*

Please answer the following questions to the best of your ability.

Within a semester (3-4 months), how often do you perform in front of an audience only comprising of...

- \_\_\_ ... your instructor only?
- \_\_\_ ... the general public?
- \_\_\_ ... fellow students?
- \_\_\_ ... a professional jury?

Within a semester (3-4 months), how often do you perform...

- \_\_\_ ... solo?
- \_\_\_ ... small ensemble (including pieces for solo instrument and accompaniment)?
- \_\_\_ ... large ensemble (i.e. orchestra)?

What piece are you currently studying to perform?

\_\_\_\_\_

How long have you been studying this piece?

\_\_\_\_\_

When you perform, do you play more often from memory or from a score?

- \_\_\_ Memory
- \_\_\_ Score

On average, how many hours do you practice during a week?

\_\_\_\_\_

What instrument(s) are you currently studying?

\_\_\_\_\_

How long have you played this/these instrument(s)?

\_\_\_\_\_

Have you or do you currently take private lessons for this instrument?

Yes

No

If yes, for how long?

\_\_\_\_\_

Have you studied with the same teach/professor for this whole time?

Yes

No

If no, how many instructors have you had throughout your private study?

\_\_\_\_\_

Have any of your private instructors mentioned music performance anxiety or “stage fright”?

Yes

No

If yes, did your private instructor address music performance anxiety prevention and or coping strategies?

Yes

No

Are you currently studying to receive a B.M. (Bachelor of Music) or B.A. (Bachelor of Arts) degree?

B.M.

B.A.

What is your age?

\_\_\_\_\_

Which of the following do you best identify with?

Male

Female

Trans

\_\_\_\_\_ (fill in the blank)

I prefer not to disclose

Which of the following best represents your racial or ethnic heritage? Choose all that apply.

- Non-Hispanic White or Euro-American
- Black, Afro-Caribbean, or African American
- Latino or Hispanic American
- East Asian or Asian American
- South Asian or Indian American
- Middle Easter or Arab American
- Native American or Alaskan Native
- Other: please specify \_\_\_\_\_
- I prefer not to disclose

## Appendix D

**Figure 1.**

A flow chart of Study 2 procedure.

