The Experiential Effects and Relationships between Student Anxiety in Music Performance and Classroom Assessment

Jordan Diego Chua
Loyola University Chicago

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LOYOLA UNIVERSITY CHICAGO

THE EXPERIENTIAL EFFECTS AND RELATIONSHIPS BETWEEN STUDENT ANXIETY IN MUSIC PERFORMANCE AND CLASSROOM ASSESSMENT

A DISSERTATION SUBMITTED TO
THE FACULTY OF THE GRADUATE SCHOOL OF EDUCATION
IN CANDIDACY FOR THE DEGREE OF
DOCTOR OF EDUCATION

PROGRAM IN CURRICULUM AND INSTRUCTION

BY
JORDAN DIEGO CHUA

CHICAGO, ILLINOIS
MAY 2018
DEDICATION

AM-LDC-JDC-OAC

To an unconditionally loving mother, a supportive brother, and a little girl
who embodies the beauty and delight of music.

AMDG
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ABSTRACT

Both as an art and assessment, music demonstration and performance in test-taking are closely related. Particular traits are shared between performance in test-taking in the classroom and musical performance “on stage.” Tests and performances are normally considered a “high-stakes” setting when the quality and perception of one's skill are under critical scrutiny. Since undergraduate and graduate music students experience assessments in both performance and academic areas, this study allowed consideration for the connections where these two areas overlap, and the possible interventions students may have initiated that are effective in stemming or reducing anxiety. Students’ experiences regarding Music Performance Anxiety were explored. Students’ test experiences were also explored and related to MPA for possible relationships. This study created a web of shared circumstances and issues in normally individualistic occurrences in the discipline of music and academics. Questions in this study desired to explore: To what extent is there a connection between anxiety experienced in performance and academic assessment among college music students? What is the understanding of the effects of anxiety on both music performance and academic assessment? Do self-efficacy and motivation create a positive experience and increased performance for music students who experience MPA and testing anxiety? The researcher believes that there is a relationship between Music Performance Anxiety and Classroom Test Anxiety. It was the
intent of the researcher to present the experiences of respondents into a larger perspective, so that a better understanding could be achieved for those who empathize with people who experience MPA and TA and for the students’ who reflected on their answers for this research with the opportunity to understand their own motivations, emotions, and experiences. The researcher found that there was a relationship between Music Performance Anxiety and Test Anxiety.
CHAPTER I
INTRODUCTION

As a former music student in both an undergraduate and graduate program, I experienced Music Performance Anxiety (MPA) in varying degrees. The cold, sweaty hands, the dry mouth and increased awareness served in both positive and negative ways. Both as an art and assessment, music demonstration and performance in test-taking are closely related. Particular traits are shared between performance in test-taking in the classroom and musical performance “on stage.” Tests and performances are normally considered a “high-stakes” setting when the quality and perception of one's skill are under critical scrutiny. The results of an assessment are demonstrative of one's attained skill and the demonstration of the synthesis and application of technique, knowledge, and critical thinking. Coping mechanisms may benefit students in both test assessments and musical demonstration. In general, musicians perform for the purpose of interpreting and breathing life into the notation on a page or the colors and timbre in their mind’s eye. MPA can limit a performer from allowing technique, interpretation, and creation from being presented to the audience in his/her intended way.

Similarly, academic assessment can incur the same issues. Davis, DiStefano, and Schutz (2008) expresses that classroom Test Anxiety (TA) has been found to interfere with competence in both lab settings as well as in true-to-life test taking situations in school and college. Common to test-taking anxiety and MPA are fears centered around
negative assessment, failure, and the perception of the exam as a threatening situation (Fernández-Castillo & Caurcel, 2015). MPA has inhibited performers from doing the best of their ability and achieving a musically satisfying performance (Chamberlain, Daly, & Spalding, 2011; Stothert, 2012). MPA, although found more in music institutions, affects the student as he continues past music studies into the larger world. Music Performance Anxiety has been something that has affected musicians through the ages. It has affected music students, teachers, and parents and has even caused distress among famous personalities (Hoffman, 2011; LeBlanc, Jin, Obert, & Siivolaho, 1997). MPA affects performers both in their active performance and their visual appearance (Stothert, 2012). MPA through performance has the potential to induce negative emotions which include distress and anxiety. Many educators and students have had the experience of understanding the material, executing a performance/problem well in either study or rehearsal, but then experiencing debilitating moments during an assessment. Some individuals can experience MPA with extreme levels of terror, impaired performance, and debilitating effects on professional careers (Spahn, Echternach, Zander, Voltmer, & Richter, 2010).

Since undergraduate and graduate music students experience assessments in both performance and academic areas, this study allows consideration for the connections where these two areas overlap, and the possible interventions students may have initiated that are effective in stemming or reducing anxiety. Students’ experiences regarding MPA will be explored. Students’ test experiences will also be explored and related to MPA for possible relationships.
I would like my research to offer contextual experiences to assist in creating a vivid picture of what an individual student faces during the processes from rehearsing to performing and during studying to taking an exam. Using these experiences and placing vignettes of students into a larger perspective, a better understanding can be achieved not only for those who empathize with these high-intensity experiences, but for the students’ understanding of their own emotions and motivations. This study would create a web of shared circumstances and issues in normally individualistic occurrences in the discipline of music and academics.

Questions I would like to research are as follows:

1. To what extent is there a connection between anxiety experienced in performance and academic assessment among college music students?

2. What is the understanding of the effects of anxiety on both music performance and academic assessment?

3. Do self-efficacy and motivation create a positive experience and increased performance for music students who experience MPA and testing anxiety?

It is my perception that MPA and test anxiety are experienced in a way that involves similarities among triggers of the anxiety, experiences during the anxiety, and possible coping techniques in reaction to the anxiety. Both MPA and test anxiety are experiences relating to “performance assessments.” In the context of MPA, a student demonstrates their skill involving the successful execution of a musical piece. Similarly, in the context of test anxiety, a student demonstrates the knowledge acquired and during
the testing, must perform the ability to synthesize learned information, create conclusions, then skillfully demonstrate the capacity to express their conclusions.

The study will focus on undergraduate and graduate music students who experience both performance and academic assessment in their program. Music students exhibit anxiety that manifests itself in both performance demonstration and traditional assessment. Due to the nature and structure of collegiate level music study, MPA can have serious effects on an individual’s performance including both musical performance and test-taking in an academic setting (Kenny, 2006). This study will also explore the positive contribution anxiety may possibly offer the student in preparation or during the exam or performance. This positive effect of anxiety may lead to a rewarding performance. A successful performance is usually followed by an increased release of beta-endorphins, agreed by researchers to induce feelings of happiness (Spahn et al., 2010).

Some insights that have emerged from the literature include the idea that a moderate amount of anxiety may be beneficial to the student. The contributions associated with possible anxiety interventions have also been explored. The sharing of students’ experiences would help in providing a rich context to the problem with MPA and test anxiety and how students have approached anxiety and possible interventions they have utilized.
CHAPTER II
LITERATURE REVIEW

Music Performance Anxiety (MPA) and Classroom Test Anxiety (TA)

A definition that is used to describe MPA is taken from Osborne and Kenny (2008) as the experience of marked and persistent anxious apprehension related to musical performance that comes about through specific anxiety conditioning experiences, which is manifested through combinations of affective, cognitive, somatic and behavioural systems (Sarbescu & Dorgo, 2014; Zakaria, Musib, & Shariff, 2013). These systems or domains affect the performer's breathing rate, perspiration, inhibition of saliva, difficulty maintaining posture and technique, and increase of fear (Hoffman & Hanrahan, 2012; Osborne & Kenny, 2008). Both academic testing and performance share attributes that stem from the students’ experience and perspective. Many of the same students experience similar apprehension caused by MPA when in the context of a traditional testing situation in the classroom.

Theories

Zakaria et al. (2013) describes three levels of MPA aside from the domains. These levels include the Before, During, and After of an individual's performance. These levels should be explored as far as the students’ experience in rehearsal as well as the parallel in an academic setting such as studying. According to theories of MPA, the anxiety created by increased pressure to perform well causes the performer to shift
his/her focus of attention from task-relevant information to irrelevant and distracting aspects (Oudejans, Burma, & Bakker, 2015). This usually involves thoughts of not achieving the desired performance level or even failure. It would be appropriate then to look at the relationship of a music student who experiences both performance and traditional testing to gauge the relationship between the two contexts in relation to anxiety. Related research that involves cognitions in test anxiety demonstrated that test-anxious students engaged in more on-task and coping cognitions (Osborn & Kenny, 2008). According to the Yerkes-Dodson model used by Hoffman and Hanrahan (2012), low and high levels of arousal does not benefit an individual’s performance, while moderate levels of arousal possibly benefit performance (Chamberlain et al., 2011).

As a professional musician and former (but always continuing) music student, I have experienced anxiety both in the classroom and onstage. This is an interesting experience because it involves a passion for what a musician loves to do, but also a fear in doing it. There were times that no matter how I practiced, rehearsed, studied, or drilled nor how confident I felt about the assessment at hand, there was a definite anxiety (sometimes miniscule, sometimes heavy) that was experienced. A study conducted by Ryan and Andrews (2009) used 201 choristers from seven semi-professional choirs. Participants ranged in age from 17 to 70 with an average age of 40. Each choir was contacted through the director and were asked whether they would be willing to have their choir participate in the study. The study was based on a self-answer questionnaire. 57% of participants reported experiencing moderate levels of anxiety during at least half of their choral performances. Fifteen percent said that they experienced anxiety
frequently, with 7% with a high level of severity. Difficulty of the music, performing from memory, and the importance of the performance were most often noted.

In the other end of the age spectrum, during the most formative years, it appears that even young children experienced stress with regard to performance situations (Boucher & Ryan, 2011). Boucher and Ryan conducted a study that involved 66 three and four-year olds who took group lessons that ended with two concerts later in the term. They measured the study utilizing anticipatory anxiety, cortisol secretion, and observation of anxious behaviors. The results demonstrated that young children with previous performing experience were found to have less anticipatory anxiety, but maintained higher cortisol levels than those without prior experience. Also, performance environment and location played a role in the children’s anxiety responses. Those students who were familiar with their performance environment responded with less anxiety than those who were not. The researchers found that the second performance that occurred a short time after, yielded less anxiety than the initial performance. These instances continue to lead to the questions: Why did I feel that way?; Why do I still sometimes experience that feeling?; Why do professional musicians across the globe and throughout historical experience discuss “stage fright?” How can we help a student understand and overcome the fear of sitting in a classroom with a test in front of him?

Many researchers reference the Yerkes-Dodson Law in relation to MPA and Test Anxiety (TA). The Yerkes-Dodson law is an empirical relationship between arousal and performance that was originally developed by psychologists Robert M. Yerkes and John Dillingham Dodson in 1908 (Dodson & Yerkes, 1908). The relationship between anxiety
and performance is complicated and this general psychological principle suggests that performance will increase with anxiety only up to a point. Concurrently, it suggests that when levels of anxiety become too high, performance then begins to decrease (Chamberlain et al., 2011). This law also explains that performance increases positively with physiological or mental arousal, but only up to a point (Oudejans et al., 2015). If arousal (anxiety) is low, then anxiety is not helpful to the performance or test taking. At a middle level of arousal, the anxiety becomes helpful to the performance of the individual. When levels of arousal become too high, performance decreases. MPA, according to this definition, consists of an anxious state of mind, characterized by cognitive, psychological, and physiological arousal and is considered an intense and negative form of excitement as characterized by the Yerkes-Dodson Effect, which proposes an inverted U relationship between physiological arousal and performance (Biasutti & Concina, 2014).

Anxiety is considered a complex phenomenon that comes from the combination of various facets, such as the performer's personal characteristics, how mastered the piece is, the stress that the particular place and time create, and the performers’ thoughts concerning performance (Perdomo-Guervara, 2014; Yoshie, Kudo, Murakoshi, & Ohtsaki, 2009). Performance musicians experience different levels of anxiety in different music performance situations, increasing from practice, to group, to solo settings - the musician being the focus of social evaluation in the solo context (Nicholson, Cody, & Beck, 2015). MPA is considered to be the experience of persisting, distressful apprehension about or actual impairment of performance skills in a public context to a
degree unwarranted given the individual's musical aptitude, training, and level of preparation (Hoffman & Hanrahan, 2012).

Test anxiety can stem from the thoughts or perceptions a student may have regarding an upcoming exam. The anticipation for an exam alongside the testing history of the student contribute to anxiety. This may include waiting for the grade and the time after receiving the grade, the way they consider themselves after receiving the grade, and the instant perception they see themselves regarding the grade. These particular facets contribute to future test anxiety because the student judges the test and test scores to be important in achieving their academic goals (Davis et al., 2008). Manifestations of anxiety can be physiological (nausea, headache, shaking, loss of appetite, increased heart rate), cognitive (low confidence, worrying thoughts of unpreparedness and failure), or a combination of both (Chamberlain et al., 2011).

Biasutti and Concina (2014) has offered a construct of MPA and TA which include three particular variables that contribute to an individual's experience of MPA. This includes the performer’s susceptibility to experiencing anxiety when the commitment to perform is made. This may include the performer’s gender, age, trait anxiety, self-esteem, self-concept, and self-efficacy. The second variable involves the performer’s task-efficacy. This relates to the performers process of preparation, learning approach, motivation to learn, task difficulty and value, and anxiety coping strategies. The third variable involves the characteristics of the specific environment where the individual is expected to perform. This variable can be influenced by parameters such as
audience presence, perceived degree of exposure, the venue for performance or classroom, and subject matter.

There are different types of anxiety people face throughout their various experiences. In Music Performance Anxiety and Test Anxiety, there are degrees and types of anxiety. Although I will focus primarily on Music Performance Anxiety (MPA) and Test Anxiety (TA), some definitions would be useful in regard to aspects of these two types of anxiety.

A general definition of anxiety encompasses a multifaceted condition that involves “task-irrelevant” behavior which has a debilitating effect on performance – either onstage or in the classroom (Edelmann & Hardwick, 1986). This description of anxiety has a negative nature and can also be described as a debilitating experience that has the potential to worsen performance (Lehrer, Goldman, & Strommen, 1990). Facilitating anxiety is a particular anxiety that helps improve an individual's performance. Trait anxiety and state anxiety are also aspects of MPA and TA.

**Aspects of Anxiety**

Trait anxiety reflects the anxiety a person experiences cross-situationally for prolonged periods of time and is often contrasted with state anxiety, which is experienced at a particular point in time. State anxiety is often in response to a specific situation, such as a specific musical performance or classroom test (Lehrer et al., 1990). Davis et al. (2008) also makes a distinction between trait and state anxiety. She describes trait anxiety as reflecting individual differences in students’ “proneness” towards feeling anxious during a test, for example, with some students experiencing pervasive or excessive worry
about exams even then they are not in the immediate testing situation. State test anxiety may fluctuate depending on the context of a given test and can be brought about by changes in the testing environment. An example of this would be a music conservatory student experiencing debilitating anxiety in preparation or worrying for juries at the end of the semester/quarter or in preparation for their comprehensive exam at the end of the academic term. This example of trait anxiety demonstrates that the student is experiencing MPA outside of the testing situation. A student who is not strong in music theory may experience state anxiety whenever she takes a music theory daily quiz or exam. Some state anxiety experiences may involve not feeling comfortable with multiple-choice questions rather than short-answer or vice-versa.

Feelings of arousal and intensity are perceived by musicians as facilitative to performance, whereas feelings of apprehension and distractibility are perceived as debilitating (Lehrer et al., 1990). Music performance requires a high level of skill in a diverse range of skill areas including fine motor dexterity and coordination, attention and memory, aesthetic, and interpretive skills. As will be explored further, music performance anxiety has its roots in the perspective of achieving prominence that requires the attainment of “near perfection” based on years of training, practice, and constant, critical self-evaluation (Kenny, Davis, & Oates, 2004). In a study conducted by Lehrer et al. (1990), approximately 700 packets containing questionnaires were sent to various groups of musicians. Subjects were selected for participation based on the following criteria of: (1) They were either students majoring in music, professional musicians, or music teachers; (2) They were giving a concert of some importance to their careers,
which could be used as a reference point for completing the questionnaires; and (3) The performance was either solo or involved fewer than seven other musicians. Results supported the notion that judgmental thinking is associated with debilitating anxiety. Two factors emerged that were not originally anticipated as separate dimensions of performance anxiety: concern about the reactions of others and concern about distraction in oneself and the audience. Coping behavior also appeared to correlate positively with perception of having given a relatively better performance than usual.

**Prevalence**

Music Performance and Classroom Assessment Anxiety have been an issue for students, teachers, performers, and amateurs. It is estimated that about 25.0% of American primary and secondary school students, suffered lower academic performance due to test anxiety (Chapell et al., 2005). I would like to explore particular areas in which MPA and Classroom Assessment Anxiety or Test Anxiety have a relationship in the experience of collegiate student musicians. Individuals may describe MPA and TA as a type of social phobia rather than a particular non-irrational experience (Simeons, Puttonen, & Tervaniemi, 2015). MPA in musicians has several characteristics that distinguish it from social phobia/anxiety. Distinguishing characteristics of MPA include high expectations for oneself (versus low expectations in social phobia), remaining committed to the challenge that terrifies the musician (versus avoidance in social phobia), and fear of scrutiny by others being secondary (versus primary in social phobia). (Simeons et al., 2015)
The prevalence of anxiety in both music performance and test assessment is found among varying age groups, demographics, and disciplines. Skill performance is not only limited to music performance, but also performance of a students’ knowledge and synthesis of ideas when undergoing an academic assessment. Performance anxiety is expressed as a group of disorders that affect individuals throughout a range of endeavors which include test-taking, math performance, public speaking, various sports and other disciplines in the performing arts like dance and theatre. Music performance and test anxiety share many of the same experiential and environmental conditions and in some cases, the same settings. Some degree of music performance anxiety or test anxiety is considered normal while performing or undergoing some type of assessment (Simeons et al., 2015). Research among professional musicians show that the phenomenon of anxiety is widespread among orchestras and other professional ensembles (Kenny et al., 2004). It would be interesting to pinpoint what the catalyst of MPA and TA is and what conditions exacerbate the musicians’ stressful experience. Research suggests that performance anxiety can lead to under-par performances. Also, memories of the anxiety of previous experiences could possibly lead to an unconscious defensive function that assists the musician in preserving self-esteem, while allowing the individual to perform below capacity (Nagel, 1990; Nettleback & Thomas, 2014).

Effects on Careers and Endeavors

Another interesting facet of MPA and TA are the implications that they have on individuals who wish to pursue a career in the performing arts. According to an extensive report by Simeons et al. (2015) based on a questionnaire survey by the International
Conference of Symphony and Opera Musicians in the U.S. involving a survey of 56 orchestras, he found that 24% of 2,212 musicians frequently suffered a severe form of MPA, 59% of tested orchestra musicians reported MPA severe enough to impair musical performance, and 70% of musicians were musically impaired by MPA respectively. MPA is a condition that affects both professional and amateur musicians and is a relevant issue for musicians with an artistic career who need to develop strategies for coping with the stress of anxiety and controlling negative consequences (Biasutti & Concina, 2014). A music student typically begins their musical training at a young age and more often makes career commitments at an earlier age than other professionals who have a similar level of education and skill. Nagel suggests that the exploration of alternative career options is narrowly limited both by choice and necessity. The experience of this particular facet does create a level of anxiety early in the individual’s life. Expectation and the drive to do well, in the midst of a competitive environment, may force a young musician to make choices of what path she should travel - intensity and frequency of lessons, types of academic auditions, then ultimately, institution of study. Being a collegiate music student, one must be able to play a musical instrument well, meeting a stipulated standard. A music student must also be able to perform confidently in front of an audience, without errors on scales, notes, lyrics, tones, pitch, pause, tempi, beats and other musical nuances (Zakaria et al., 2013). Throughout the young person's life, there is a balancing act that occurs between time and resources into the investment of growing in skill and knowledge. This is not only found in the music sphere, but also in the academic area in preparation for high-stakes tests.
**Working Condition**

This long-term experience perhaps creates a working condition for professional musicians that are much more stressful and anxiety-filled compared with other professions (Kenny et al., 2004). Anxious reactions can interfere with students’ ability to focus on the task at hand and to recall the relevant subject matter, possibly decreasing an individual’s ability to perform and may ultimately prevent students from reaching their full potential (Chamberlain et al., 2011; Cox & Kennedy, 1993).

There are many factors that can be attributed to MPA onset. These factors may range from personal experiences, external elements, or an individual's own thoughts and perceptions. MPA is composed of interactions between these various arousal levels. An issue that arises then is the problem a student faces when he has prepared very diligently, has studied both technique and critical information, and has repeatedly been successful in rehearsal or study. MPA, according to Nicholson et al. (2015), is independent of musical training and accomplishment. The students’ context, then, must be explored. In the context of musical demonstration, the performer's personal characteristics involve gender, age, trait anxiety, self-esteem, self-concept, and self-efficacy. How mastered the piece is and the stress it creates involves the process of preparation, learning approach, motivation to learn, the difficulty of the piece, and the repertoire value. The performers’ thoughts concerning the performance involve audience presence, perceived degree of exposure, and the venue’s environment (Biasutti & Concina, 2014). Powell (2004) explains that MPA can be distinguished by high expectations of oneself, remaining committed to the challenge that frightens musicians, and fear of judgement by others. These facets can
also be attributed to academic assessment. Many musicians and non-musicians fear negative appraisal and often exaggerate the negative consequences of social situations when performing in public or being assessed during an exam. Hamann (1982) studied 90 music students, five graduates and 85 undergraduates who served as subjects. The research criteria was based on each subject’s ability and willingness to perform and record a musical composition in two performance situations within a five day span. They found that subjects with the highest years of formal study were rated superior under the anxious performance condition as compared to subjects with Medium or Low years of formal study. Interestingly, it was also found that students exhibited significantly greater increases in state anxiety and anger between non-repertory and repertory situations. This possibly denotes that students may view performances in front of an instructor and peers as more threatening than situations where only recording equipment was present.

**Student Stress**

Students who experience MPA undergo a “continuum of severity” from what would be considered normal, healthy everyday aspects of stress and anxiety that are part of music performance or high stake assessment to “stage fright” symptoms that are severely debilitating. Both Kenny et al. (2004) and Nagel (1990) suggest the amount of social pressure music students experience add to anxiety during their studies and performance. Some researchers argue that performers, by the very nature of their profession, are affected by the general stresses related to having to perform under conditions of high adrenaline flow, anxiety, fatigue, social pressure, and financial insecurity. As will be explained later, it is possible to have a mediocre doctor or lawyer
make a living, but it is very rare for that same instance to apply to a mediocre musician. The stresses of audience perspective, personal standards, and ambition have added to the students’ various social pressures of demonstrating high skill and the financial security that is often associated with the performing arts. Nagel suggests that talented performers must not only compete with other musicians, but they must also “beat the system.” I thought this was an exacting point. Musicians must consistently work in a society that paradoxically claims to appreciate the performing arts, but does not adequately support it. This is very apparent in many of our school systems and the stereotypical perception people have concerning the performance arts as a practical profession. This type of mindset may have been ingrained at an early age among music students. Boucher and Ryan (2011) mentions that the question as to whether anxiety is developed or innate has been raised in a number of studies with the suggestion that it may be absent in early childhood, but firmly ingrained by second grade. Consistent exposure to adults’ perceptions of the performance industry and lifestyle may have a lasting effect on students especially to the relation of their view of success. Classroom testing is also strongly related to these MPA experiences. Much stress is placed on students to be high-achieving, demonstrated through the constant use of assessments. The test-taking experience is a part of life for students. The amount of conversation of standardized achievement tests at the national, state, and school district levels for both students and teachers indicates that the focus on testing in the United States is increasing (Schutz & Davis, 2000).
Music professionals and students are affected in ways that are physiological, behavioural, and psychological (Ryan, 2009). This leads to a lower performance quality, premature termination of performance careers, and reduced overall happiness for those engaging in performance on a regular basis. A study conducted by Chapell et al. (2005) indicated that 25.0% of American primary and secondary school students (approximately 10 million at the time the study was conducted), suffered lower academic performance caused by test anxiety. According to a study conducted on both secondary and undergraduate students, test anxiety was associated with a reduction in student grade point averages. This study included large scale reports on the relationship between test anxiety and the GPA in undergraduate programs. Some researchers feel that MPA may not necessarily impair performance, but may lead to a persistent and anxious apprehension related to musical performance (Nettlebeck & Thomas, 2014). According to Davis et al.’s (2008) study, evaluation anxiety can have serious consequences affecting an individual's physical and mental health including one’s educational achievement and occupational career. Although music performance can lead to feelings of exhilarating positivity in musicians, sometimes feelings of anxiety may surface. Supposing MPA initially creates feelings of anxiety during a test or performance, positive feelings stemming from accomplishment or other positive attributes of success may have a positive effect on the student.

MPA and TA can possibly be caused by a situation that feeds itself. A performer on-stage or in the classroom may have had a particular negative experience in the past. When the individual is faced with a similar experience, they may experience stress or
unhelpful ideas that may trigger anxiety, which in turn, may cause poor performance.

Dews and Williams (1989) helpfully illustrates a serious situation facing musicians and perhaps those in high-stakes assessment situations. He explains that music, perhaps more than any other artistic discipline, demands a high level of perfection from those hopeful of being successful in it as a career or life profession. Dews believes that every aspect of music is directly related to a search for perfection. As was suggested earlier that while it’s possible to be a mediocre doctor or lawyer and earn a living, it is generally difficult for mediocre musicians to find and retain a job. This concept, which I believe many musicians have experienced and which young music students fear is a daily reality. Stage fright is a serious problem for many professional and amateur musicians. Trembling, hyperventilation and nausea are common even in mild cases, while severe difficulties may lead to premature termination of promising careers (Steptoe & Fidler, 1987).

**Self-Perception**

Thoughts may arise such as, “Will I be good enough? How can I skillfully compete with my extremely talented peers?” Studies of amateur singers have shown that anxiety is common among elementary school children performing in a choral capacity and high school choristers. These students demonstrated that anxiety occasionally interfered with their performance (Ryan, 2009). Anxious people demonstrate high levels of task-irrelevant thoughts, including worry about performance, preoccupation with feelings of inadequacy and anticipation of loss of status, together with distraction by perceived somatic arousal (Steptoe & Fidler, 1987).
Self-perception and the perceived thought of how people view and judge one's skill can have a definite effect on an individual's level of anxiety. Kenny et al. (2004) suggests that anxiety may be triggered by conscious, rational concerns or by particular cues that unconsciously trigger earlier anxiety-producing experiences. So, once these past experiences are brought forth, the individual may shift into a self-evaluative attention state. Being in this state can create a stressful situation in which the performer or test-taker focuses upon their perceived inadequate skills or capabilities. A music student may undergo this type of anxiety throughout their undergraduate career, during every term, and even during weekly lessons or rehearsals. This type of anxious experience may be based on what Lehrer terms “absolutistic judgments.” Absolutistic judgments are judgements of a person's behaviour as “good/bad” or “acceptable/unacceptable” (Lehrer et al., 1990). Musicians may tend to look at rehearsal technique, concert etiquette, or how they present themselves to the audience in a particular way that may not be black and white. If a performance went a particular way that was not perfect, that may seem to be “unacceptable” or “bad.” A student of high standards or having a particular perspective may view a test grade lower than perfect as something equally “unacceptable” or “bad.” In light of these aforementioned experiences and self-perception, stress is the likely result. Stress experienced by musicians often results from a need to reach self-imposed standards of musicianship (Dews & Williams, 1989). Fear of negative evaluation may play an especially large role in MPA, because in music performance, evaluation can be highly relevant to career and self-concept. Most musicians feel evaluated against a perfect standard. Therefore, feeling evaluated against a
perfect standard, an individual who fears negative evaluation off stage is likely to experience marked anxiety when placed in a performance situation on stage. It appears that a fear of negative evaluation in general carries over into music performance, contributing to experienced anxiety on stage (Nicholson et al., 2015). Music students have a goal – that goal is “perfection.” A successful music student is one who attains the highest level they can on both stage and in the classroom. If students judge a test, assessment, or performance to be relevant to their goals, and the task at hand is not going well, two possibilities may arise that exacerbate stress. In one instance, if a performance or test is not going well due to someone else’s fault, anger will emerge. If a student believes the performance or test is not going well and feels that they themselves are at fault, guilt is more likely to emerge (Schutz & Davis, 2000). This guilt may resurface time and time again during rehearsal, lessons, and performance. Students across the board may find themselves thinking, “I didn’t practice enough” or “I didn’t put enough effort into my studies” when that may not necessarily be the case. It is test anxiety especially in the form of a preoccupation with worrisome thoughts such as, “I will fail” or cognitive distortions related to the consequences or the sources of failure such as “I am not smart,” and “No one will like me if I fail” that are responsible for its disruptive effects on test performance (Usak, Senay, & Mustafa, 2012).

In both the areas of performance assessment on stage and in the classroom, students were surveyed and a considerable amount of the respondents stated that self-esteem was directly related to how they perform. Almost 79% responded with this statement and possibly suggests that most musicians, possibly more than any other group,
have a problem in separating themselves from their art or work (Dews & Williams, 1989). The experience of MPA may be formed by the “perfectionism” a student perceives she should have. A high aspiration to “perfection” may produce greater performance stress or test anxiety since failure, possibly including past experiences of failure, are more likely to cause stress due to the student’s self-esteem which is threatened by an “imperfect” performance (Kenny et al., 2004).

**Catastrophisation**

I find this in many instances among music students both in and outside of the classroom. Assessments and demonstrative action are a reflection of our skill level and knowledge. Although assessments may not express the true talent or skill of a student, the audience or assessor bases the skill level and knowledge of the student using the performance assessment. MPA has also been shown to correlate with certain kinds of cognitions such as negative self-talk, preoccupation about the “not being good enough” mentality, concerns about others’ negative evaluation, fear of humiliation, “catastrophisation” (believing that minor errors may have catastrophic consequences), and other irrational beliefs such as the perception that one must be perfectly competent at musical performance to be a worthwhile person (Perdomo-Guevara, 2014). This also leads to a student possibly feeling helpless when having to perform when already having a history of stress and anxiety. A low self-efficacy appraisal about being able to handle problems during a test tends to result in increased test anxiety (Schutz & Davis, 2000). During the performance phase, students begin the process of making multiple judgments about the test or performance. This includes their level of preparation and their perceived
ability to handle any potential problems that might occur with a particular exam (Schutz & Davis, 2000).

Studies, such as Steptoe and Fidler’s (1987) work with different types of musicians, have found that anxiety in the context of musical performance can be found among music students in traditional classroom setting assessments, on stage, and during rehearsal. Three groups of subjects participated in the study. A professional group, an amateur group, and a student group. The sets of questionnaires were distributed to musicians during rehearsal breaks. Performance anxiety was assessed using the State scale from the State-Trait Anxiety Inventory (STAI) and the instructions for completing the inventory were modified so that subjects were asked to indicate how they felt just before and during performances in public. Items were selected to represent the various categories of fear identified through factor analysis of the responses of phobic patients. There were no significant associations between performance anxiety and specific phobic fears such as travel, heights, water, or animals. The comparison of performance anxiety in the three groups indicated higher levels of stage fright among students compared with professional musicians. The amateur group had similar levels of public performance experience as the students, yet their anxiety levels were lower, suggesting that age may be the more important factor. Catastrophizing, as previously mentioned, has been identified as a major element in the pattern of maladaptive, irrational beliefs associated with anxiety.

Studies such as these have indicated that debilitating anxiety can interfere with mental processes, especially processes that involve evaluative tasks (Chamberlain et al.,
Test anxiety has been identified by undergraduate and graduate students as an important issue that needs to be addressed (Chapell et al., 2005). Studies have been conducted regarding test anxiety involving the acceptance of test anxiety-related thoughts (Usak et al., 2012), students’ experience and what triggers test anxiety (Chamberlain et al., 2011), and emotional stress caused by test anxiety (Davis et al., 2008).
CHAPTER III
METHODOLOGY

The approach to this research was qualitative. This approach allowed me to explore the context in which students are experiencing MPA and test-anxiety in both their studies and performance. The use of student interviews and self-reporting gave more depth and breadth to the experiences of each of the particular students (Creswell, 2007). Student answers as well as contextual vignettes offered a clearer perspective and approach of the students in relation to their anxiety rather than strictly using a multiple-choice survey (Perdomo-Guervara, 2014; Yoshie, 2009). Data to be collected included age, gender, principal instrument, length of time studying the instrument, desire to be a professional musician, patterns and frequency of daily practice, age first performed in front of an audience, pattern of frequency of performing, and perceived level of anxiety associated with music performance (Kenny, 2008; Nettleback, 2014). Zakaria’s (2013) study used questionnaire surveys which were coded and placed in context with personal student vignettes. This method allowed the researcher to place the symptoms, levels, and coping mechanisms in the context of student history and experience, and offer possible recommendations to the community. A strong component of these instruments was the use of “before,” “during,” and “after” contextual questions involving emotional or physiological feelings. I would incorporate this concept in the areas of rehearsal and performance in contrast to studying and exam-taking.
Institutions Utilized

A survey was given to three music schools in the Midwest in a large and demographically diverse city. Two of the institutions were focused on performance degrees and the other was an institution primarily focused in music education. One of the institutions focusing on music performance is accredited by the National Association of Schools of Music, Commission on Accreditation, and Commission on Community/Junior College Accreditation: Music (MUS) – institutions and units within institutions offering degree-granting and/or non-degree granting programs. The other music performance-focused institution is accredited by both the Higher Learning Commission and National Association of Music Schools. The institution focusing on music education is an independent school accredited by the Higher Learning Commission of the North Central Association of Colleges and Schools and the National Association of Schools of Music with their teacher certification program approved by the State Board of Education. Permissions were granted by the Office of the Dean of each institution. The survey was distributed by the Office of the Dean during mid-October and was accessible by the participants for a two week period. During the two week period, two reminder emails were sent by the Dean’s Office to remind the participants to access and complete the survey.

Survey Format and Questions

The survey was based on the combined survey structure and focus of Nettleback (2014), Zakaria (2013), and Ryan (2009). Each survey had qualitative components that allowed the researcher to create a rich context of the students’ experience. The
components and layout of the survey were informed by the literature review of MPA and TA and were found to provide detailed information concerning MPA and TA that were valuable to the research. This questionnaire style was used because it was both easily accessible and able to be completed by the student and was found to glean helpful information for previous researchers. The survey instrument was created using Google Forms. This provided an accessible survey instrument to both the participant and the researcher that was secure and allowed ease of functionality. The primary tools used in the survey were multiple choice, “yes” or “no” replies, and short answer. The survey was structured using contextual questions, such as the year in school of the student, gender of the student, the primary type of instrument the student played, and information of the basic performance experience that provided an idea of what kind of student the participant was. The next section focused on descriptive answers of their experience in musical performance involving both rehearsal, time leading to the performance, the performance itself, and post-performance. The next portion of the survey involved descriptive answers of students' experience in classroom testing involving both studying, time leading to the exam, the assessment itself, and post-assessment. The end of the survey was capped by two questions allowing the participant to provide a longer answer regarding their experience with either performance or classroom testing anxiety and their thoughts on the relationship between the two.

**Student Population**

There were 79 student responses in total. The responses were anonymous unless the student provided an email address. In reference to Table 1, 32 students responded
from the school primarily focused on performance, 30 students responded from the music conservatory, and 17 students responded from the institution predominantly focused on music education.

Table 1

Survey Population

<table>
<thead>
<tr>
<th>Institution</th>
<th>Number of Participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Performance Program I</td>
<td>32</td>
</tr>
<tr>
<td>Performance Program II</td>
<td>30</td>
</tr>
<tr>
<td>Music Education Program</td>
<td>17</td>
</tr>
<tr>
<td>TOTAL</td>
<td>79</td>
</tr>
</tbody>
</table>

In Table 2, the student respondents were divided approximately 52% female, 47% male, and 1% non-binary.

Table 2

Gender

<table>
<thead>
<tr>
<th>Gender</th>
<th>Percentage of Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>52%</td>
</tr>
<tr>
<td>Male</td>
<td>47%</td>
</tr>
<tr>
<td>Non-Binary</td>
<td>1%</td>
</tr>
</tbody>
</table>

Among those surveyed, traditionally 23% were freshman, 14% sophomore, 24% junior, and 17% senior. Some of the programs included non-undergraduate students and
graduate students who participated in classes taken by undergraduates. Nineteen percent of the respondents were graduate students, 1% post-graduate, and 1% diploma. Approximately, 1% of respondents identified as being a transfer student.

Table 3

Grade Level

<table>
<thead>
<tr>
<th>Grade Level</th>
<th>Percentage of Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Freshman</td>
<td>23%</td>
</tr>
<tr>
<td>Sophomore</td>
<td>14%</td>
</tr>
<tr>
<td>Junior</td>
<td>24%</td>
</tr>
<tr>
<td>Senior</td>
<td>17%</td>
</tr>
<tr>
<td>Graduate/Diploma</td>
<td>19%</td>
</tr>
</tbody>
</table>

Also, 60% of the surveys were completed by students in a semester program and 40% from a quarter system. The students were asked the type of instrument they identified as their primary instrument. I have categorized instruments into their particular instrumental families. Twenty-seven percent of students played a woodwind instrument, 24% were vocal majors, 20% were string players, 18% played brass, 8% piano, and 3% percussion.
Table 4

*Primary Instrument*

<table>
<thead>
<tr>
<th>Instrumental Family</th>
<th>Percentage of Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Woodwind</td>
<td>27%</td>
</tr>
<tr>
<td>Vocal</td>
<td>24%</td>
</tr>
<tr>
<td>String</td>
<td>20%</td>
</tr>
<tr>
<td>Brass</td>
<td>18%</td>
</tr>
<tr>
<td>Keyboard</td>
<td>8%</td>
</tr>
<tr>
<td>Percussion</td>
<td>3%</td>
</tr>
</tbody>
</table>

**Contextual Inquiry**

In the area of musical performance, students averaged about seven years in taking formal lessons on their instrument. This question gave me insight into how much formal training the students had on average. The possibility of the years of formal training in comparison to their experience with musical performance anxiety may exhibit a connection. Another exploratory question involved the participation of a student in an environment that is normally considered to be a situation when performance anxiety may arise. Often this type of situation takes the form of a formal recital or a performance where the focus of the audience is on the individual. The age at which a student first performed in front of an audience may indicate the opportunities they had to experience performance anxiety in the amount of time they had from their first performance to this survey to reflect and assess their experience with MPA. The average number of years a
student played in a school ensemble were 9 to 12 years, since they first performed
publicly on their primary instrument. This area of experience leads to exploring the intent
of the student concerning their future endeavors. Anxiety possibly increases when a
student may want to be a professional musician. The amount of work and the worry a
student invests in practicing, knowledge acquisition, and public performance often times
reflects their desire to be a high caliber, professional musician. What may possibly create
an even more stressful experience is when a student desires to be a professional musician,
but the perception of their own skill level does not reflect the skill level needed to be a
professional musician. When asked about their desire to be a professional musician, 75%
were sure they wanted to be a professional musician, 9% responded no, and 16% weren’t
as confident in what they wanted to do in the future.

The schools’ structure of performances, either solo, ensemble, or both may affect
a students’ experience of performance anxiety. It is possible that a student may
experience less performance anxiety when participating in a group rather than engaging
in a solo performance when a majority of the focus is upon the individual student. It is
also possible that the opposite may be true. Also, the frequency of performance
opportunities may give insight to the experience students are given in encountering
performance anxiety. Depending on how the various programs from the different schools
structure their public performances, respondents varied considerably. Eighty percent of
students performed formally as either a soloist or in an ensemble in front of an audience
more than three times an academic year. Nine percent performed three times an
academic year, 5% twice an academic year, and 3% once an academic year. In context of
the student as more of a soloist or a member of an ensemble, 9% stated that they performed more as a soloist, 59% more in an ensemble, and 32% stated that they performed both as a soloist and in an ensemble about equally.

Practicing is an integral part of a music students’ growth in both skill and repertoire. Practice allows the student to explore their weaknesses and vulnerabilities and to ascertain where their strength lies. In relation to academics, studying allows the student to recall information used to synthesize and extrapolate concepts. Studying helps solidify concepts using drilling, reinforcement exercises, and exploring contextual relationships. It is possible that for a majority of students who practice and study often and well, less music performance and classroom anxiety is experienced than those who do not. When asked what the frequency of days a student practiced, 66% of students practiced more than four times a week. In comparison, 15% practiced four times a week, 13% practiced three times a week, and once or twice a week was done by 1% of students. Four percent of students stated that they rarely practiced. In terms of the average number of minutes a student practices during a single session, 46% of students practiced more than 60 minutes. Forty-one percent of respondents practiced 60 minutes, 13% practiced 30 minutes, and no student respondents practiced less than 30 minutes (of those who practice). The overall frequency of days and hours a student invests in practice may have an effect on a student’s experience of music performance anxiety.

When asked what the frequency of minutes a student studied for a particular exam (in total minutes), 41% of students studied more than 60 minutes per exam. In
comparison, 20% studied 60 minutes per exam, 18% studied 30 minutes per exam, and less than 30 minutes was done by 22% of students.

Self-perception may also be a possible factor in how a student experiences performance anxiety. When asked how skillfully they envisioned themselves as a performer, 15% of individuals considered themselves Very High, 24% as High, and 37% as Above Average. Thirteen percent considered themselves Average, 10% as Alright, and 1% as Low. When asked how skillfully they envisioned themselves academically, 20% of individuals considered themselves Very High, 22% as High, and 30% as Above Average. Twenty-two percent considered themselves Average, 5% as Alright, and 1% as Low. The music student respondents overall considered themselves stronger musicians than academicians.

In the student survey, I wanted to get a sense of how the student approached preparation, execution, and reflection of a particular assessment both in the areas of music performance and classroom testing. I approached both a formal musical performance and a classroom test as a high stakes assessment. Both assessments have consequences, both positive and negative, that affect the student. Both assessments require preparation and are used to assess the demonstrable skill of the student. Music students experience both assessment on the stage and in the classroom. This allows for a more contextual exploration into their experience. The students’ classroom assessment involves either a traditional course in the arts and sciences or an academic course that involves music disciplines such as theory, history, or aural training.
In regard to music performance, students mainly shared their experience performing with their primary instrument for either a recital, jury, or audition. I wanted to look into their method or process of practicing and the thoughts they experienced during that particular rehearsal session. In context of the students’ thoughts, I desired to explore the possible emotions they felt that accompanied those thoughts. I believe it was also important to investigate the student’s emotional/physiological state during the day of and leading up to the actual performance. Between the preparation for the performance and the actual execution before an audience, I wanted the student to consider their level of anxiety. As the performance occurred and passed, I prompted the student to reflect on areas regarding experiences during and after the performance. I wanted the student to describe their experience during the performance, reflect on how well the performance went, what in particular went well, what the student perceived went badly, and what the students’ emotion was immediately after the performance. I also asked the student to reflect on what they would have done differently in preparation for the performance if they had the opportunity. Concerning the students’ academic performance, the questions were identical with an addition regarding the type of exam that was taken.

In exploring the various aspects of a students’ experience, I have coded students’ responses. The survey structure first presented the students with music performance-based questions followed by classroom assessment survey questions. My hope was that the music-based questions would enkindle an interest and possibly more reflection when answering the classroom assessment questions. In the responses of students, some interpretation was implemented in order to practically code their particular experiences.
and insights. A majority of the answers exhibited similarities, allowing practical coding to occur. I utilized the similar responses of the students to create groupings. It is hopeful that by categorizing all the students’ experiences, a particular pattern may emerge concerning music performance anxiety and possible correlation with classroom test anxiety. I have given a brief explanation of certain aspects of respondent answers, but have allowed student responses to give a first-hand coloration of the majority of students’ experiences from a particular category. Generally, students answered mostly all the questions. Some student responses ranged from perfunctory, to colorful, and as may reflect institutions of the musical arts, highly dramatic.

**Limitations**

Several limitations to the study included the sample size, the self-reporting of the respondents and the population bias. The planned sample size was to be much larger than previously expected. Only 79 out of a planned 400 or so students responded to the survey. Although this sample size still gave a contextual picture of students’ experiences, the delineation of experiences, when placed in percentages, would have been more accurate to the school population. A number of responses were unusable due to the student either not understanding the question or reading the question incorrectly. Some of the self-reporting of the students were unintelligible or did not make sense in the context of the question, making the particular answer difficult to code. When I planned to utilize music students, my intent was to gain balanced contextual information regarding their experience with both anxiety in music performance and classroom assessment. After
analyzing the student responses, I found that there was a heavy bias towards their music rather than classroom experiences.
CHAPTER IV
ANALYSIS

This chapter takes an in-depth look into the student experiences of MPA and TA and analyzes the Before, During, and After music performance and test experiences of each student. The responses included answers to questions providing a qualitative context incorporating demographic, respondent profile, and vignettes of personal experience. These student responses allowed a more extensive exploration into the context of these students’ experiences and their response to MPA and TA. Types of music performances and test assessments are compared as well as exploring the questions of what the understanding of the effects of anxiety on both music performance and academic assessment are and to what extent a connection between anxiety experienced in performance and academic assessment among college music students exists.

I first asked the students to describe their process of practicing and rehearsing. 27% of students worked on technical aspects of their piece and then on musicality. These involved students working foundationally from learning notes and rhythms and practicing the fingering and placement at a slow tempo, gradually increasing the speed to proper tempo. Musicality, which includes musical phrasing, dynamic contrast, and interpretation are then worked on. One student described her experience as,

...for all the fast passages, I would start slowly at a speed I knew I could play at without mistakes. Then I gradually increased the tempo until I felt comfortable
playing quickly. Once all the notes and rhythms were in place, I would work on
the musical message I wanted to send and apply it to the notes… (2018)

Twenty-six percent of students described their practice session as first practicing scales,
working on particular trouble sections, running through piece, then finally reviewing
continued troubled spots. Once student described his session, “…warm up with 30
minutes of scales, then 15 minutes of articulation/finger exercises, then do 30 minutes of
an etude and 45 minutes to an hour on any solo repertoire I am preparing” (2018).
Another student describes her experience,

...warm up for 10 minutes including stretching my body thoroughly to feel less
tension in all my muscles. Long tones on lowest strings (G string) to establish
good volume, tone and intonation. I would then do 5-minute scales even though I
know I should practice them a lot more, especially since you have more ways to
play scales on string instruments (double stops). After this routine is done, I will
usually practice the difficult passages below tempo. This includes changing the
rhythm, articulation and bow direction, and once I am comfortable, I will spend
the majority of the remainder of my time making the piece more musical. (2018)

Ten percent of students began and focused in their practice session with a physical warm
up and basic exercises such as scales. Vocal majors primarily focused on breath support
and non-vocalists with an upper body/arm focus. Less than 10% of students used a mix of
practicing sections, then doing a run through or vice-versa. Others utilized a free-play-
through of the piece and some solely worked on problem areas. 13% stated they had no
particular system of practice at all, “…repetitive but jumping around to wherever I feel
like practicing. At the end of the practice session, I’ll do a few complete run-throughs and see how I compared to last session’s complete run-through from a recording I made” (2018).

Concerning the classroom exams, I first wanted to ascertain the type of assessments the students were taking. The assessments were structured as many classroom tests are: fill in the blank, essay, with the majority being mixed, multiple choice, and short answer. Some tests required writing music notation, these included music theory, arranging, and transposing. Music students who attended an accredited college or university and depending on their program of study utilized non-music “core” courses in their curriculum similar to those under the disciplines of the Arts and Sciences, such as English, Math, and Literature. Music curricula, such as music theory and music history, involve aspects of traditional mathematics concepts, history, and literature. To assist with context, music theory is defined as the study concerned with describing how musicians and composers make music, including tuning systems and composition methods (among other things). An aspect of theory is called rudiments. This explores the elements of notation, of key signatures, of time signatures, of rhythmic notation, et al. In the Western music sphere, another aspect is the study of writings about music from ancient times to the present. A third aspect involves an area of current musicological study that seeks to define processes and general principles in music (Fallows, 2016). Music dictation or aural training is a skill by which musicians learn to identify, exclusively by hearing pitches, intervals, melody, chords, rhythms, and other basic
elements of music. This is similar to taking dictation in written and spoken language (Karpinski, 2000).

Among the academic courses, the students responded the most to music theory being the most difficult course. One individual did respond with calculus as their exam. As with their music practice, I asked students to describe how they studied or their process of studying. Eight percent of students responded with having no particular system. Five percent and less of students mentioned memorizing or strictly using a study group. Forty-three percent of students were described as reading and reviewing past material. Students explained that they would revisit the textbook, look over study guides, and peruse old exams. One student recounted, “I spent a lot of time working on a study guide and developing in-depth answers to the essay questions. I also attended review sessions and office hours with my professor” (2018). Another iteration said, “…read the book, go over notes that I’ve taken from class, listen to recordings that need to be identified to the point where I can identify them and state the artist, date, and information about the tune” (2018).

Thirty-three percent of students utilized mostly drilling and recall. Students described their process as reading the material, taking various parts of the material and memorizing it, and either practicing recalling information from a page or using tools such as flash cards. Some methods described were, “…they [the teacher] provided us with bullet points of the information and I rewrote them multiple times in order to retain all of the information” (2018). Another student wrote, “I write down the answers over and over
and try to outline concepts for the long essay portion” (2018). A little more detail from this student summed up a portion of what the other students shared,

I drilled the information in my head a few times for this particular exam. Being a band person, the transpositions of instruments came really easy to me. I like to use note cards/flash cards and quizzing my friends to study for more intense tests. 

(2018)

What is the understanding of the effects of anxiety on both music performance and academic assessment?

Students were asked what thoughts entered their mind about the upcoming performance during their practice sessions. This question was coded into 17 categories. Eight percent of respondents shared that they felt pressed for time as well as another 8% felt that they had a constructive practice plan that gave them confidence with the upcoming performance. Twenty-four percent of students had a mix of a general “freak-out,” frustration, or the need to compel the audience with their performance. Five percent or less of students thought of being/feeling confident or the need to focus. Two categories, however, had a strong similarity among their respondents. Twenty percent of students thought they would fail or would have a high possibility of failing with their current skill or ability. The responses were strongly negative. One student shared, 

Giirrl you’ve got so many issues. You’ve practiced so hard for this and it’d be a shame if you mess this up. Why do you even bother going out of your comfort zone? You’re dead meat anyway. There are so many people who are waaaay better than you; so many that it’s not even worth practicing to attempt to be better. No
one's going to want to employ you. Oh hey. You just missed a note.... And another one… and another one… you should stop listening to me, but I know you won’t; I know you can’t. At least attempt to multitask, loser. (2018)

Another student shared, “I hate myself. I bet so and so can do this. One less cellist in the world would be fine” (2018). Fourteen percent of students had the thought of the performance going well. These respondents predominantly phrased their answers in a way that conveyed the desire for the performance to go well, but also included possible thoughts of how to do so. One student stated,

...I would anticipate what I would be messing up (and would practice these sections more—these sections involved large shifts on the fingerboard typically).

I also thought about how I would need to exaggerate my phrasing so that my musical ideas would be more understandable to audience members. (2018)

Another student mentioned, “The acting portion of singing are my main focus as well as good technique. I try to visualize what I look like to the audience and act accordingly” (2018).

Students were asked what thoughts entered their mind about the upcoming exam during their study session. This question was coded into 16 categories. Less than 10% of students had the following thoughts: negatively resigned, distracted, “I gotta pass!”

general freak out, hope, anxiety, and tiredness. Twenty-three percent described their thoughts as thinking of confidence. Some of these thoughts focused on the previous work they did or confidence in their academic ability. Sometimes, it was a response to the easiness of the exam. One student remarked, “I can do all of these things well. I should
have no problem. I just need to relax and be smart” (2018). Fifteen percent of students had thoughts of curiosity. The students’ explanations of curiosity included wondering what the format or what specific questions the exam would ask. Other students responded with something similar to the following, “…if the test will be easy or hard. Will the test be on this material or something else?” (2018). Eleven percent of students had worrisome thoughts. These included, a fear of not remembering crucial material or studying for material that wasn’t on the test and not studying material found on the test. One student stated,

   It was a very interesting balance of "what could go wrong?" coupled with "I'm going to fail." The way the tests are structured, it is very easy to make simple mistakes, and I always think I do better on them than I actually do. (2018)

One of the categories I thought was interesting was “annoyance.” Ten percent of students responded that they were annoyed during studying. Two students said respectively, “...annoyed by the fact that this was time being taken away from practicing” and “I can't wait for this to be over, I wish I was practicing right now, it's wasting my time” (2018). Some annoyance was aimed at the professor, “Oh gosh, this class is unorganized and unspecific we have NO IDEA what is going to be tested except for the fact he said everything” (2018).

Another question I asked the students concerned what they felt emotionally during their rehearsing for an upcoming performance? The answers to these questions coded into 25 categories. Twenty-four percent felt either a frustration, fear, or a mix of positive and negative emotions. Ten percent had either a good feeling or calmness.
Categories that were between 1%-3% were predominantly negative. These included feeling overwhelmed, anxious, worried, doubtful, drained, terrified, and highly negative. Approximately 1% stated they felt either confident or serene. Concerning this question, three categories were predominant and similarly consistent. One category focused on nervous anticipation. Sixteen percent of students who were feeling nervous anticipation had a mix of some excitement coupled with anticipation. Some students describe this as feeling overwhelmed and the desire to “get it over with.” The students’ responses were not necessarily negative but had a sense of reflection of why they were feeling what they were feeling.

Emotionally, I felt a mixture of nervousness and excitement. I was nervous to play in front of people I had never played in front of, and who I barely knew. On the other hand, I was excited, because performing is what I live for. I love the feeling of getting on stage and getting to play in front of people, especially because I was going to get feedback on my playing from the other people within the trumpet studio. (2018)

Another student continues, perhaps with a more positive perspective of nerves,

I feel a sense of determination to prepare it as well as I possibly can in order to perform the best that I possibly can. I get nervous, but only because I know I can do it, I just do not want to display anything less than what I am capable of. (2018)

Thirteen percent of students noted that they felt the feeling of being pressured or stressed. Students described a situation where they feel fear of disappointing family or teachers because of their overall feeling of not being good enough. Some of the pressure stems
from the acknowledgement that the student has less time to prepare than was allocated for. One student mentioned, “Stressed, but focused to be better. I would get caught up with the idea of how much time I really had to get ready for the performance and I ended up feeling very stressed and overworked” (2018). Another explained, “Definitely stress! I second-guess myself while waiting to go on. It happens to me all the time, and I am still learning how to trust myself and my abilities” (2018). The other 13% of students stated that they felt a feeling of excitement! In a positive light, students described the enjoyment they felt in having opportunities to play and a chance to demonstrate their skill. The tone I sense from the student responses was an enjoyment of the music. One student said, “I felt excitement, happy to have the opportunity to make music and excited to try to read the music at a high level and contribute to the group” (2018). One senior stated,

If it's at the point where it's the performance, I'm usually pretty confident by that point. I still get the heart flutters, but I try to consider that as excitement rather than something negative. I usually feel like I really want to do a good job and show off all that I can do, because I feel like I'm kind of brushed off in the voice music program, in addition to the fact I just want to do the best I can because I've worked so hard on it. (2018)

I asked the students what they felt emotionally during their studying for an upcoming exam. This question was ordered into 23 categories. Twenty of the categories were either 8% or lower for the respondents. These included emotions such as calm, frustrated, excited, dread, curt, numb, tired, bored, regret, helpless, or a mix of some of these feelings. The top three categories that students consistently shared were feelings of
nervousness, confidence, and nothing. Twenty-nine percent of students felt a nervousness during their studying. Most students described this experience with the words, “anxious” or “nervous.” Some students were nervous about the test itself and others about the consequences that would occur if they did not do well on the particular exam. One student shared, “…a little anxious and a little pressure. My teacher has very high expectations, and he is not usually the most fun when he is disappointed” (2018). The responses of those who answered “nervous” were primarily negative. Most were similar to this students’ response,

Usually during any study for an upcoming exam, it depends on how much time I have. Assuming I have a lot of time and I'm studying well in advance, I'm eager to learn and take the test to prove my knowledge. If I don't have as much time I am of course very mean to myself and generally miserable. (2018)

Fifteen percent of students felt a sense of confidence. This included having a strong handling of the material and feeling that the student studied more than adequately for the exam. One students’ response was definitely confident, “…confident that I knew the material at a level superior to my classmates” (2018). Lastly for this question, 11% of students felt nothing. This was different from students’ emotions during rehearsing for a performance. The word response from students for this category was primarily “nothing.” Only one student said, “I don't usually feel strong emotions when studying for tests. I typically feel neutral about my tests” (2018). This could possibly be a priority-issue that music students placed on classroom assessments as opposed to music performance.
My next question to the students was a description of their emotional and/or physiological state during the day of the performance up to the performance itself. As can be expected, a variety of experiences and descriptors were shared. These student responses were coded into 20 categories. A majority of students felt a wide range of emotions and physiological symptoms. Fewer than 10% of students felt a mix between feeling confident, nervous, excited, scared, having no appetite, experiencing a general freak out, and dread. Physiologically, students mainly felt either numb, having no appetite, and experiencing a jittery feeling. With these mixed experiences, one student described her experience as, “...wishing I had made better life choices up until that point. Also wishing I had packed more bananas, since they apparently help when you're nervous (which they didn't...). As always, I was dreading the big moment before the performance” (2018). Three categories revealed themselves to share a majority of the respondents’ insights. These included exhibiting nervousness, calmness, and confidence. Thirty-three percent of students experienced nervousness. Students described an accelerated heart rate and an increase of scattered thoughts. Some students mentioned a loss of appetite or the feeling of being numb. A junior explained,

Waking up the day of solo performance feels surreal. I feel nervous, but I also feel like my brain and my nerves are in denial. The hours leading up to the performance feel like I am on the edge of a cliff, but I am often optimistic. Once there is less than an hour before I perform, and I begin warming up, I feel like I am in another realm of consciousness. I still have an underlying feeling of nervousness, but it is fueling my focus. (2018)
A sophomore experience suggested,

...when I woke up, I was extremely nervous. My family took me out to lunch and took my mind off of everything, but I kept running over the worst-case scenarios in my head. When we got to the venue, my private instructor helped me warm up and I began to calm down a bit, but I couldn't stop pacing around the room afterwards and I drank a lot of water to keep from panicking. (2018)

Seventeen percent of students stated that they experienced calm. Students described being or feeling calm not as a type of resignation, but a sense that they practiced as best they could and they must convey their skill and musicianship as best they can. Students who disclosed that they continued their days “as usual,” avoided instances and areas of high energy or distraction and refrained from over-practicing, tended to suggest they felt calm. One student mentioned,

I try to isolate myself as much as possible, so I stay off of electronics and social media in order to focus in as much as possible. I am relatively calm leading up to it, or anxious, but a good anxious. I get the feeling that I am ready, but sometimes having to wait can be obnoxious because I just want to get it over with.”

Another student exhibited a type of “letting go.” He said, “...at this point, I decide in my head that it is what it is. I may squeak, I may not. There's only one way to find out. My nerves go down and I think about the wonderful release I'll feel after the performance” (2018). Lastly, with this question, 10% of students stated that they felt confidence.

Students described themselves as feeling well-prepared, physically attuned, and ready to
perform. Those students who described themselves as feeling confidence similarly shared the intent of enjoying the music. An upperclassman stated,

On the day of the performance, I felt confident. My studio class is later in the day, around 6:00 PM, so I had ample time to prepare my warmup and play through my pieces again just to make sure I could play them up to the standard I hold for myself. I was looking forward to playing, because after getting to meet other people in the studio, I learned how nice they were and, even though the previous week, when the other upperclassmen had played, the feedback they got was presented in a blunt manner, I was looking forward to getting feedback on my playing. I was excited to hear how I can improve myself as a musician, even if it meant going a little out of my comfort zone. (2018)

This student’s feeling of confidence definitely is reflected in her response,

Positive. I usually relax and treat myself the night before an important performance. I put on a face mask, hair mask, took a warm bath, used some oils on my skin, put on my favorite pajamas, did my nails and drank some hot tea before going to bed. I also made sure that I got at least 8 hours of sleep. When I woke up, I stood in bed with my eyes closed and I told myself that it was my day to shine and how great everything was going to be, then I mentally ran the entire piece in my head just to see the state of my memory in case I needed to go over some spot before the performance. Then I got breakfast, a lot of fruit and no caffeine. Then I warmed up and went throughout the piece slowly and ran the piece in tempo once. During the dress rehearsal on the same day I tried to dress as
nicely as possible because if I like how I look it'll make me feel better and as a result play better. I also ate a piece of the darkest chocolate I could find at the store, for energy. And I looked at myself in the mirror and told myself words of encouragement and positive things so that when I would go on stage I was in the mindset that I'm at my best and I'm a champion. (2018)

In relation to what the student experienced during their classroom assessment, something very interesting surfaced. In the music performance area of this question, the responses were able to be coded into 20 different categories. Concerning this academic portion, however, only two categories were needed to code. Seventy-five percent of respondents described their experience as exuding confidence. Almost all the student responses used the word “confident.” One student described their experience as,

...I just ran through the checklist. I started on the easy things and knocked them out, and to my surprise, there was very little left on the exam, which is good. That means I study well enough to be confident on most of the exam. For the rest, I completed it with little struggle. As far as singing, it went well except for sight reading, which I didn't get discouraged by because I know it is something I need to work on, so I saw it as an opportunity to see what I'm still not good at. (2018)

This student’s response resonated with the other respondents,

I started with stuff I knew and I worked my way around the exam until I only had stuff I didn't know left. I was stressed because it was way more intense than my studying. I trusted my knowledge, though, and I think I did okay. (2018)
Twenty-three percent were displeased or negatively surprised by the exam. This students’ response reflected a majority of these student responses and attuned itself to the chaotic experience these 23% of students felt,

There was a part on enharmonic modulation that I had practiced and nailed every time after a while, but when it came time for the test, the problem did not work itself out like it always had and I was alarmed. So, I skipped and went all the way to the history part in the back that I knew I would know to boost my confidence. After that, I went to a little bit harder part, finished it, and was ultimately torn between trying to go back to the part that stumped me, or onto a part that I knew I wouldn't know. I went back because I was so bothered that it wasn't working, finished it, and then approached the hardest part without panic because I knew it wouldn't end well. (2018)

The respondents were given the opportunities to reflect on their experience from their time rehearsing to the day and moment of the performance. The opportunity was also given to the students concerning their classroom assessment. Students were asked to rate their level of anxiety from 0 to 5, with 5 being a very high level of anxiety when reflecting on how they felt before the actual performance. Those who responded with a level 5 described having a general sense of panic. A majority of those who responded with a level 5 were so panicked that many couldn’t remember what they were feeling. Six percent of students were at a Level 0, 15% at a Level 1, 11% at a Level 2, 30% at a Level 3, 24% at a Level 4, and 13% at a Level 5.
Table 5

Anxiety Level (MPA)

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<td>5</td>
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I asked the students to describe their experience as best as they can remember from during the performance or exam. Using the anxiety level at which they rated themselves and comparing those to the student responses gave me a brief excerpt into what they were experiencing at that particular level of anxiety.

At level 0, students predominantly felt excited about the performance. Some students described that they felt similarly as they do every day. Several suggested that they weren’t nervous, nor did they exhibit terror at performing. One student stated that they were, “...just ready to have fun performing” (2018). It was interesting to note that some of the students who performed in an ensemble felt empathetic to others in the group in relation to their own calm and composure. One student said, “...I know that some of the other members of my group get anxious, and I hoped that they wouldn't let it get to them during the performance” (2018).
Concerning the classroom assessment, 5% of students predominantly felt unfazed with taking their exam denoting a 0 level of anxiety. Most responses were short and stated that there was no issue with taking the test. One students’ response mentioned, “I honestly felt fine during the exam. I was able to remember 100% of the information. My hand was writing very fast and could barely keep up with my brain” (2018).

Students who experienced a Level 1 (15%) and 2 (11%) Anxiety, also had a sense of enjoyment in sharing their music. Memory and technical issues were concerns that were rooted in their anxious feeling. Two student responses encapsulated these two levels. One student described her experience in the context of preparation,

...the performance was in my school's recital hall. The lighting was set right for the song and performance, and I had a trusted musician friend running my translation PowerPoint. My accompanist was a well accomplished pianist, so I didn't have to worry about her making mistakes. All I had to do was focus on the performing of my song and the different characters, which I felt I artfully demonstrated. (2018)

Another student described their experience in way that put focus on the art of singing and less on what could go wrong. Her reflection exuded a type of visualization for the purpose of confidence and grounding.

As soon as I stood on stage I got into a character. I thought of myself as this very beautiful diva who owned the scene who's there to leave everyone speechless with her skills. Because she worked so hard, she deserved to leave people fascinated with her playing. I usually get a lot of adrenaline on stage which people confuse
for nerves all the time, but I think of it as the fuel to make my music catch people's hearts. (2018)

In the classroom area, Level 1 (22%) and Level 2 (13%) anxiety students answered similarly regarding their experience. Both Level 1 and 2 mentioned that once the exam began, they found that they felt prepared for the exam and, in some cases, were relieved after perusing the exam content. Responses were similar in the sense that students felt prepared and ready. A reflection of the responses read, “I was extremely ready, after seeing that the first portion was exactly what I studied – it was smooth sailing” (2018).

The predominant number of students, 30%, experienced a Level 3 Anxiety with music performance. These particular students focused on the how the audience would perceive their performance and how their demonstrable skill during rehearsal would compare during the actual performance. An informative vignette from a student described their process on stage,

...when performing solo, I feel determined. I sometimes feel like I am on autopilot, yet extremely focused at the same time when actually performing. When I come out of my unconscious state (usually when I begin the piece), I present myself and my emotions as a performer. I try to tell a story with my thinking of the music. At times I feel exhilarated. All of these feelings are enhanced greatly during solo performance. (2018)

The student continued to explain their experience with ensemble performance saying, “Ensemble performances induce less of the negative nervous energy and the feeling of
unconsciousness/surrealism, though it does happen to some degree. Exhilaration, connection, and theatrical feelings are enhanced in an ensemble performance setting” (2018). Another vignette described one student’s Level 3 experience in the context of a professional audition. In this instance, the stakes may be perceived as being higher, but similar aspects are shared with other students who delineated a Level 3 anxiety level. The student began,

I was able to warm up fairly normally and found a reed that I was pretty happy with. I was confident as I listened to other players who sounded good, but not necessarily better. (I plan to avoid any attempt to compare in warm up situations in the future.) The audition was in a church, and the sanctuary had very live acoustics. I felt at the time that I sounded just fine, but later believed that I may have played too loud with not enough clarity. I forgot to bring my music for my concerto, but had played it from memory many times before, and there were no problems when I did it in the audition. Most of the excerpts they asked for were comfortable for me, though there was one that I hadn't spent much time on at all. I was familiar enough with the piece and had sufficient control of the instrument to lay it down well. I was likely cut for excerpts that I had practiced much more on.

(2018)

This same student expressed physiological symptoms of what many of the other students suggested,

...I didn't feel any crippling anxiety, but the normal symptoms of performance stress was present: sweaty hands, tight muscles, etc. My articulation suffered, (an
occurrence in all of my past auditions), and my fingers weren't as even and
relaxed as they had been in previous run-through’s. This led to a few technical
errors and flubs, but I was able to continue without trouble. (2018)

Importantly, the student was able to reflect on past experiences in relation to the present
situation,

I felt like I was able to slow down and control my playing more than in previous
audition situations despite the handful of technical errors. I was cut off before the
end of the preliminary list and did not advance, but I didn't feel horrible about my

As mentioned before, sometimes students’ past experiences in performance create
a particular seed for anxiety to manifest itself in future instances. This same student
vocalized what many of the other respondents may have felt,

I did feel normal feelings of rejection for the remainder of the day, but I got over
them quickly and was able to move on to what I would do next time. This was
new for me: many of my grad school and festival auditions had been very difficult
emotionally, and I spent the rest of the week questioning my career choices.
(2018)

As in the case of performance test anxiety level, Level 3 of TA (21%) was also a
consistently chosen level among students regarding classroom test anxiety. One student
summed up a majority of level 3 anxiety respondents, “I'm usually just too focused on the
exam to have any negative feelings. At that point, I just want to get it done” (2018). In
the case of academics, however, more students were less anxious overall with 76%
feeling an anxiety level of 1-3, whereas only 62% of students responding to MPA felt anxiety levels of 1-3. These numbers indicate that the respondents to these surveys have less anxiety about classroom tests than music performance.

Twenty-four percent of students described a Level 4 Anxiety. Interestingly, students who denoted a Level 4 Anxiety described their performance as going fairly well. Although the students’ feeling of anxiety was higher on the scale, there was a certain focus and intent to their responses.

During the performance, I blocked out the audience and focused on the music and who I was playing with. When I made a mistake, I instantly thought RELAX, keep playing, the show must go on. There were some points where I would just lose my place in the music and almost scramble to find it again. Luckily, I almost had the piece memorized. (2018)

Concerning some students, the anxiety seemed to disperse once the performance had begun. Unfortunately, for a number of students, the anxiety was either exacerbated by something unplanned occurring during the performance, or there were perceived negative thoughts that entered the student’s mind. Although some level 4 anxiety students maintained focus, some had to contend with adaptability. One student explained,

I was very nervous, shaky. My mouth was SO DRY, and it was really affecting how I sounded, which made me more anxious. Because I was nervous, I took the second section of my piece really fast, and I could not play it that fast, and once I realized I was playing it too fast, I tried to slow it down, but it just wasn't working, so I tried my best and just finished the piece. Because of the speed and
the dry mouth, my last note ended up being like a growl, which is NOT the style of the piece I was playing. It felt like I was rolling down a hill and not being able to stop. Afterwards I was just happy it was over, and it wasn't until later that I felt like I made a lot of mistakes. (2018)

Lastly, 13% of students experienced the highest level of anxiety in regards to music performance. Much of what the students shared were instances of previous perceived negative experiences that had occurred in the past. Although these students denoted their anxiety at the highest level, most of the students felt that they did very well. One student mentioned,

I had to perform with a mic to live accompaniment, both of which I was aware of, but unprepared mentally for. I was nervous about messing up and shutting down as I performed. Every critique I’d ever received flooded into my head and I was terrified about my sudden lack of confidence in my ability. I felt like I was stumbling through the song and that my improvisational runs weren't clean enough, and that I would look or sound bored with the piece as I was singing. (2018)

Some students, who denoted their anxiety at this level experienced a type of general “freak out” such as,

My brain kind of goes crazy so if I don’t have my music extremely prepared, it will show. I get all sweaty and shaky to the point you can sometimes hear it in my sound. I have breathing issues and take weird breaths when I’m freaking out on
stage. I pretty much have a panic attack while performing. But the more I do it, the more comfortable I am with the fear and can manage some of it. (2018)

In the academic area, I have placed anxiety levels 4 and 5 together, since their responses were very similar. Although one student had a positive outcome with their exam, the majority of level 4-5 responses were highly negative. They ranged from forgetting everything for the test, constant second-guessing of answers, and a general “freak out” as the test was being administered. One student’s response adequately reflected her peers experience, “I was ready to crawl into a corner and then sit in fetal position, rocking back and forth whilst devouring myself inwards into a vortex of agony” (2018).

Table 6

Anxiety Level (TA)

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Ninety-three percent of respondents felt that the performance went “Good” to “Excellent.” Out of the 93% that felt their performance was “Good” to “Excellent,” 43% noted their performance to be either “Very Good” or “Excellent.” Although a greater
percentage of respondents experienced a mid to higher level of anxiety, a majority perceived their performance to have gone well. In asking the students of what went well during the performance, the top 3 categories included the general execution of the piece (38%), conveying of the emotional intent or interpretation (15%), and musical technique (14%). General execution of the piece involved correct notes, proper technique and dynamic, and synchronization with an ensemble, accompanist, and possibly the connection with the audience. Interpretation involved conveying the interpretation the student desired to express musically. Musical technique, in this instance, was the specific technique a student was working on during practice to demonstrate well during the performance. Concerning what students thought went badly, the top 3 categories that students shared were General Execution (18%), incorrect notes (14%), and technique (27%). In this instance, it was not the same students who denoted that these particular areas went well for them. What this does imply is that these 4 areas are concerns to the student performer.

Once the performance has been completed, musicians tended to exhibit different feelings and emotions than what they experienced before the performance. All the students surveyed gave a response of some type of feeling. Approximately, a mixture of under 5% of the students mentioned feeling disappointment, sad, fretful, or upset. Sixty-three percent of respondents experienced happiness, relief, or a mixture of both. Students described the relief due to the feeling of accomplishment or the physiological release from adrenaline.
Relief. I feel as if I bore the burden of Atlas with the Earth on his shoulders and he finally took the task from me. I always tell myself I won't perform again, but I make sure to discipline myself and force myself to do it so I can gain more experience from other performances” (2018)

Other students were happy to be surrounded by family and friends who wished them well and perceived strong support. Some students, although generally positive, mentioned how they were upset with themselves for getting so “worked up” during much of the preparation, “I was happy with my performance, and a little upset about how the anxiety I had felt near the beginning had impacted my playing” (2018). One student summed up a majority of students’ feelings after a particular performance, “It’s usually relief. Sometimes I beat myself up over something. That didn’t go well and should have gone well, but I’m usually just relieved that it’s over and I go get some ice cream” (2018)!

I then asked the students what they thought went well during the classroom exam. Student responses fell into three main categories such as answering the questions correctly or perceived to have answered correctly, the ability to recall information, and maintaining a confident demeanor. Sixty-two percent responded that they were happy with answering questions correctly. Thirteen percent described the ability to recall information. Two students responded, “I was able to access the information memorized as intended” and “I knew the answers! I could remember the process of finding the answers and I remembered the key signatures and everything” (2018). Although lower in percentage, 9% of students mentioned a confident demeanor. These students consistently
reiterated the same idea of not allowing anxiety to overwhelm their testing experience. One student reflected the responses of the others, “What went well is that I didn't let anxiety take over. Because I truly felt prepared, I was able to do well on the exam” (2018).

The students were then asked that if they had the opportunity, what would they have done differently in preparation for this particular performance. These responses provided quite a spectrum into the insight of the student regarding what they perceived to be important to their success. Eighteen percent of students stated that they would not have changed anything. It is interesting to note that a little more than half of these students exhibited a level of 3 to 4 of anxiety. Less than 5% of students wished to have approached the following differently: work on details of musicality, analyzed the music or text, reduce negativity, exchange a person in an ensemble, figure out their own anxiety issue, or use more physiological preparation such as stretching. There were four categories I focused on which a majority of respondents had similar, consistent answers. Nineteen percent of students desired more time to practice or more opportunities to practice. The responses suggested that students, many times, put off practicing, reducing the amount of days they could have used for practice before the performance. One student suggested,

I would have absolutely spent more time on the piece. In my opinion, all it ever needed was more time and it could have been really great rather than just good.

Of course, that is likely the case with any musician and piece. (2018)

Another student bluntly stated,
...of course every musicians’ answer to this will be ‘I would have practiced more!!!!’ But I have performed this piece a few times and I'm pleased to notice I've improved each time. I would have liked to have one more rehearsal with my accompanist because she is a genius and I would love to get more insight from her. (2018)

Sixteen percent of students were more particular, stating that they wanted to practice more efficiently. Using more energy to practice particular passages, using a metronome, and practicing passages more slowly when first starting the piece were mentioned. Two students encapsulated a majority of the responses well.

I would have worked more slowly and focused on smaller sections that didn't work out as well. I think that playing parts that already sound fine shouldn't be ran through as much. I would also practice repeating the measures or few notes that are troublesome more often, so I would be 100% sure it would be up to my standards every single performance. (2018)

Another student stated,

...Rehearse more with accompaniment, practice slower, make more musical decisions. I have a hard time narrowing down the perfect way to play every phrase, or for that matter, where all musical phrases start and end. Basically, do more practicing that does not purely involve physically playing the violin. (2018)

Fifteen percent of students said after the performance that they would have practiced a specific technique. The approach of the following student seemed very practical and was more specific than other responses, he stated,
I would have worked much more on technical exercises away from the repertoire. If I feel like I'm using an excerpt to push my control of the instrument, then I need to find a way to acquire that control some other way. Spending six weeks just trying to play the notes was bad for my confidence and led to mental fatigue and boredom. I would have focused solely on learning notes for the first couple of weeks, working familiar or less demanding excerpts in later. This would allow me to begin running mock performances sooner, and I would do many more of them...I have made most of these changes for my next performance, which will be the first that I've played since. I feel like a have much greater control of this list. We'll see how it shows. (2018)

Lastly, 10% of the students desired to practice in front of an audience. The responses explained that “audience” ranged from friends and family members to a small group of peers. Foundationally, respondents believed that this would allow a controlled type of environment, one that is much less threatening, less “high stakes,” but still allows the performer to experience possible anxiety. One student suggested,

I think what would have helped during the rehearsal process is if I would have practiced singing in front of an actual audience, even if it was just in front of peers. This would have probably helped with my body being able to feel more relaxed during the actual performance. (2018)

A formal type of feedback, even among peers, was considered valuable. “I would’ve performed in front of people more prior to the performance, and get their feedback while also practicing dealing with the anxiety” (2018).
In contrast, I asked the students what they would have done differently in preparation for this exam if given the opportunity. I coded the students’ answers into 15 different categories. Less than 10% of students who responded suggested various things they would have done differently including drilling more, studying earlier for the exam, slowing down on the test, obtaining tutoring, implementing a more organized system, being more careful with details on the exam, paying more attention in class, being more calm, studying more in a group, working faster on the exam, and being more aware of their physiological needs. The responses were generally perfunctory. The highest response of 28% stated that they would do nothing different. This was a much higher percentage of students consistently responding in the same way. Only 18% of students said they would do nothing differently for their performance. Fourteen percent of students said they would devote more time to studying. One student responded,

... [I would have] studied A LOT more, started studying when I got the study guide. I had never taken a listening exam before, so I was overwhelmed, and I didn't know how to study. I just needed more time for the information to soak into my brain. I thought it was going to be impossible. But now that I know how the test went and how to study, the next one will go a lot better. (2018)

Ten percent of students responded that they would have studied a more specific area of the exam. Most of the students mentioned a particular portion and how they wished they had studied that area more. An example from this student stated, “Made sure I really knew the process of transposing. We did some practice questions in class, and I definitely would have studied those more” (2018).
In this research, I asked students to share any general comments they would like the researcher to know about their personal experience of test anxiety and performance anxiety? I chose several students from each institution and requested that they go more in depth with their experience. I was very relieved that students responded frankly and openly. I have asked particular students to elaborate on their experience of MPA or classroom anxiety. In reading the responses, I have chosen some experiences that reflected a wide breadth of the perfunctory or less detailed responses in the main body of the survey. I have grouped them into various narratives to make the vignettes more readable. Pseudonyms for students have been used in the following vignettes.

One junior, Rachel, described that she experienced anxiety all the time. At this point, Rachel explained that she didn’t even think the anxiety was directly related to herself and was instead what she experienced on a day to day basis. She described that she had days when she felt unnaturally anxious leading to feeling frustrated, for no apparent reason. She described it as rendering her unable to function and having to lay on the couch drinking some form of caffeine until the feeling passed and she felt fine again. The student emphasized that the anxiety really hindered her school and social life, especially when she had to practice music. She continued to share that, concerning her performance anxiety, she used to be absolutely terrified to the extent where she would “shake like a blender” and be unable to perform properly. As she progressed through high school then college, she explained that she completely overcame her performance nerves, except for the “little bits that stick around for life.” Rachel explained that she is now much more comfortable on stage and talking in front of people. She did, however, feel
anxious when thinking about singing long bursts of solo music on stage by herself. In the moment, she described it as usually fine, but before the performance, combined with her monthly anxiety waves, Rachel would sometimes get so overwhelmed before learning music she would become paralyzed to the point where she was scared to even start learning the music because it seemed overwhelming. At the time of this survey, Rachel experienced an episode during the quarter. Rachel explained, “...thinking about an hour’s worth of difficult music to learn coupled with tension in my jaw, was both preventing me from practicing and also stressing me out more because of that” (2018).

Logan, a sophomore, recounted that, in general, he always experienced a high level of test anxiety. As a young student, Logan remembered that he quickly learned that not studying for a test would usually result in poor test results. However, studying for tests all throughout high school (and even into college) was still an issue for him. I believed that what he experienced more than test anxiety was study anxiety. Logan’s main issue was always the fact that he didn't know how to study. He felt that even if a teacher took the time to offer study suggestions to the class, which seemed to rarely happen, he said, he usually felt that the study suggestions didn't actually help him. Logan shared, “I believe that the study habits of an individual should match the learning style of the student” (2018).

Jeffrey wanted to expand on a specific answer he gave in the survey regarding the relationship he felt between MPA and TA. He experienced anxiety semi-regularly with his trumpet lessons. He described that with his busy schedule, there were some weeks that he didn’t have enough time to practice the material that was assigned. Due to this
lack of practice and preparation, Jeffrey felt really timid and anxious going into his lesson because he was aware that he didn't practice, which stressed him out. He explained that sometimes he managed to get by with an “okay” lesson, but during others, he perceived that his instructor was disappointed in his performance. Throughout the day after his lesson, Jeffrey would tell himself that he was a bad student for not being prepared and having a lousy lesson. In the academic realm, Jeffrey shared his experience with his music history test. The exam consisted of listening to six to seven pieces, identifying them, and answering questions about each particular piece. The students weren’t knowledgeable of what order the listening samples were in, so the students would have to aurally identify them before writing down answers to the questions. Before the midterm for this class, Jeffrey recounted that this was the first time he had taken a test of this style.

I was freaking out because I have never taken a test like this and I haven't studied for one before. I even had friends who had previously taken the class tell me the best way to study, and I was still avoiding studying. (2018)

Jeffrey ended up studying at 5am the day of the test, and admitted that was obviously not enough time, so he went into the test unprepared. “I experienced the same stress factors I mentioned in my experience with performance” (2018). Jeffrey later described going into the final at the end of the semester and “studying a little more,” but still not as much as he knew he should have. He remembered having less stress at that time, but still experiencing anxiety. Jeffrey presented a different perspective explaining an experience of when he was prepared, and everything worked out. Jeffrey described it
as giving him more motivation to continue more effective and consistent studying.

Jeffrey said,

...but it is very easy to slip up and not be prepared, and then that snowballs into me getting behind. Already this semester, there are two assignments I haven't gotten done because I forgot about them and didn't have enough time to complete them before the due date. (2018)

He shared that once he gets off track, it became even more difficult to get back on task. This situation, Jeffrey said, snowballed allowing him to perceive that he was a bad student and couldn’t handle the workload, even though he really believed he could. He ended by sharing,

I think I would have performance anxiety no matter how prepared I was. Maybe I just haven't experienced the level of preparedness I need, but so far, that hasn't been the case. It is just generally nerve wracking to get in front of people to present something you have been working on and expressing those things. (2018)

To what extent is there a connection between anxiety experienced in performance and academic assessment among college music students?

I asked students if they thought there was a relationship between their experience with musical performance and test performance. It was my hope that the opportunity for reflection between an experience of performance and classroom assessment would allow them to see some type of connection between both the areas of MPA and TA. Four percent of students were not sure how they felt about any relationship. Five percent believed there could possibly be a correlation between the two. Thirty percent felt that
there was a relationship and 61% believed there was not a relationship between MPA and Test Anxiety.

Table 7

**MPA and TA Relationship**

<table>
<thead>
<tr>
<th>Relationship between MPA and TA?</th>
<th>Percentage of Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not Sure</td>
<td>4%</td>
</tr>
<tr>
<td>Possible Relationship</td>
<td>5%</td>
</tr>
<tr>
<td>Definite Relationship</td>
<td>30%</td>
</tr>
<tr>
<td>No Relationship</td>
<td>61%</td>
</tr>
</tbody>
</table>

The responses stating that students were not certain if there was a relationship between the two areas were perfunctory at best. Responses ranged from, “I don’t know” to “I’m not sure” (2018). In the category of possible relationship, students suggested that it was difficult to tell whether there was a relationship or not or that the two were very different. One difference some students suggested were the manner and structure of studying between disciplines. A senior replied,

Sort of - I am in the middle for this. I think that there could be a correlation between the two because practicing is like studying. You have to do both for positive outcomes. On the flip side, I also think that they are not similar because I don't practice the same way I study. When I practice, it is a lot of hands-on and doing. When I study, it is a lot of reading and memorizing. Well, I guess you
could memorize your music and then it would be similar to studying... but it's isn't necessarily the same. (2018)

Some students felt that the musical arts and disciplines such as the social sciences and other disciplines in the Humanities are very different. A junior replied,

Overall, I feel that I prepare more and in more depth when I am going to perform compared to taking a test because performing is a form of expression and I want to give and let the audience feel what I worked hard on for them to feel and experience and I want them to walk away from a performance feeling moved. Taking a test is something temporary and usually meant for a grade - just to get by. Touching someone’s heart by music is more lasting. (2018)

Sixty-one percent of students shared that they didn’t believe there was a relationship between MPA and classroom Test Anxiety. A majority of students who described no relation between the two focused their view on the idea that, although both instances are types of assessments, the execution of each is very different from one another in terms of linear time and threshold of error. One student described the issue with execution of each assessment, she stated,

I don't think that for me there is an especially strong correlation. In a test, I know I can usually go back and check or change my answers. But in a performance, once a note is played, it's played, and all the other notes and fingers patterns and bowing depend on the notes that came before it. (2018)

Another student focuses on the environment of each assessment suggesting,
...Absolutely not. During a performance (Ensemble or Solo), the audience has all their eyes on you and they will notice a mistake of yours. However, during an exam it is extremely easy to take your time and focus on finding answers for the questions. You can argue that your teacher is your audience-of-one during exams, but that idea has never really fazed me. Music is ultimately a concept of time and during most performances when you make a mistake, the mistake is ingrained in the past; however, on a sheet of paper the mistake can always be erased. (2018)

One student discusses their relationship between the “audience” and the vulnerability of the “performer” with both assessments,

I don’t think so. I see performance as a more vulnerable event - as a performer, you’re putting yourself out there in a way that most people are unable to. As a tester, I don’t feel as exposed. There is more of a safety net between me and the professor, such as a piece of paper. If I’m turning in a test, I don’t see their immediate reaction to my answers. But in a performance, there is nothing separating you between the audience and yourself. (2018)

Other students who didn’t feel a strong relationship existed between MPA and classroom Test Anxiety discussed the importance they placed in either assessment as a musician. One students said,

No, I don't think there is a correlation between my experience with my musical performance and test performance because my musical performance experiences are more important to me than the test performances. I also find that missing one question on a test is not a big as a deal as missing a few notes in a piece. I think
that I am always striving for perfection in my performances and I think I can always improve; however, I think that once I have learned the basic facts for the test that is all. If I will learn new information on the test materials, that would be on my own accord and not for the test. (2018)

Another student’s response is similar to the difference in disciplines, but also discusses the difference of emotional affect between a musical performance and a classroom assessment,

No, because with tests it’s more like there is one (or a few) right answer(s), and there is little that can go wrong on a test other than getting a question wrong. And if you put down an answer you realize was wrong later, you can go back and change it. With a performance, there are SO MANY things that can go wrong. And if you make a mistake or miss a note or count your rests wrong, you can't go back and fix it. You have to recover for the rest of the performance and live with the fact that you messed up. Also, if you really mess up a test, the only people who have to know are your teacher and yourself. In a performance, depending on how bad you mess up, everyone could know you did bad. Some minor things only you, your accompanist, or other majors of your same instrument will notice, but with more obvious mistakes everyone would be able to hear. Its more public, and that makes it way more embarrassing. Although they might be considered the same type of assessment, they are really different in my eyes. (2018)
Other students discuss the important difference of how the student desires to be perceived by others and what value the student places on how they are perceived either on stage or in the classroom. One stated,

No, because the music I play and the groups I play in are actively performing in front of people. With music, it is very technical, and I am constantly trying not to mess everything up in order to appear "learned and studious" or something. With exams and tests, it's more of a personal thing since I'm not afraid of what other students think of my grade, and also since the other students don't see my grade anyway. (2018)

In a self-perceptive manner, one student explained,

I would say no. I look at the two very differently. Performances are not just for me they are showing people what I do and how good I am at my instrument. A test is just a grade that is only for me and the only person that will know my grade is myself and the teacher. I would be more embarrassed if I do bad during a performance because more people can see and will talk about it. If I do bad on a test no one has to know but me. (2018)

One student took a philosophical approach of the performer becoming a possible catalyst for future musicians,

I don't think there is a connection. I worry about tests because it'll churn out a letter that will matter or won't. But when you have a musical performance, in the audience, you can absolutely bet that it's someone's first time ever hearing that piece, and it's probably also someone's last time ever hearing it. You can be the
reason someone decides to play music, or the reason why someone decides that their life is worth living. You can give the audience an experience so amazing, they go home and google recordings of the piece and are underwhelmed by everything they find there. (That happened to me at Mahler 7 2 years ago with the Chicago Symphony Orchestra.) It's a totally non-superficial pressure to succeed about a totally non-superficial thing. (2018)

Some students weighed the importance of music performance with classroom assessment,

No. Musical performance is extremely personal and intimate and is a reflection on you as an artist and a human being. I chose trumpet performance as a major because that's what I want to do with my life. If I have a bad performance, I feel like that makes me a lesser individual in a way. With academic performance, I'm only required to take those classes for my degree. With that degree, more orchestra jobs and performance opportunities will arise. So test performance is just a means to an end. (2018)

Lastly, some students have a strong feeling of the use of classroom tests as an instrument of assessment compared to performance-based assessments of the stage,

No. I have found music school tests are just really ridiculous and unorganized. They put a lot of pressure on students to memorize a ton of unspecific information, and then give bad marks for students when their answer on the test isn't exactly what the teacher wanted. This is, fill in the blanks vs. multiple choice, as well as short answer questions. I'm already a bad test taker, for no real
reason other than the fact tests don't test my knowledge and understanding and instead demand I memorize everything, which never works because it's quickly crammed in and just as quickly forgotten. It's only last year that I've figured out the best way to study, and it's not with the help of the teachers, either. I have a great understanding of a lot of things, but I can't memorize it all AND understand it all if information is just being thrown at us, and not DISCUSSED with us. (2018)

Comparisons

A comparison was done looking at how many females and males experienced a self-answered level of anxiety. Students were asked to rate their level of anxiety from 0 to 5, with 5 being a very high level of anxiety when reflecting of how they felt before the actual performance and exam. Level 3 was considered to be “common nerves” and Level 0 was no anxiety at all. Those who responded with a level 5 described having a general sense of panic. The percentages presented indicate percentage of individuals who experienced an anxiety level of 3 or higher. “MPA” = percentage of students experiencing an anxiety level of 3 or higher of Music Performance-based Anxiety; “TA” = percentage of students experiencing an anxiety level of 3 or higher of Classroom Test Anxiety; “Both” = percentage of students who experienced both an anxiety level of 3 or higher of both MPA and TA.
Females tended to experience a higher level of MPA than males. In turn, males experiencing a higher level of TA than females. More females, however, experienced high levels with both MPA and TA. No females specifically mentioned that they felt more MPA because they were female. Since both male and female student population were about equal in number, it seems the male population in general experienced a higher level of anxiety than the female population. I am not certain as to why males experienced a higher level of anxiety than the female population. In future studies, it would possibly be of interest to ask students whether they feel if their gender creates more or less pressure to be successful or to meet certain expectations.

A comparison was also made of what percentage of academic years experienced a Level 3 or higher of MPA, TA, or both. The Juniors and Freshmen represented the largest population of respondents, followed by Graduates, Seniors, then Sophomores. The percentages presented indicate percentage of individuals who experienced an anxiety level of 3 or higher. “MPA” = percentage of students experiencing an anxiety level of 3

<table>
<thead>
<tr>
<th>Gender</th>
<th>MPA</th>
<th>TA</th>
<th>Both</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>68%</td>
<td>27%</td>
<td>41%</td>
</tr>
<tr>
<td>Male</td>
<td>57%</td>
<td>41%</td>
<td>27%</td>
</tr>
<tr>
<td>Non-Binary</td>
<td>1%</td>
<td>1%</td>
<td>1%</td>
</tr>
</tbody>
</table>

Table 8

*Gender (Anxiety)*

Females tended to experience a higher level of MPA than males. In turn, males experiencing a higher level of TA than females. More females, however, experienced high levels with both MPA and TA. No females specifically mentioned that they felt more MPA because they were female. Since both male and female student population were about equal in number, it seems the male population in general experienced a higher level of anxiety than the female population. I am not certain as to why males experienced a higher level of anxiety than the female population. In future studies, it would possibly be of interest to ask students whether they feel if their gender creates more or less pressure to be successful or to meet certain expectations.

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or higher of Music Performance-based Anxiety; “TA” = percentage of students experiencing an anxiety level of 3 or higher of Classroom Test Anxiety; “Both” = percentage of students who experienced both an anxiety level of 3 or higher of both MPA and TA.

Table 9

*Academic Year*

<table>
<thead>
<tr>
<th>Academic Year</th>
<th>MPA</th>
<th>TA</th>
<th>Both</th>
</tr>
</thead>
<tbody>
<tr>
<td>Freshman</td>
<td>67%</td>
<td>44%</td>
<td>39%</td>
</tr>
<tr>
<td>Sophomore</td>
<td>75%</td>
<td>50%</td>
<td>50%</td>
</tr>
<tr>
<td>Junior</td>
<td>74%</td>
<td>58%</td>
<td>53%</td>
</tr>
<tr>
<td>Senior</td>
<td>38%</td>
<td>38%</td>
<td>15%</td>
</tr>
<tr>
<td>Graduate</td>
<td>53%</td>
<td>47%</td>
<td>24%</td>
</tr>
</tbody>
</table>

Overall, MPA, at a self-reported level 3 or higher, was experienced by more respondents than TA. It is also helpful to note that the senior respondents, who experienced an anxiety level of 3 and higher experienced the same percentage of MPA and TA. If a larger pool of seniors responded to the survey, there may be more of an apparent connection between their experience of anxiety in both music and academia. Perhaps, depending on the specific program, students who are in their terminal year experience anxiety in both areas of music and academia due to the equal requirements
both the academic and music disciplines require for graduation. Although, as stated later in this chapter, there is no increase in anxiety levels as the grade level reaches senior year. A larger pool respondent would have been more helpful.

The higher the grade level, a general increase in MPA occurs (except for the seniors). It is understandable that a large amount of Freshman would experience a level 3 or higher of anxiety. Interestingly, the percentage of anxious students increase as the grade level advances, but there is a remarkable drop during Senior year. Perhaps there is something akin to what secondary students would term as “senioritis” or possibly the three past years of experiencing performance anxiety on both the stage and in the classroom have given seniors a sense “control” over their dealings with anxiety. For many students, senior year is their terminal year and perhaps that may have an effect on their experience of anxiety. Graduate students seem to experience a level 3 or higher anxiety in a higher percentage than I expected. It is possible that graduate students feel their assessments, either performance or in the classroom, are of “higher stakes.”

I chose to compare the percentages of those who stated they were either on the Low Range to Very High Range on the skill level of performance and how they perceived themselves in relation to academics. Concerning all respondents, 15% said they were of very high musical skill, 24% high, 37% above average, 13% average, 10% alright, and 1% low musical skill. These percentages represented denote the percentage of students who experienced an anxiety level of 3 or higher in their musical skill level in comparison to their self-reported musical performance skill level. The percentages presented indicate individuals who are experiencing an anxiety level of 3 or higher. As an
example, 15% of students considered themselves to be very highly skillful musically. In relation to this self-reported skill level, of those students, 58% experienced an MPA anxiety level of 3 or higher and 33% experienced a TA anxiety level of 3 or higher. Of same group of very highly musically skilled students, 17% experienced an anxiety level of 3 or higher in both MPA and TA.

Table 10

Musical Skill Level

<table>
<thead>
<tr>
<th>Musical Skill Level</th>
<th>MPA</th>
<th>TA</th>
<th>Both</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very High (15%)</td>
<td>58%</td>
<td>33%</td>
<td>17%</td>
</tr>
<tr>
<td>High (24%)</td>
<td>26%</td>
<td>26%</td>
<td>26%</td>
</tr>
<tr>
<td>Above Average (37%)</td>
<td>62%</td>
<td>52%</td>
<td>28%</td>
</tr>
<tr>
<td>Average (13%)</td>
<td>60%</td>
<td>50%</td>
<td>40%</td>
</tr>
<tr>
<td>Alright (10%)</td>
<td>88%</td>
<td>75%</td>
<td>75%</td>
</tr>
<tr>
<td>Low (1%)</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
</tbody>
</table>

For the most part, as the perceived skill of the performer decreases, the MPA level increases as well as the TA level. The experiences of both MPA and TA together (of level 3 and higher anxiety) also increase as the self-perception of the performer’s skill level decreases. Since this is a self-reported answer concerning the students’ musical skill, the students’ confidence level may be causing the student to experience a higher
level of anxiety. As stated before, many respondents had feelings of not being skilled enough or having the proper talent.

Inversely, I desired to compare the percentages of those who stated they were either Low to Very High in academic skill or how they perceived themselves in relation to music performance skill level. Concerning all respondents, 20% said they were of very high academic skill, 22% high, 30% above average, 22% average, 5% alright, and 1% low in academic skill. These percentages represented denote the percentage of students who experienced an anxiety level of 3 or higher in their musical performance in comparison to their self-reported academic skill level. As an example of this comparison, 20% of students considered themselves to be very highly skillful academically. In relation to this self-reported skill level, of those students, 56% experienced an MPA anxiety level of 3 or higher and 38% experienced a TA anxiety level of 3 or higher. Of same group of very highly musically skilled students, 25% experienced an anxiety level of 3 or higher in both MPA and TA.

As the perceived academic skill of the student decreases, the MPA level increases as well as the TA level. The experiences of both MPA and TA together (of level 3 and higher anxiety) also increase as the self-perception of the performer’s skill level decreases. This pattern could possibly be attributed to a general confidence issue as well.
Table 11

*Academic Skill Level*

<table>
<thead>
<tr>
<th>Academic Skill Level</th>
<th>MPA</th>
<th>TA</th>
<th>Both</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very High (20%)</td>
<td>56%</td>
<td>38%</td>
<td>25%</td>
</tr>
<tr>
<td>High (22%)</td>
<td>65%</td>
<td>35%</td>
<td>24%</td>
</tr>
<tr>
<td>Above Average (30%)</td>
<td>63%</td>
<td>42%</td>
<td>38%</td>
</tr>
<tr>
<td>Average (22%)</td>
<td>59%</td>
<td>71%</td>
<td>47%</td>
</tr>
<tr>
<td>Alright (5%)</td>
<td>75%</td>
<td>75%</td>
<td>75%</td>
</tr>
<tr>
<td>Low (1%)</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
</tbody>
</table>

Regarding relationships, 4% of students weren’t sure if there was a connection between MPA and TA, 5% though there was a possibility of a connection, 24% stated there was a relationship, and 48% said there was no relationship at all. The following percentages exhibit the similarity students had in their responses regarding the anxiety level they experienced in both MPA and TA. The “similar” category denotes that the students responses between MPA and TA are a step apart e.g. MPA = a level 3 and TA = a level 2. “Exact” was when the students self-reported their level of MPA and TA as the same.
Table 12

*Correlation*

<table>
<thead>
<tr>
<th>Relationship MPA/TA</th>
<th>Similar</th>
<th>Exact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Of No Relationship</td>
<td>46%</td>
<td>10%</td>
</tr>
<tr>
<td>Of Yes Relationship</td>
<td>54%</td>
<td>21%</td>
</tr>
</tbody>
</table>

There was a strong possibility of a relationship between MPA and TA with 54% of students feeling similar anxiety levels. Since 48% of students mentioned there was no correlation, their percentage of similar levels between MPA and TA (46%) give them a greater number of students who experienced similar levels of MPA and TA. I suggest that most of the students who didn’t feel there was a connection were focusing more on the differences of how the performance and classroom assessment varied in execution and perception of others rather than how the assessment situation itself caused anxiety to occur in the students. It must be understood that each student focuses upon their own experience of MPA and TA, so placing all the students’ responses and contextual experiences in comparison, a pattern of experiences, emotions, and thoughts are able to be established.
CHAPTER V
DISCUSSION

The purpose of my research was to provide contextual experiences to assist in creating a better picture of what students face during the processes from rehearsing to performing and during studying and taking and exam. It was my intent to present the experiences of these respondents into a larger perspective, so that a better understanding could be achieved for those who empathize with people who experience MPA and TA and for the students’ who reflected on their answers for this research with the opportunity to understand their own motivations, emotions, and experiences. I have also asked students to reflect on what they did to stem anxiety. I asked them that if they experienced music performance or testing anxiety, what have they done to help reduce that anxiety. This section, as well as some of the previous student examples helped to explore the question if self-efficacy and motivation create a positive experience and increased performance for music students who experience MPA and testing anxiety.

I was able to code this question into 23 categories. Less than 10% of respondents gave the following possible remedies (ordered from higher percentage to lowest): thinking positive thoughts, practicing more, utilizing meditative practices, use medical accommodations, pray, remember their humanity, listen to music (while studying), eat or drink water, work on material with others. One percent of students offered some of the
following: warm up as much as possible, get adequate sleep, just be resigned to the situation.

Three categories were consistently offered by students. These categories involved breathing exercises (22%), doing nothing (11%), and mindfulness (10%). Concerning breathing, respondents have suggested deep, controlled breathing either during rehearsal or before the performance/test. Some students utilized a particular, formal breathing technique while others used counting to control breathing intervals. One student suggested, “I try to count my breaths until I feel grounded. I use other grounding techniques, such as feeling each of my fingers and toes, or use breathing techniques like in for 7, out for 10” (2018). Another student used something more physiological, I have tried deep breathing before a performance or test, and that helps but only sometimes. I like to “shake out the tension.” I actually shake my arms and wrists to release all of the tension from my body. This seems to help the most. I also tell myself happy things, like “you got this” and “you're awesome dude.” (2018)

Other students have stated they don’t do anything or don’t see the need to do anything. As expected, the respondents’ answers ranged from “nothing” to “nothing really, but I do deep breathing and eat a banana” (2018).

Ten percent of respondents mentioned used the term “mindfulness.” Another way I would interpret these responses is “awareness” of their own perceived weakness/deficiencies. One student remarked,

Raising my floor. I only experience serious anxiety when I'm performing something that's beyond my current technical ability and I haven't prepared
enough. It also helps me to be much more analytical and "growth" oriented. I'm confident that, with the right work, I can improve. (2018)

Other students suggested exploring experience and understanding how they mentally, emotionally, and physically react to a performance or test situation, so they can better compensate and prepare for similar instances in the future. Another student suggested,

...analyze what brought me to feel this way, and critically analyze it (societal pressures, educational power systems, grading policies, assumptions about value, how money and power work in higher ed, service-providing professors versus students need to show mastery to prove their abilities). (2018)

**Conclusion**

In reading the responses of the students, I would suggest that there is a strong relationship between Music Performance Anxiety and Classroom Test Anxiety. The vignettes give the impression that the respondents were concerned about how they are perceived. This is very understandable when studied with an empathetic lens. These undergraduate and graduate students primarily have their own focus and perception of their MPA or TA experience. As the researcher, I have the ability to look across the various vignettes and experiences and ascertain any patterns that present. I would consider that “fear of perception” in this context, may take the form of an audience, benefactors of a students' education, social relationships, and self-perception. Many respondents stated that the linear timeline between a musical performance and a classroom test are different, mainly that an individual can backtrack on a test, but not in a
performance. I agree that the execution of both assessments are different, but I would offer that the experience at the time of the assessment coupled with the idea of “what makes this particular assessment/performance important to me” creates value for the student, which in turn may allow anxiety to be present. It is the idea of being judged (e.g. by an audience, professor, or peer) or losing something of worth (e.g. esteem, social perception, or personal best) that make the performance/assessment of “high stakes” value.

I have briefly touched the Before, During, and After experiences of these music students. It was seen by many respondents that the anxiety they experienced, created by the pressure to perform well, caused the student to shift focus from the task on-hand to relevant and distracting thoughts, feelings, and emotions. It can also be perceived that students who did not place much value on an assessment, especially in a classroom exam, did not experience a high level of anxiety. I have also discerned that students had varying degrees of anxiety that came from the students’ own personal characteristics, how mastered the piece or subject matter was, the stress that the testing environment and time created for the student, and the students’ thoughts concerning the performance or exam. Many of the respondents explained their different levels of anxiety in regard to different assessment contexts, especially when exploring situations that range from individual practice, to ensemble performance, then into a solo setting. There were no “group classroom assessments” that were mentioned by the students, so that would be interesting to explore in the future. Although many students did well, but still have a high degree of anxiety; I considered them to have experienced persistent and negative apprehension and
actual impairment of their performance skills both in a public and individual setting to a point that did not necessarily reflect the students’ musical or academic skill, training, and level of preparation.

In this research, I found that more students were concerned about their musical performance rather than the assessments experienced in the classroom. Many of the vignettes regarding academic assessment perceived exams to be a “means to an end,” whereas music performance was seen as a potential “artistic accomplishment” by many of the students. In using all music students for this research, I didn’t realize the bias the respondents would have between music performance and classroom examinations until after analyzing their responses. It may have been more informative to use non-music students whose primary assessment are more “traditionally” structured, along with utilizing music students. Although I did not use solely traditional classroom-exam-students, the ideas concerning their thoughts and perception regarding an upcoming exam or performance can still be applied. I mentioned that anticipation for an exam alongside the testing history of the student contribute to anxiety. Student vignettes did not specifically mention waiting for the results of the grade, the time after receiving the grade, the way they considered themselves after receiving the grade, and the way they consider themselves after receiving the grade. Rather, students more clearly relayed their performance experience and the “grade” the audience gave (and the grade they gave themselves) concerning the performance. I believe these perceptions contribute to future anxiety either during a performance or a test because the student deems the performance
to be important in achieving their goals. If the same weight were placed on classroom exams by the student, I believe this would ring just as true.

Time was also an aspect that came up in both categories of MPA and TA. Some students plainly mentioned that time, particularly the shortness and mismanagement of it, had a great effect on their experience of anxiety. Many other students did not specifically mention time as the contributor to their anxiety, but their responses resembled that which students who mentioned “time” plainly experienced. There is a balancing act that occurs between time and resources into the refinement of skill and knowledge, especially for the music student. They must work particularly long and hard to achieve a certain level of competence. This is true for their academic experience even if it’s just a “means to an end.” Students stressed how they would rather spend time honing their musical craft rather than preparing for an exam that may not even directly affect their perceived goals. I agree that in both MPA and TA that a long-term experience of deadlines based on your skill and aptitude may create conditions that are more stressful and anxiety-filled and may overlap into other spheres of the students’ responsibilities and experience in college.

I previously mentioned a “continuum of severity” that may be a correlative experience in both MPA and TA. Students shared experiences that involved stressors such as audience critical perspective, the students’ own personal standards, and personal ambition. This continuum was seen in the respondents’ answers ranging from slight nervousness to debilitating anxiety. The attitude toward a performance on stage or assessment in the classroom was shared by students. Students must deal with stresses having to perform under conditions of high-adrenaline flow, fatigue, social pressure,
financial security (as with the case of employment auditions), along with the students’ personal perception and their physiological condition. Both of the students’ experiences with MPA and TA demonstrated that there were some shared reactions or triggers even though the students felt both MPA and TA were unrelated.

Some issues arose related to student participation and response to the survey. I was hoping more students would have participated in the survey, but the actual participation was uneven among institutions. The music conservatory had the most respondents with the least coming from the institution primarily focused on music education. The quality of the responses was also unbalanced. Some responses were excellent and in-depth providing a better context to the study. Other responses, even with the follow-up questions, were perfunctory. Unfortunately, answers to many survey questions were irrelevant possibly due to the student not reading the question carefully. A possible study that would yield more definitive results would be using a survey population exclusively devoted to music performance compared with a population exclusively utilizing traditional classroom assessment.

Important aspects that may be taken from this study and may prove to be helpful to music students involve time management, opportunities for performance, and critical, yet positive support from the institution. Many of the respondents mentioned not having enough time to complete study or practice. Respondents wished they had practiced or studied more efficiently. Others have explained that they do not really know how to study/practice or know they could do either more effectively. I think educators should explore this issue more with their student, especially during private lessons or preparing
for exams in college. Perhaps many times educators in higher education assume that their students, especially freshman, already know how to study or rehearse. It would prove beneficial to have a conversation that spans anxiety experiences, including triggers and remedies, among undergraduate and graduate students. This would possibly be a positive experience for both groups – graduates sharing life experiences and the undergraduates reminding the graduates of the roots of their own experiences with anxiety.

In regard to opportunities for performance, I mainly suggest not just having higher frequencies of performance, but performances that are quite informal and “low stakes” and allow for immediate and constructive critique of the performance. I feel classroom assessments should be handled in the same way. This would not only allow students to gain more opportunities to make mistakes but create a situation that would allow for increased adrenaline and excitement, but at the same time allow the performer and the students in the audience or classroom, to learn from the process and expectation. I believe this would also create an environment that would increase conceptual reinforcement and give students the opportunity to test an “apparent curriculum” that would possibly involve the discussion of time management, physiological issues, and environmental assessment conditions among students and teachers.

This directly relates to critical, yet positive support from the institution. I do not suggest creating an environment of coddling, but an atmosphere of objective observation, honesty, student accountability, and constant and immediate positive feedback. I perceived from the responses from students that there was a fear of disappointing others, not having clarity of the expectations of instructors, the student not knowing how they are
really doing regarding their music and academics and feeling too shy to ask questions or request help. I sensed there was sometimes an “all or nothing” attitude among the respondents, a type of, “either you get or don’t.” The consistent and frequent positive feedback would give direction to the student, prepare the student of how to receive professional admonishment with grace, and allow the student to build resilience and endurance for performance, exams, and other “high stakes” situations.

As the study of MPA and TA are explored, a particular use of the quantitative method to exact a correlation would be beneficial and placing that data in context with the relationships found in exploratory research like my own. Curriculum could also be explored involving students’ experience in utilizing offered techniques to relieve the experience of anxiety. A cooperation between educators and their students would further allow a shared experience of MPA and TA to better inform a programs’ curricular and instructional structure. This type of formative assessment would mainly focus on the experience of the students and how to better address and process the experience of MPA and TA.

Some limitations that arose regarding the research involved using more institutions for the survey to facilitate a larger pool of students. Unfortunately, several planned institutions had a survey schedule in place with a waiting list in order to prevent their students from being “over-surveyed.” Another limitation that may just be a characteristic of the survey population is their individual and program schedules. Music students must balance academic assignments, rehearsal and performance responsibilities, and personal obligations. Take a twenty to thirty minutes survey may not have been a
priority on their daily schedule. As previously mentioned, I have chosen to use music students who experienced both music performance and academic test-taking rather than utilizing students who were studying separate disciplines. I had the notion that I would receive a balanced response from the music students regarding their experience in music performance and classroom assessment. I have found that pool of students I have utilized seemed to have placed more value on their music performance rather than classroom experience.

Music performance and demonstrating one’s knowledge and skill with test taking are aspects of a formal music education that will remain in its current state for the inevitable future. Musicians can, by nature, be competitive and highly critical of themselves. The same seems true for those immersed in academics. At the end of the day, however, it is my hope that students of music continue to enjoy in and share what they do best – cultivate their passion of music for themselves and others.
APPENDIX A

SURVEY QUESTIONNAIRE
**Contextual Questions:**
What is your gender?
What year in college are you?
Are you on a semester or quarter system?
What is your primary instrument?
How many years have you been taking private lessons on your primary instrument? (one-on-one lessons)
How many years have you played in a school ensemble (e.g. band, choir, orchestra)?
Do you desire to be a professional musician?
How old were you when you first performed publicly on your primary instrument (e.g. first formal recital)?
How often do you perform formally as a soloist or in an ensemble in front of an audience? (e.g. peers, faculty, public)
Do you perform more as a soloist or ensemble member?
How many days of the week do you practice?
How many minutes, on average, do you practice during a given day?
How skillful do you generally see yourself as a music performer?
How skillful do you generally see yourself academically?

**Descriptive Answers - Musical Performance**

*Musical Performance and Classroom Exams are considered by students to be “high stakes assessments.” These could lead to possible experiences of performance and/or test anxiety, which may either help, hinder, or have no effect on an individual's performance.*

Please answer the following questions in retrospect thoughtfully and to the best of your ability.

Take a moment and choose a preparation and performance situation you experienced in the most recent past.

***PLEASE BE AS DESCRIPTIVE AS POSSIBLE (the more you explain, the better a "picture is painted")

[Consider reflecting on feedback you received from peers or your instructor...]

**Type of Performance:** (choose one)

End semester jury/board
Senior recital
Junior recital
Chamber music concert
Other
**Repertoire**: What piece were you recently working on? [or are currently worked on] e.g. Debussy's "Prelude" from the Suite Bergamesque for piano

**During Practice**: 
Describe your process of practice/rehearsing?

During practice, what thoughts entered your mind regarding the upcoming performance? What did you feel emotionally during your rehearsing for an upcoming performance?

**Day of Performance**: 
Describe your emotional and physiological state during the day until the performance.

**During Performance**: 
On a scale from 1-5, how anxious were you feeling? 
Describe your experience during the performance? 
How well did the performance generally go? 
What went well during the performance? 
What did you perceive went badly during the performance?

**Post-Performance**
What was your emotion after your performance? 
If you had the opportunity, what would have done differently in preparation for this performance?

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**Descriptive Answers Classroom Assessment**

Musical Performance and Classroom Exams are both considered by students to be “high stakes assessments.” These could lead to possible experiences of performance and/or test anxiety, which may either help, hinder, or have no effect on an individual's performance. Please answer the following questions in retrospect thoughtfully and to the best of your ability.

Choose a study or exam (non-musical performance) situation you experienced in the most recent past. **Please be as descriptive as possible.**

**Test Subject**:
What was the test on? 
*(e.g. a music theory quiz on secondary function; a music history quiz on the Rococo Era; an anthropological exam on ethnocentrism and its relation to biological inheritance...)*

How was the test structured? 
Do you perceive this to be a difficult class?
Pre-Exam:
How much time do you use studying for a particular exam?
Describe your process of studying.
During studying, what thoughts entered your mind regarding the upcoming exam?
What did you emotionally feel during your studying for an upcoming exam?

During Exam:
On a scale from 1-5, how anxious were you feeling?
Describe your experience during the exam.
What went well during the exam?
What did you perceive went badly during the exam?

Post-Exam
What was your feeling after you completed and submitted the exam?
If you had the opportunity, what would have done differently in preparation for this exam?

General Comments:
Any general comments you would like the researcher to know about your personal experience of test anxiety and/or performance anxiety?

Two Final Questions:
If you experienced music performance anxiety or testing anxiety, what have you attempted to help stem or reduce anxiety?

Do you think there is a correlation between your experience with your musical performance and test performance? If yes or no, why?

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REFERENCE LIST


VITA

Jordan Chua is the son of Dr. Fairbank and Ludinea Chua. He is also brother to Dr. Jerell Chua and uncle (*ninong*) to Olympia Chua. He was born in Chicago, Illinois on November 24, 1980. He currently resides in Chicago enjoying beautiful Lake Michigan and the bustle of city life. Jordan graduated from Loyola University Chicago in 2004 with a Bachelor of Arts dual degree in Music and Philosophy. In 2009, he completed a Master of Music Education and Illinois Teacher Certification from VanderCook College of Music. Jordan has worked in K-12 education for 12 years in the capacity of music instruction and school administration.

Currently, Jordan is working as Head of Music Publication with Lyon and Healy Publications helping to further the preservation and distribution of music repertoire to students, teachers, and professional performers. Jordan also works as an ecclesiastical musician in both the Roman Catholic and Evangelical Lutheran traditions.
DISSEPTION COMMITTEE

The dissertation submitted Jordan Diego Chua has been read and approved by the following committee:

Michelle Lia, Ed.D., Director  
Clinical Assistant Professor, School of Education and Assistant Director for Professional Development, Andrew M. Greeley Center for Catholic Education  
Loyola University Chicago

Ann Marie Ryan, Ph.D.  
Associate Professor, School of Education  
Loyola University Chicago

Yu-Sui Hung, DMA  
Assistant Professor  
VanderCook College of Music