

Running head: THE ANXIOUS MUSICIAN

1

The Anxious Musician: Coping Strategies Used to Combat Music Performance Anxiety

Abigail Lockhart

A Senior Thesis submitted in partial fulfillment
of the requirements for graduation
in the Honors Program
Liberty University
Spring 2019

Acceptance of Senior Honors Thesis

This Senior Honors Thesis is accepted in partial fulfillment of the requirements for graduation from the Honors Program of Liberty University.

Cassandra Hibbard, D.M.A.
Thesis Chair

Rebecca Watson, D.M.A.
Committee Member

Marilyn Gadowski, Ph.D.
Committee Member

James H. Nutter, D.A.
Honors Director

Date

Abstract

Music Performance Anxiety, or MPA, affects over 20% of musicians, regardless of age, experience, or nationality. MPA is a form of social anxiety that causes the performer great distress before and during a performance experience, often causing the performance to have a less favorable outcome. As this is such a common occurrence in the field of music, it is important for teachers and students alike to understand the basis of anxiety as well as how to deal with its effects. Unfortunately, there is no simple solution to conquer anxiety, but through the implementation of various coping strategies, musicians can have greater success and more enjoyable performance experiences.

Table of Contents

| | |
|--|----|
| The Anxious Musician..... | 5 |
| What is Anxiety?..... | 5 |
| Biological Basis of Anxiety..... | 6 |
| Psychological Basis of Anxiety..... | 7 |
| Music Performance Anxiety..... | 8 |
| Causes of Music Performance Anxiety..... | 9 |
| Effects of Anxiety on the Musical Performance..... | 11 |
| Physiological Effects..... | 11 |
| Psychological Effects..... | 14 |
| Coping Strategies..... | 15 |
| Negative Coping Strategies..... | 17 |
| Substance Abuse..... | 17 |
| Avoidance Strategies..... | 18 |
| Demand of Social Support..... | 19 |
| Positive Coping Strategies..... | 19 |
| Beta Blockers..... | 20 |
| Increased Preparation..... | 21 |
| Cognitive Strategies..... | 22 |
| Flow..... | 24 |
| Hypnotherapy..... | 25 |
| Reflections and Conclusions..... | 26 |

The Anxious Musician: Coping Strategies Used to Combat Music Performance Anxiety

Music Performance Anxiety, or MPA, is the extreme and often debilitating fear of performing in front of an audience (Parncutt & McPherson, 2002). This experience is shared by over 20% of professional musicians and has, to an extent, always been present in the field of performing arts (Burin, 2017). Chopin himself admitted to avoiding performances due to extreme nerves, stating, “I am not fitted to give concerts. The audience intimidates me, I feel choked by its breath, paralyzed by its curious glances, struck dumb by all those strange faces” (Kenny, 2011, p. 2). As MPA impacts such a large group of musicians, it is important for teachers and students alike to understand the basis of anxiety as well as how to deal with its effects.

Anxiety

Anxiety is the body’s natural response to stress; however, many individuals experience anxiety and panic at high rate that often interferes with the rest of their lives. According to the Anxiety and Depression Association of America, anxiety disorders are the most common mental illness in the United States, with over 18% of the population suffering from a form of an anxiety disorder (Anxiety and Depression Association of America, 2018). Anxiety stems from excessive, often irrational, fear and can produce a variety of harmful side effects, including severe responses such as hyperventilation, chest pains, and panic attacks. Additionally, anxiety is central to most psychological disorders, including music performance anxiety, or MPA. Thus, it is important to understand what causes anxiety in order to address it in a music performance context (Kenny, 2011).

Biological Bases of Anxiety

Although anxiety is typically viewed as disruptive in the modern world, it originated as a survival response. Charles Darwin believed that both humans and animals responded to dangerous stimuli with a series of physiological responses which have become commonly known as the “fight or flight” response (Kenny, 2011, p. 19). The presence of threatening stimuli causes the state of homeostasis, or balance, in the brain to be disrupted. The sympathetic branch of the nervous system responds by preparing the body for danger. This causes an acceleration of heart rate, dilation or constriction of blood vessels, pupil dilation, and, in extreme circumstances, even loss of vision and hyperventilation. The parasympathetic system produces “tonic immobility,” which is often interpreted as “freezing” or “playing dead” (Kenny, 2011, p. 20). When anxiety is triggered in a person, both sympathetic and parasympathetic responses are activated, causing a mix of symptoms in the individual (Kenny, 2011).

Physiological symptoms in individuals with anxiety suggest that the body’s response to anxiety triggers a disruption in healthy neurotransmitter function (Kenny, 2011). Noradrenaline, or norepinephrine, a hormone used by the sympathetic nervous system, is responsible for changes in the cardiovascular system when exposed to distress (Goldstein, 2010). One main function of noradrenaline is to prepare the body for action, as the release of noradrenaline causes increased heart rate, dilation of pupils, and increased blood pressure (Coull, Jones, Egan, Frith, & Maze, 2004). Many of these symptoms are often side effects of anxiety and panic attacks, caused by a disruption of normal noradrenaline levels (Goldstein, 2010).

Several other disruptions in normal brain activity can lead to increased anxiety. A deficiency of the hormone serotonin causes irregular moods and contributes to depression and anxiety (Judd, 1985). Another contributor is the amygdala, a structure in the brain that controls the body's fear responses. An overactive amygdala can cause a more heightened response to fear, which leads to an increase in anxiety (Social Anxiety Disorder, 2017).

Psychological Basis of Anxiety

According to the American Psychiatric Association (2013), Performance Anxiety is a manifestation of social anxiety disorder. Social anxiety is the fear of being judged in a negative manner by others, and it often leads to feelings of self-consciousness, inadequacy, humiliation, and depression, according to the Social Anxiety Institute. Over 14% of the population suffers from some form of social anxiety, and it is much more than a simple fear of speaking in front of people. Individuals who struggle with generalized social anxiety usually experience distress in a variety of situations, including meeting new people, being criticized, and being watched when doing something (Richards, 2019).

Many different variations of social anxiety are more specific. A common one is the fear of public speaking, but there are various specific social anxieties, including music performance anxiety. People who struggle with these specific anxieties generally do not experience the same emotional distress in all social situations the same way that those with generalized social anxiety do. Their anxiety is generally limited to the experiences which trigger anxiety, such as performing on stage (Richards, 2019).

The exact cause of social anxiety is unknown, but most leading researchers believe that it is caused by a combination of environmental factors, inherited traits, and

physical abnormalities. Environmental factors include toxic previous experiences, such as family conflict, abuse, and bullying. Researchers are not certain if anxiety disorders can be genetically traced, but children who have a parent with anxiety are more likely to develop a disorder also through learning the behavior from their parent. Additionally, physical abnormalities such as a hormonal imbalance in the brain can increase presence of anxiety (Higuera, 2016).

Music Performance Anxiety

According to Hoffman (2012), MPA is “the experience of persisting, distressful apprehension about and/or actual impairment of performance skills in a public context, to a degree unwarranted given the individual’s musical aptitude, training, and level of preparation” (p. 17). It might be tempting to view MPA as a challenge that musicians must overcome as they grow in their abilities, but MPA does not discriminate based on experience, as musicians of all levels have reported struggling with anxiety (Zarza-Alzugaray, 2017). Furthermore, anxiety cannot be easily overcome through a set of steps; MPA is often a lifelong struggle, and musicians must learn to cope, rather than treat it as a hurdle to overcome (Kenny, 2011).

According to the Yerkes-Dodson law, a moderate amount of arousal is necessary for optimal performance (Matei & Ginsborg, 2017). Some degree of adrenaline and nerves add excitement and electricity to the performance, but a heightened sense of panic can derail even the most skilled of performers (Parncutt & McPherson, 2002). Unfortunately, for almost a fourth of all professional musicians, this is a hurdle that must be overcome, as it is shown to lower levels of satisfaction in music, often causing musicians to burn out and even give it up entirely (Kenny, 2011). According to a recent

survey, over 20% of music conservatory students abandon their studies due to problems with MPA (Zarza-Alzugaray, 2017).

Causes of Music Performance Anxiety

A number of factors contribute to significant MPA, including personal history, preparation for the performance, and the way in which one views the self. In order to address the best possible solutions for MPA, it is important to understand that there are many possible causes and triggers of MPA, and that these causes do not apply evenly to everyone. Each individual is affected by MPA differently, based on the individual's past experiences, mental health, and level of musical ability (Kenny, 2011).

Barlow's Triple Vulnerability Model describes the origins of anxiety and why it persists in certain individuals. It suggests three risk factors that cause anxiety to develop: a heritably biological vulnerability, a generalized psychological vulnerability (based on early experiences), and a specific psychological vulnerability. This model postulates that a combination of these three factors make an individual more susceptible to anxiety, but it does not state that an individual must have all three factors in order to be anxious. It is important to note that there are a variety of factors behind MPA, or even generalized anxiety, and that everyone responds differently based on their own unique traits (Zarza-Alzugaray, 2017).

One leading factor that can lead to MPA is a personal or genetic predisposition to anxiety. If a musician has already been diagnosed with a general anxiety disorder or a social anxiety disorder, it is far easier for the individual to be afflicted with MPA as well

(Matei & Ginsborg, 2017). Additionally, the upbringing and education of the musician has a large part in how they will view performances. If their teacher did a good job of framing the performance in a positive light, then it is likely that as an adult, the musician will continue to view the performance positively (Zarza-Alzugaray, 2017). Likewise, if a musician has had a history of unsuccessful performing experiences, especially at a young age, the musician is far more likely to be predisposed to viewing performance as a negative experience. This causes the individual to dread upcoming performances, likely due to a fear that one will fail again. Another factor that is worth considering is gender; women are far more likely to report high levels of MPA than men (LeBlanc, Jin, Obert, & Siivola, 1997). This is in line with the statistics of general anxiety disorders, as women have twice the risk for developing a generalized anxiety disorder as opposed to men (American Psychiatric Association, 2013).

Another leading cause of MPA is inadequate preparation for the performance. When musicians have not thoroughly learned the music, it is more likely that they will face more nervousness and uncertainty, especially when they are expected to have the music memorized (Helding, 2016). Additionally, insufficient time spent in rehearsals can lead to more apprehension about a performance. This greatly affects orchestral musicians, who are expected to learn and perfect music in a short time period without many rehearsals, and often must rely on sight-reading in order to succeed (Matei & Ginsborg, 2017). In a survey of New Zealand tertiary-level music students, the students reported that inadequate preparation for the performance was the number one reason behind their MPA (Kenny, 2011).

MPA can also be caused by excessive pressure from self. Music is a demanding field that deals with outside opinions and judgments. This can be easy to internalize, often causing negative self-talk and unrealistic expectations. In the survey cited above, the New Zealand survey showed that pressure from self was the number two reason behind high levels of MPA. This is especially evident in individuals who struggle with perfectionism, who tend to dismiss an entire performance if there is just a single mistake. Perfectionism is a common vice among musicians, as the performing arts are an exact discipline, with musicians often believing that they owe it to the audience to deliver a perfect performance (Kenny, 2011). Unfortunately, the fear of making mistakes only leads to making more mistakes. Additionally, negative self-talk reinforces the idea that a performance is worthy of fear and apprehension, which leads to higher levels of MPA, in addition to a greater aversion to performing (Hoffman, 2012).

Effects on the Musical Performance

The main reason why MPA is a concern in the musical community is due to its harmful effects on the performance. Performing on an instrument requires precise control over fine motor skills as well as great cognitive awareness. Anxiety disrupts the musician's control over the technical abilities required to play an instrument with proficient mastery. As a result, it is difficult for the musician to have a positive performance experience. In order to decide how to overcome MPA, it is important to understand the ways in which anxiety disrupts the musical performance (Kenny, 2011).

Physiological effects. MPA is caused by the activation of the brain's emergency system, which activates the sympathetic branch of the nervous system and increases the flow of adrenaline into the bloodstream (Judd, 1985). Although these systems would

serve well in protecting the body from a physical threat, unfortunately, in a music performance setting, the side effects can negatively interfere with the act of creating music (Parncutt & McPherson, 2002). In fact, the main self-reported complaint of frequent sufferers of MPA is that the physiological symptoms and respiratory manifestations had a drastic effect on the success of the performance (Studer, 2012). Musicians should portray confidence when on stage, but trembling and excess muscular tension can prevent them from executing the skills required in order to perform excellently on their instruments (Sieger, 2017).

One symptom brought about by excessive MPA is hyperventilation, in which the individual breathes much quicker than what is normally considered to be healthy. Normal breathing has a healthy balance of breathing in oxygen and breathing out carbon dioxide, but when an individual hyperventilates, they exhale more than they inhale, causing more CO₂ to be eliminated than produced. This disrupts the normal diffusion of oxygen into the tissues of the body, which causes trembling, heart palpitations, chest pain, and disturbances in breathing. When hyperventilating, the breathing pattern is much more irregular, which causes problems for musicians whose instrument requires proper breath support. Additionally, hyperventilation can also cause vasoconstriction, or narrowing of the blood vessels, which impairs the body's circulation and reduces the feeling in the body, especially in the extremities (Studer, 2012). This is especially harmful in musical performances, where precision of movement is important (Kenny, 2011).

Another physiological effect of MPA is an increase in the heart rate. In extreme cases, there can be severe palpitations and even chest pain. Additionally, persistent anxiety can raise the risk for coronary events such as heart attacks. Anxiety can also

disrupt digestion, causing the feeling of “butterflies” in the stomach (Parncutt & McPherson, 2002).

The activation of the body’s defense system also redirects body fluids such as saliva into the bloodstream, causing the sensation of a dry mouth. When under significant distress, the body also activates a cooling system, which causes the body to sweat more than necessary and even causes the extremities to feel cold and numb. This is the “clammy hands” sensation that many musicians report occurring before a performance (Parncutt & McPherson, 2002, p. 112).

MPA also puts the individual under a high level of autonomic arousal, which fatigues the musician. This is especially an issue in a long performance (i.e., an hour-long solo recital), where the musician is expected to be at peak performance, without extended breaks to recover. This increase in arousal also disrupts and typically increases the musician’s internal tempo, explaining the frequent increase in tempo during performance (Yoshie, 2009).

An unhealthy amount of arousal can also cause increased muscle activity and joint stiffness, which can significantly alter fine motor skills, especially when expressing dynamics or playing technically challenging passages (Yoshie, 2009). Unfortunately, if a musician plays regularly under stress and with stiff muscles, it is easy for muscle-related injuries such as tendonitis to develop. In a medical study conducted in 1997, playing-related musculoskeletal disorders were found in approximately 47% of adult musicians and 17% of secondary music students. It is important that musicians learn to perform without tension, as tendonitis has the potential to derail the careers of even the most skilled musicians (Zaza, 1998).

In a physical survival setting, these reactions would serve the individual well, but in a musical setting, they are harmful and distract from the act of making music (LeBlanc et al., 1997). In a survey of American collegiate musicians, 30% stated that the physiological side effects of MPA had a “moderate impairment” on their performance, while 17% said that it had a “marked impairment.” In this study, 57% of the participants reported a rapid heart rate, 46% reported trembling, and 40% reported a shortness of breath. As over half of musicians in the survey suffered from at least one of the physiological effects, it is clear that MPA has a drastic and important effect on the performance (Parncutt & McPherson, 2002).

Psychological effects. MPA is not limited in its effects to physical symptoms; it also has a great effect on the mind. The psychological side effects of MPA can affect the quality of a musical performance, as performance is an incredibly mental practice. Some musicians even compared it to a mental game, explaining that performing well has much to do with cognitive awareness and control (Kenny, 2011). This is not just limited to whether or not the musician makes mistakes, as artistic expression and dynamics also require focus and high-order associative functions (Yoshie, 2009).

MPA significantly impairs cognitive function during a performance. When anxious, the musician finds it much more difficult to focus on the act of making music, which can lead to various problems that pose threat to the musical experience, including poor interpretation of the music, memory problems, and distorted thoughts (Burin, 2017). Additionally, after a slip-up, whether just a small mistake or a major memory slip, it is difficult for the anxious musician to continue going without faltering even more (Kenny, 2011).

Electromyography tests, or EMGs, reveal that musicians are much more anxious in the competition or performance condition, where an audience is judging the outcome, than a practice or rehearsal condition (Yoshie, 2009). In fact, the presence of an audience is often enough to cause a musician who was perfect in practice to make excessive mistakes on stage. The increase in anxiety as a result of the presence of an audience causes the musician to shift attention from making music to task-irrelevant social cues (Yoshie, 2009). The musician can easily become too focused in the audience's perceptions and lose sight of the task taking place. Fear of negative evaluation causes more severe MPA to occur, and when a performer focuses on the audience's perceptions, the musician cannot sufficiently engage in the music and often make more mistakes as a result (Biasutti, 2014).

Additionally, MPA generally results in the musician catastrophizing as soon as they make a mistake, which unfortunately tends to lead to more mistakes due to an altered state of focus (Sieger, 2017). This is especially the case in individuals who struggle with perfectionism, which causes excessive preoccupation with mistakes, incessant doubts about one's actions, and negative responses to imperfections and failures. Perfectionists use much energy when they engage in evaluative behaviors and as a result have less energy to focus on the performance, allowing the stress of evaluation to take precedence over the act of making music. Individuals with high levels of MPA view themselves and the performance situation differently, typically having negative expectations prior to walking on stage, strong negative bias in self-evaluation, and an expectancy that performance will be negatively evaluated by others. They are

preoccupied with the consequences of a poor performance and are highly susceptible to changes in the audience's reactions (Burin, 2017).

One issue is that MPA is not only limited to the moment of the performance. It is entirely possible for MPA to develop several days prior and continue to grow until the performance is over (Burin, 2017). This causes a number of unpleasant emotional side effects for the musician, including stress, apprehension, insecurity, and dread. It is possible that this is the brain's way of bracing itself for the possibility of a negative or humiliating experience, but it causes much unpleasantness to the musician (Burin, 2017).

Coping Strategies

One common fallacy with MPA is the assumption that musicians will become desensitized to the effects of anxiety by being more exposed to performance situations (Burin, 2017). Unfortunately, this is far from the truth; MPA is often a lifetime struggle, experienced even by adult musicians who perform multiple times a week. Thus, it is necessary for musicians who struggle with anxiety to develop coping strategies in order to continue to have a fulfilling performing career. Unfortunately, even though over 25% of musicians consider MPA to be a serious barrier that impedes their career, few individuals who are affected by MPA choose to seek professional treatment (Sieger, 2017).

Coping strategies are defined as "a set of skills that people use to deal with adverse and stressful situations" (Burin, 2017, p. 131). As there are no clear treatment plans for MPA, it is important that musicians develop their own strategies in order to overcome anxiety in the manner most effective for them. Treatment should be customized for each individual, and it is important that musicians develop an arsenal of

strategies in order to combat MPA in a number of circumstances (Sieger, 2017). In fact, the manner in which anxiety is confronted could show benefits to the musician's overall growth as a performer. Some individuals implement routines the day of their performance, while others use more long-term treatments, such as cognitive strategies designed to reorient negative thought processes (Sieger, 2017). No one solution is best, and even those that have shown benefits in studies are still in need of verification and further testing (Helding, 2016).

Coping mechanisms range widely, from beneficial to harmful (Helding, 2016). A survey of orchestral musicians revealed that the main coping strategies used included deep breathing, positive self-talk, greater preparation, relaxation techniques, hypnosis, use of medication, and use of alcohol (Burin, 2017). Clearly, some of these techniques are more beneficial than others, and it is important that musicians use good judgment in finding the solution best for their situations (Matei & Ginsborg, 2017).

Negative Coping Strategies

Although it is important for musicians to develop strategies in order to overcome MPA, not every method of coping is beneficial. It is important to note that just because a certain method works does not mean that is the most effective and healthy way of reaching the goal. Some examples of negative coping strategies include drug and alcohol abuse, avoidance strategies, and demand of social support. A study of advanced conservatory students and professionals revealed that coping strategies based on social support and avoidance caused the greatest amount of MPA (Biasutti, 2014).

Unfortunately, many musicians rely on these tactics. Even though they might be effective

for a short time, the side effects eventually become damaging to the musician as a whole, making the coping strategy no longer a viable option (Parncutt & McPherson, 2002).

Substance abuse. Unfortunately, alcohol and drugs are widely used by musicians and artists, as they numb the negative feelings associated with performance anxiety. Some performing artists even believe that drugs open the brain, allowing them to see new possibilities in their art. For example, the popular rock group *The Beatles* used marijuana, LSD, cocaine, and heroine throughout the creation of several of their albums (Sostar et al., 2009). A 2012 survey found that 12.9% of the individuals who struggled with heavy substance abuse were employed in the music or art field, putting this industry third highest on the list. In a survey of Australian musicians who struggled with MPA, 12% admitted using alcohol to alleviate MPA, while 5% used anxiolytics, and 4% used antidepressants (Bush & Lipari, 2012).

This is not a new occurrence in the world of music, as numerous famous composers are all known to have experimented with drugs or alcohol during their period of composition. Beethoven was known for drinking an excess of red wine in his later life, and many scholars believe that it had a large part in his death (Sostar et al., 2009). Additionally, Berlioz admitted to using opium frequently while composing, as he believed it would “open his mind’s eye” (Sostar et al., 2009, p. 3). Terry Riley, a 20th century minimalist composer, experimented with a number of hallucinogens throughout his lifetime, once even stating that LSD was “the element of the consciousness-raising movement” (Sostar et al., 2009, p. 5).

Although drugs and alcohol succeed at minimizing negative effects of performance anxiety, they create a myriad of other problems for the musician. The use of

substances may get a musician through a performance, but they are ultimately destructive to the life and career of the individual. Not only does consistent drug use lower the effectiveness of the drug as well as reduce the excitement and adrenaline of the performance, substance use creates dependency, and many musicians are unable to continue to perform or create music at all as soon as they halt usage of the drug. Additionally, according to the CDC (Center for Disease Control and Prevention, 2018), every day in the United States, over 100 people die of a drug overdose, and those working in the entertainment industry make up over 30% of all drug-related deaths. Thus, despite the short-term effectiveness of drug use, substance use is destructive to the career of the musician and should not be used as a solution to performance anxiety (Parncutt & McPherson, 2002).

Avoidance strategies. Avoidance-oriented coping is based on the assumption that, if the individual internally denies that the stressful event is about to occur, then he or she will not feel the effects of stress and anxiety leading up to the event. In musicians, this manifests itself by the musician not acknowledging the performance until the moment of the event, not giving stress enough time to set in. Unfortunately, a study conducted on MPA levels in conservatory music students found that there was no significant correlation between avoidance-oriented coping and lower levels of MPA (Biasutti, 2014). Additionally, avoidance-based coping trains the mind to develop an unhealthy response to stress. Avoidance-based coping is directly linked to depression and increases overall stress in the individual (Holahan, Moos, Holahan, Brennan, & Schutte, 2005). As a result, this method of coping should not be relied upon by performing musicians.

Demand of social support. As the field of music performance is largely based on the judgment of others, especially in audition or competition settings, it can be easy for musicians to put great stock in the opinions of others. As a result, many musicians perform with less anxiety when their self-esteem is higher, or when they feel as if their performance may be better received by others (Kenny, 2011). This leads to a demand of social support when the musician is facing any stressful situation. A study on the coping strategies of professional musicians showed that coping strategies based on social support did little to nothing to reduce the overall amount of MPA in the musician. Although social support can aid the individual and raise overall self-esteem, it should not be a tool that is relied upon in order to combat MPA (Biasutti, 2014).

Positive Coping Strategies

A number of coping strategies enable the musician to perform well without the presence of unhealthy side effects. According to a survey conducted in 2014, the most widely used positive coping strategies include increasing practice, deep breathing, positive self-talk, mock performance practice, becoming familiar with the performance space, engaging in relaxation or meditation prior to the performance, and the use of beta blockers (Matei & Ginsborg, 2017). All of these techniques enable the performer to be more at ease in front of an audience without extreme negative side effects. In order to have a successful performing experience, the musician should research and test various coping strategies in order to develop a method that best works for his or her needs. This may involve integrating many of the following solutions, as well as incorporating a routine and lifestyle that aids them best (Kenny, 2011).

Beta blockers. Beta blocker medications are generally believed to be a positive coping strategy as they are effective at minimizing the side effects of MPA. As a result, they are widely used by regularly-performing musicians. In a survey of Australian professional musicians, 31% reported that they regularly took beta-blockers to alleviate the symptoms of MPA (Matei & Ginsborg, 2017). Beta blockers inhibit the peripheral autonomic symptoms, blocking the body's typical response to stress. Proponents of the medication claim that it effectively clears the musician's mind and eliminates issues such as trembling or butterflies (Parncutt & McPherson, 2002).

However, although beta blockers are used by over a quarter of musicians, many researchers argue that they are not the more effective manner of solving MPA. Beta blockers might limit the physical side effects of performance anxiety, but they also limit the release of adrenaline in the body. Many performers have learned that it is more effective to tame anxiety through various coping strategies, to "ride the wave of exhilaration that only a public performance offers," rather than try to rid the effects of anxiety completely (Helding, 2016, p. 85). When medicated, the edge of live performance is lost, and the excitement of the performance can suffer as a result. Additionally, the performer will not get the enjoyable rush of adrenaline upon finishing a concert and might be less inclined to pursue performances in the future (Helding, 2016).

According to the Yerkes-Dodson Law, a moderate level of arousal is optimal for stress-related tasks, including music performance (Parncutt & McPherson, 2002). Beta blockers minimize the amount of arousal that the musician is under, which limits the musician from achieving full potential on stage. Even though they limit the negative effects of arousal, they fail to improve the quality of the music as a whole (Juncos, 2016).

More rigorous study and research is necessary in order to determine the effectiveness of beta blockers and if they are an adequate solution for MPA (Burin, 2017).

Increased preparation. As a main cause of MPA is insufficient preparation for the performance, it is important that the musician invest significant time into preparing for the performance, both practically and mentally. Increased preparation for the performance does not strictly mean physical practice; it also refers to preparing for every aspect of the performance. Musicians should feel comfortable with the music that they have prepared, as well as the performance space and their routine for the day of the event (Helding, 2016).

In a 2014 survey of professional musicians, 91% of participants responded that increasing practice was the most effective coping strategy for preparing for their upcoming performance (Matei & Ginsborg, 2017). If musicians feel inadequately prepared for the concert, then they will be much more likely to stumble and make more mistakes when put under pressure. It is important that the musician spend enough time practicing and solidifying prior to the performance so that the musician has full confidence in the musical interpretation when they step onto the stage. They should also make sure that their practice is deliberate, well-thought-out practice, not meaningless practice, such as running through a piece mindlessly without any intentionality (Helding, 2016). Furthermore, the musician should be intentional about the music chosen to present when performing, as the repertoire chosen to perform can be an indicator of MPA. If they select music that is incompatible with their skill level or ability to prepare, it can cause more anxiety to occur, as they are less likely to be adequately prepared for the performance. (Burin, 2017).

The musician should also be prepared for the day of the performance mentally as well as physically. One way that this can be achieved is by establishing a pre-performance ritual. On the day of the performance, the performer should have a set plan in place in order to feel at ease when the moment arrives (Helding, 2016). This includes deciding in advance when they are going to wake up, what they are going to eat, how they will spend their time prior to the performance, and when they will arrive at the performance venue. Additionally, they should do their best to become familiar with the venue, and if possible, practice in the space in order to get more comfortable (Kenny, 2011).

Cognitive strategies. Cognitive strategies are aimed at altering poor cognitive process, such as negative patterns related to performance, by means of restructuring the thought processes into a more constructive manner (Burin, 2017). Many musicians have unhealthy thought processes before and during a performance and effectively restructuring those thoughts would enable them to maintain a more focused mindset while on stage (Parncutt & McPherson, 2002). There two main targets for cognitive therapy: negative self-talk and a poor focus of attention (Kenny, 2011).

Negative self-talk is a major source of MPA. When the performer focuses on what could go wrong in a performance, it is more likely that those poor outcomes will happen as a result of the fixation on the negative. Additionally, there are several poor thought processes that occur in many performers, including the “all or nothing” manner of thinking, where the musician assumes that, if they make a single mistake, it does not matter if the entire rest of the performance goes well; in their eyes, they have already

failed. These negative thoughts only continue to increase the level of MPA and impede the performer from reaching greater success (Kenny, 2011).

Instead, the individual must intentionally remove negative patterns of thinking and replace them with more positive thought processes. According to Hoffman, “Through targeting unhelpful thoughts, we can enhance the quality of performance and lower anxiety to a manageable level” (Hoffman, 2012, p. 21). The performer should intentionally engage in positive self-talk in order to reduce negative thoughts, such as the fear of a memory slip or an upcoming difficult passage, and replace those negative thoughts with positive ideas that motivate them to achieve success (Sieger, 2017). In fact, poor thought processes are less about the actual performance and more about the musician’s false interpretations of the performance or past performances. It is important that the musician intentionally restructure the negative thoughts in order to develop a more helpful view of performing experiences (Hoffman, 2012).

Another aspect of cognitive restructuring is refocusing the performer’s attention. In the moment of performance, it is easy for the musician to focus on task-irrelevant thoughts that impede the act of making music. A study of 53 pianists struggling with MPA found that task-irrelevant thoughts, such as audience opinions, were largely to blame for their stress on the stage (Parncutt & McPherson, 2002). However, many musicians are not aware of these unhealthy thought processes and continue to make the same mistakes as a result. Educational training on the development of positive cognitive skills should be taught, as it would enhance the musician’s control over MPA (Biasutti, 2014). A 2012 study showed that a short mental skills intervention teaching how to

combat MPA by utilizing healthy patterns of thinking would be highly successful at reducing anxiety (Hoffman, 2012).

There are a number of other theories that have their basis in cognitive restructuring that are also shown to have considerable benefits at reducing MPA. One example is task and emotion related coping methods. A 2014 study found that there were significant correlations between MPA and the way in which a musician handles their emotions prior to a performing experience (Biasutti, 2014). Another way that the musician could handle anxiety is through using mantras or visualization techniques. By focusing their energy on a mantra, a short statement that reinforces positive thinking, the individual is able to focus on success and not all of the various elements of the performance that could go wrong (Helding, 2016).

Flow. Flow is the mental state in which a person is so involved in the activity taking place that they are oblivious to the world around them. Utilized in yoga and meditation, the concept of flow teaches single-mindedness and focusing on every detail of the activity they are engaging in. In music performance, flow is not the absence of fear and anxiety, but rather allowing it to be a part of the performance experience (Kenny, 2011).

Barbara Conable, a teacher of Alexander Technique, believes that fear is not hindrance in performance, but rather a natural part of the experience that should be accepted and understood. In an interview, she said that performers should strive to:

Embody the fear. Any attempt to not feel the fear splits the performer psychically into two persons, the feeler and the repressor. It is the splitting, not the fear, that limits capability. Worse, performers will reduce their body awareness in an

attempt to reduce their fear ... It is the attempt not to feel rather than the feeling that impairs performance. (Helding, 2016, p. 87)

By understanding and embodying the fear, the musician may be able to have a flow experience. Additionally, the musician should seek to interpret the music well to the audience. By exercising their creativity and letting the music flow from their instrument, stress and nervousness may be lessened as a result (Burin, 2017).

Another example of accepting fear and letting it flow into the performance can be found in Acceptance and Commitment Therapy, or ACT. ACT promotes mindfulness and acceptance of one's emotional distress rather than mastery or control of symptoms. ACT is an acceptance of the experience as a whole and becoming increasingly comfortable with the experience of discomfort (i.e. performance). Reduction of the symptoms of MPA is not an immediate goal of ACT but often happens as a result (Juncos, 2016).

Hypnotherapy. A kind of alternative medicine, hypnotherapy involves the patient being induced into a hypnotic state in order to alter poor behavior problems or thought processes (Kenny, 2011). Many researchers believe, since positive self-talk is a key to alleviating performance anxiety, that suggestions delivered through the influence of hypnosis would be an even more effective treatment (Parncutt & McPherson, 2002). However, only one main study, conducted in 1993, has been done on the effects of hypnotherapy on individuals who struggle with MPA. Although the results of the study were positive, more research must be done in order to label hypnotherapy as a successful strategy for those struggling with MPA (Parncutt & McPherson, 2002). Additionally, only about 12% of people are capable of entering a deep hypnotic state, making this not a viable solution for everyone (Kenny, 2011).

It is important to note the difference between hypnosis and relaxation. Hypnosis is conducted days or weeks prior to the performance experience in order to correct poor thought processes in the mind. Many performers believe that relaxing immediately prior to the performance will have positive results, but it is not the appropriate coping mechanism to use immediately prior, as it lowers arousal. It would be better for the musician to engage in concentration exercises and positive self-talk immediately prior to the performance, rather than relaxing immediately before (Hoffman, 2012).

Reflections and Conclusion

The music field can be an exhausting and difficult career choice at times. Between large amounts of practice, long work hours, and frequent performances, musicians are under much psychological distress as a whole (Burin, 2017). MPA affects over a fifth of all musicians, due to the exhausting and demanding nature of the field. However, even though MPA can feel debilitating to those who suffer from it, that does not mean that those individuals are unable to pursue a successful and fulfilling performance career. Through the use of various coping strategies, musicians can find hope to overcome their anxiety through various helpful and non-destructive solutions. It is important that musicians who struggle with MPA research the source of their anxiety and discover which strategy enables them to perform their best.

References

- American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders* (5th ed.). Washington, DC: APA.
- Anxiety and Depression Association of America. (2018). Facts & statistics. Retrieved from <https://adaa.org/about-adaa/press-room/facts-statistics>
- Biasutti, M. (2014). The role of coping strategy and experience in predicting music performance anxiety. *Musicae Scientiae*, 18(2), 189-202.
- Burin, A. (2017). Music performance anxiety: A critical review of etiological aspects, perceived causes, coping strategies and treatments. *Clinical Psychology*, 44(5), 127-133.
- Bush, D., & Lipari, R. (2012). Substance use and substance use disorder by industry. Retrieved from https://www.samhsa.gov/data/sites/default/files/report_1959/ShortReport-1959.html
- Center for Disease Control and Prevention. (2018, October 19). Opioid overdose. Retrieved from <https://www.cdc.gov/drugoverdose/index.html#>
- Coull, J., Jones, M., Egan, T., Frith, C., & Maze, M. (2004). Attentional effects of noradrenaline vary with arousal level. *NeuroImage*, 22(1), 315-222.
- Goldstein, D. (2010, September). Adrenaline and noradrenaline. Retrieved from <http://www.els.net/WileyCDA/ElsArticle/refId-a0001401.html>
- Helding, L. (2016). Music performance anxiety. *Journal of Singing - The Official Journal of the National Association of Teachers of Singing*, 73(1), 83-90.

Higuera, V. (2016, January 9). Social anxiety disorder: Causes, symptoms & diagnosis.

Retrieved from <https://www.healthline.com/health/anxiety/social-phobia>

Hoffman, S. (2012). Mental skills for musicians: Managing music performance anxiety and enhancing performance. *Sport, Exercise, and Performance Psychology, 1*(1), 17-28.

Holahan, C. J., Moos, R. H., Holahan, C. K., Brennan, P. L., & Schutte, K. K. (2005).

Stress generation, avoidance coping, and depressive Symptoms: A 10-year model. *Journal of Consulting and Clinical Psychology, 73*(4), 658-666.

Judd, F. (1985). The biological basis of anxiety: An overview. *Journal of Affective Disorders, 9*, 271-284.

Juncos, D. (2016). Acceptance and commitment therapy for the treatment of music performance anxiety. *Psychology of Music, 44*(5), 935-952.

Kenny, D. (2011). *The psychology of music performance anxiety*. New York, NY: Oxford University Press.

LeBlanc, A., Jin, Y., Obert, M., & Siivola, C. (1997). Effect of audience on music performance anxiety. *Journal of Research in Music Education, 45*(3), 480-496.

Matei, R., & Ginsborg, J. (2017). Music performance anxiety in classical musicians – What we know about what works. *BJPsych Int, 14*(5), 33-35.

Parncutt, R., & McPherson, G. (2002). *The science and psychology of music performance: Creative strategies for teaching and learning*. New York, NY: Oxford University Press.

Richards, T. A. (2019). What is social anxiety? Retrieved from <https://socialanxietyinstitute.org/what-is-social-anxiety>

- Sieger, C. (2017). Music performance anxiety in instrumental music students: A multiple case study of teacher perspectives. *Contributions to Music Education, 42*, 35-52.
- Social anxiety disorder (social phobia). (2017, August 29). Retrieved from <https://www.mayoclinic.org/diseases-conditions/social-anxiety-disorder/symptoms-causes/syc-20353561>
- Sostar, Z., Vodanovic, M., Breitenfeld, D., Breitenfeld, T., Buljan, D., & Granic, R. (2009). Composers-substance abusers. *Alcoholism and Psychiatry Research, 45*(2), 15-26.
- Studer, R. (2012). Hyperventilation in anticipatory music performance anxiety. *Psychosomatic Medicine, 74*(7), 773-782.
- Yoshie, M. (2009). Music performance anxiety in skilled pianists. *Experimental Brain Research, 199*(2), 117-126.
- Zarza-Alzugaray, F. (2017). Music performance anxiety in adolescence and early adulthood. *Psychology of Music, 46*(1), 18-32.
- Zaza, C. (1998). Playing-related musculoskeletal disorders in musicians. *Canadian Medical Association Journal, 158*(8), 1019-1025.